

**WHEN ABANDONMENT IS NOT WHAT IT SEEMS:
BATEYS AND A MYTHIC LANDSCAPE IN PUERTO RICO**

Christopher T. Espenshade

When considering the abandonment behavior observed at many bateys and ceremonial sites in Puerto Rico, two common traits are noteworthy. First, the bateys are left intact, with rock art of high cultural value left in place. Second, the bateys show evidence of visitation in periods post-dating their construction. Building on data from south-central Puerto Rico, the concept of an additive mythic landscape is considered. Important to this discussion is the rejection of the site perspective and the embracement of the landscape view. It is suggested that certain landscapes in Puerto Rico were slowly developed through time as locations for pilgrimages and celebrations of greater than cacique-level importance. Through time, way stations were added to the pilgrimage route. Rather than one batey replacing another, the landscape was elaborated, with the earlier bateys and rock art locations still playing an important role in the interaction of society and the mythic landscape.

Excavation and research related to the Jácana site in south-central Puerto Rico led to two realizations, both of which have ramifications for how archaeologists might interpret this and surrounding sites. First, archaeologists have not fully considered the nature of abandonment behavior, especially as it applies to major batey centers.

Secondly, the ways in which archaeologists talk about sites rather than landscapes hinders a fuller understanding of cultural dynamics. After addressing abandonment behavior and the limitations of a site perspective, the data from Jácana and other regional sites are considered relative to the possible presence of a mythic or ritual landscape of importance to much of Taíno culture.

In 2006 and 2007, New South Associates conducted Phase III data recovery investigations at site PO-29, Municipio Ponce, south-central Puerto Rico. The work was conducted for the U.S. Army Corps of

Engineers (USACOE), Jacksonville District (Jacksonville District), to mitigate adverse effects related to the proposed construction of Portugués Dam and Pool Project. The project is documented in Espenshade (2011a), Espenshade et al (2007), and Espenshade and Young (2008).

The site is a multi-component, pre-Columbian habitation complex that includes a batey (a ballcourt/dance ground/ceremonial surface), a midden mound, several areas of domestic occupation, and numerous burials. The major components were Jácana 2 (A.D. 600-900) and Jácana 4 (A.D. 1300-1500). Phase III excavations revealed that the site was larger and more complex than previously known, and also revealed the presence of a large batey with multiple petroglyphs. Recognition of the research potential and public interpretive value of the site increased as the data recovery excavations progressed, and following consultation with the Puerto

Rican State Historic Preservation Office (PR-SHPO), the Puerto Rico Department of Natural and Environmental Resources (PR-DNER), and the Consejo para la Protección del Patrimonio Arqueológico Terrestre de Puerto Rico (Consejo), the USACOE decided to revise its construction plans and preserve the site (Siegel et al. 2009).

The fieldwork included a combination of geomorphological trenching (33 trenches); 71 hand-excavated units to sample the various site contexts (52 1x1-meter units, one 1.5x0.5-meter unit, and 16 0.5x0.5-meter units); machine-assisted excavation of feature exposure areas (FXs, totaling 1,790.5 square meters); exposure, analysis, and recordation of the four batey borders; the hand excavation of 49 burial features, some containing multiple individuals, and the hand excavation of 157 non-burial features.

Two major pre-Columbian components were revealed at the site, with Jácana 4 stratigraphically above Jácana 2, or mixed with the uppermost portion of the Jácana-2 deposits. In the Jácana-2 span (A.D. 600-900), the site contained numerous houses, thick midden deposits, human burials in and below the middens, a small midden mound, and possibly a batey or plaza. The thickness of the domestic midden and the frequency of burials suggests a lengthy occupation by multiple, coeval households. The associated pottery was a mix of materials fitting the expectations for late Cuevas and Early Ostionoid/Monserrate styles. The residents at the site ate a mixture of mammals (predominately hutia), fish, and shellfish, with minor contributions by birds and reptiles. There was a significant reliance on maritime faunal resources, relative to expectations for a site in the interior hills. Houses were oval forms, generally eight by six meters. It appears that the site served as a hamlet (perhaps 3-5 houses occupied

coevally) and a part of a ritual landscape in Jácana 2 times.

In Jácana 4 times (circa A.D. 1300-1500), the site centered on a 40x50 meter batey, which was bordered on all four sides by rows of slabs and boulders. The north border of the batey featured a gallery of rock art, and other petroglyphs were also present in the other borders (Loubser et al. 2011). The midden mound was greatly expanded in this span, with most of the material derived from the earlier midden deposits. Only a few structures were present, and very little midden accumulated during the Jácana 4 occupation. The zooarchaeological record and the macrobotanical remains suggest the possibility that a garden of ritual and medicinal plants was maintained at the site, and guinea pigs may have been raised there as well (Newsom et al. 2011; DuChemin et al. 2011). The Jácana 4 diet saw an increase in guinea pig, the first use of pelagic fishes, and an increased use of sea turtles. These differences relative to the Jácana 2 pattern suggest that the Jácana 4 occupation was more heavily focused on ritual consumption. This component is interpreted as a minimally occupied ceremonial center, with perhaps only a single small family present at any one time.

Abandonment Behavior

Abandonment behavior has received limited attention in the discussion of the bateys of Puerto Rico, but it may be the key to understanding the evolution of its landscapes. Once we stop to think about it, the way the bateys were left has implications for their past functions. Jácana is similar to Caguana and many other batey sites in that the petroglyphs appear to have been left in place upon abandonment of the site (Alegría 1983; Rodríguez Meléndez 2007). Oliver (2009), Siegel (1999), and others have argued that the petroglyphs represented material manifestations of a cacique's

power. The chronicles report the theft of zemis as a means of diminishing the status of the former owner and increasing the status of the new owner.

The pattern of abandonment at the late period, Puerto Rican, batey sites seems to have been to simply walk away from the site. The petroglyphs are not concealed or cached, to protect them from others. The petroglyphs were not broken or defaced, as might be expected if the site was over-run by marauders. The petroglyphs were not even knocked down, again as might be expected from extra-local social groups. Also, clearly, the powerful images were not stolen for use elsewhere.

The over-riding characteristic of the late batey sites in Puerto Rico is that the petroglyphs and other border stones were left in place. This abandonment behavior is inconsistent with cycling chiefdoms, where the powerful, public artifacts would have been moved to a new ceremonial center. The abandonment behavior is inconsistent with forced fleeing in face of hostilities.

It is also important that abandonment is too often glossed as equaling the end of residential occupation. For example, Tibes was considered to have been abandoned circa. A.D. 1200, as there is no evidence of residential occupation of the site after that date. Importantly, however, there is evidence that Tibes continued to be used, probably for ceremonial functions. Pottery that generally dates to the span A.D. 1200-1500 was recovered at Tibes. Likewise, even though the residential/hamlet function of Jácana ended by A.D. 900, the site was clearly used for ceremonial functions in the span A.D. 1200-1500. A common complaint about batey sites in the Portugués Valley (and elsewhere) is that they are hard to date, because there seems to be pottery

indicative of site use after the residential abandonment of the site (e.g., Garrow 1995; Robinson et al. 1985; Torres 2012).

When we consider that the bateys were left in place when the residential focus moved elsewhere, and that the bateys continued to be visited long after the residences were gone, it becomes evident that there are different levels of abandonment. In the argument developed more fully below, it is suggested that these bateys remained significant elements of an additive and evolving ritual landscape, serving as way stations for ritual pilgrimages.

If the petroglyphs and other border stones at Caguana and Jácana, and other batey sites, were left in place (as the evidence suggests), what does this say about the possible function of these artifacts and these sites? Perhaps these sites served as more than just reinforcement of caciqual power. Perhaps these sites were sacred shrines. That is, perhaps these bateys and their attendant rock art were meant to permanently mark a location sacred to the Taíno. By such an argument, the place would have remained sacred no matter what happened to local groups. The sacred place would not necessarily have played an active role in the status contests of competing caciques, but would instead have had broader cultural significance (and almost surely a role in preserving and teaching the oral history of the culture). As a sacred place or shrine, these ceremonial centers would have been untouchable; nobody (before the Spanish) would have considered desecrating a holy shrine. Holy shrines would have operated at a level above the petty bickering of rival caciques.

It should be noted that one petroglyph at Jácana (North Wall 5) indeed exhibited damage. However, this large, slab

petroglyph was found in an upright position, and the piece that had broken off of the main was not present. It seems most likely that this piece broke during production, with enough of the image surviving to convey the crucial cultural information. The slab was used despite the damage. The alternate explanation, considered less likely, is that the image was purposefully damaged and then the slab was put back in place.

It is argued here that it is no coincidence that similar images are found in the petroglyph galleries of Caguana and Jácana. As Oliver has suggested, at least certain images had cultural importance above and beyond local and regional power issues. It is likely that the two best-carved, most intricate petroglyphs at Jácana (and similarly at Caguana) underline the broader importance of these sites/landscapes to Taíno culture.

Removing or downplaying the competitive function of these major ceremonial centers allows us to understand why they would be left intact. We can understand why there was no displacement, damage, or theft of the petroglyphs. We can understand why there was no effort to cache or conceal the images.

The bateys-as-shrines argument also makes sense if we are correct that Jácana and other batey sites include both early (Jácana 2) and late (Jácana 4) burials. The ancestors were literally present at Jácana during Jácana 4 times, and the deceased of the Jácana 4 period were added within the sacred enclosure. The importance of this sacred location was marked by landscape features (midden mound(s), rock-bordered batey), features that were left in place even after the site was no longer occupied. To whoever the last Taíno were at Jácana 4, there was a

reasonable expectation that this site would continue to have cultural relevance and should continue to be marked.

It must be remembered that in the Taíno belief/ritual system, a batey was established in a particular location because the landscape was already significant, rather than the landscape becoming significant only after the addition of the man-made construct. This parallels the belief that a rock was a zemi even before it was carved; that is, the rock was carved because it was already a zemi and so instructed the carver.

The possibility of the site as a shrine or holy place in Jácana 4 times is consistent with the archaeological findings. The site generally lacks late, domestic midden deposits, and there are only a very few structures, possibly of special function. The picture is consistent with might have resulted from routine pilgrimages to a sacred place, possibly accompanied by public festivities and feasting. The presence of apparently extra-local pottery made by many different potters, the presence of extra-local faunal resources (including marine shellfish), the presence and use of pine resin from an off-island source, the strong representation of medicinal and ceremonial plants, the presence of suspected high-status foods, and the evidence for gathering and properly preparing porcupine fish are consistent with the expectations of public ceremonies rather than everyday domestic activities.

The shrine interpretation also addresses the incongruity between the large size of the batey and the apparent lack of a large population living at the site or nearby. The archaeological signature at Jácana (and arguably at Caguana and Tibes) is more consistent with the possible presence of a small number of caretakers (possibly behiques or shamans, keepers of the oral

history), and the visiting by sojourners intermittently and at specific, scheduled holidays. The high frequency of medicinal and ritual plants in the pollen and macrobotanical assemblages from Jácana 4 suggests that caretakers of the site may have had a specialized garden. They may also have been tasked with raising guinea pigs for use in ceremonial feasting. The low frequency of portable zemis in Jácana 4 contexts further suggests that the site was not crucial in cacique-level power struggles, as Oliver has argued that portable zemis played an important role in marking the status and power of a cacique.

Archaeological Sites Versus landscapes

Many of the recent changes in Puerto Rican archaeology have been prompted by the recognition that modern perspectives have biased our interpretations of culture change. It is argued here that, similarly, the very concept of **archaeological site** is damaging to our understanding or appreciation of how the pre-Columbian occupants of the island saw and used the land. An archaeological site is a Western concept that creates breaks in the landscape based on the distribution of artifacts and features. It is an artifice generated to facilitate archaeological description and, more importantly, resource management. The modern archaeologists, trained in Section 106/Ley 112 compliance, see the pre-Columbian landscape as a series of spatially discrete elements, and only those locations with artifacts or features are considered sites. Although this mindset has its value when making preservation decisions, and although it makes it easy to talk about a site as a cohesive unit, we must remember that sites were not necessarily recognized as distinct by the people who created them hundreds of years ago.

There is no evidence that the Taíno and their predecessors made site distinctions. Indeed, where ethnohistoric or ethnographic accounts are available, native peoples often relied more on social relationships (“my people live here”) or general, natural features (“we live on this river, below the falls”) to define social units, rather than the presence of cultural features or artifacts. So, for example, the Historic Creek Indian village of Uchee Town included the main residential area, dispersed farmsteads up and down the river for several miles, and all the intervening agricultural land (Ethridge 2003). Uchee Town, as defined by the Creek Indians, would have encompassed hundreds of archaeological sites and much land now considered non-site.

From reconstruction of Taíno cosmology, we can suggest that the Taíno recognized that the landscape existed before their arrival, and that it would have been arrogant of humans to divide the landscape based solely on the location of cultural features or items. The Taíno recognized that they shared the landscape with a variety of plants, animals, and geological features. It is highly unlikely that they would have embraced the modern site mentality.

The concept of a sacred landscape (or sacred riverscape) is becoming better developed in recent archaeology (Ingold 1993; Bruno and Thomas 2008). It seems that especially when examining the area around a locus of special ritual or mythic importance, a very broad landscape is often defined as related to that locus. For example, Mississippian and/or Historic Cherokee Indians approaching the Peachtree Mound and Village in Western North Carolina began encountering petroglyphs in and adjacent to the Hiwassee River at least five miles upstream from the village (the entire river has yet to be surveyed). Rather than viewing

Peachtree Mound and Village as a distinct site, the Indians apparently viewed it as the central focus of a much broader sacred riverscape (Ashcraft et al. 2012; Espenshade and Loubser 2010).

Likewise, convenient natural features that we use to define site boundaries or survey areas (e.g., rivers and streams) were probably considered part of the landscape by the Taíno. Especially when the river can be crossed in 10 quick paces, there is little reason to suppose that said river delimited a community.

Oliver, Fontan, Torres, Curet and others have recognized the limitations of site-based archaeology. Torres, especially, has called for the consideration of communities, rather than sites. Curet and Torres (2010:282) reported:

It is clear from Torres's (2001, 2005, this volume) studies of southern Puerto Rico and Oliver and Rivera Fontán's work around Caguana (Oliver 1998; Oliver et al. 1999; Rivera Fontán 1992; Rivera Fontán and Oliver 2005) that ceremonial centers are regional phenomena and they should be treated as such in our modeling of past human behavior.

As we step away from a site focus, what does this mean in terms of archaeological interpretations? From the traditional site-based perspective, the changes in the locations of bateys in the Portugués Valley from perhaps A.D. 800 through A.D. 1500 are seen as a record of competition and abandonment. If we stay with the site perspective, we end up with almost

Darwinian explanations. We are puzzled by the coeval existence of three small Elenoid ballcourts (Torres et al. 2008) and the major structures at Tibes. We wonder why Tibes was abandoned circa A.D. 1200, and why the site of Jácana become important after that date?

However, as we redefine our perspective (remembering that artifactual gaps of however many meters are a completely modern and arbitrary definition of a site), there was no abandonment of the Portugués community. There was not competition between groups, rather subtle adjustment of the community's use of a single landscape. We no longer must posit the decline of Tibes in favor of Jácana, because Tibes and Jácana were part of a single entity. We are now looking at subtle refinements in the use of a single landscape, without having to posit competition or abandonment. When we remove the blinders of a site-perspective and when we consider the true nature of the supposed abandonment of bateys in the Portugués Valley, a new possibility can be entertained.

Ritual Landscape of Culture-Level Importance

It is argued that the Portugués Valley was a major portion of a ritual landscape that had mythic and cultural importance to possibly all the Taíno. This landscape was part of the identity of the Taíno, and it remained a geographic touchstone from possibly as early as Saladoid times up to the arrival of the Spanish.

The record of the valley is noteworthy for a large number of bateys, for the presence of the Tibes ceremonial complex (arguably the largest ceremonial complex on the island, A.D. 900-1200), and for the presence of the large batey at Jácana. The valley is also

important as it served as one route from the southcentral coast to the inland, ceremonial complex of Caguana, which was modeled on Tibes.

When we step away from a site perspective, and when we better understand that residential abandonment did not end the use of the batey sites, we avoid the false trap of sites competing with one another. For example, the two Elenoid bateys of the Portugués recorded by Torres, the Elenoid batey at El Bronce, and the ceremonial center at Tibes may not have been competing, but rather may have served as coeval elements of a single, broad, ritual landscape. These bateys may all have been part of the same system as Tibes. Possibly back into Saladoid times, this valley was important historically, ritually, and/or mythically. The valley was continuously marked by a high density of bateys and related ritual structures. Even as the construction of new bateys occurred (or reworking of old bateys slowed), the older structures continued to be used.

If we step back from the site-based perspective, the record may also better fit the possibility that the large bateys of the Portugués marked a generalized location of cultural and possibly mythic importance. Rather than necessarily marking the specific burial locations of the ancestors, the Tibes-Jácana (or possibly El Bronce-Tibes-Jácana) landscape may have marked a mythical or historical location. It will be recalled that one could get from the coast to Caguana via the Portugués, and that the structure of Caguana (i.e., the configuration of its bateys) was based on the spatial model of Tibes. Perhaps the Tibes-Jácana vicinity marked the descent of the Ancestors (mythical, rather than biological) from the sacred caves of the Utuado area (Oliver 1997, 2005, 2009, 2019).

The admittedly speculative idea that Tibes-Jácana was one and the same to precolonial peoples and that its major ballcourts marked a culturally or ritually charged location would help explain some otherwise problematic issues. The apparent abandonment of Tibes and the construction of a large batey at Jácana (rather than reusing the Tibes structures) makes sense if the same people were simply enhancing the landscape by adding a large batey. The structures at what is known as Tibes were built and used with a specific set of functions in mind. Such ritual structures are not easily revised, and there would be no need for reusing or revising the existing structures because the Tibes-Jácana community had usable, vacant land nearby (i.e., at Jácana). There was no need to destroy the Tibes courts or steal or hide the petroglyphs because the community was not being abandoned. Instead, the ceremonial focus of the community was shifted to a new location (although there is evidence that Tibes proper also saw use in the post-A.D. 1200 span). This shift may have been related to the need for a larger batey, or to flooding issues at Tibes (Espenshade 2011a).

When one looks at landscapes with mythological and/or historical importance, pilgrimages are a common theme (e.g., Malville and Malville 2001). Importantly, such landscapes are not simple dichotomies between one spiritual location and surrounding domestic sites. Instead, there are often way stations and minor shrines along the path(s) of pilgrimages, and the entire, broader landscape is considered sacred. There was also a domestic presence in many of these landscapes, as well as periodic merchants and traders, drawn by scheduled pilgrimages/celebrations. With pilgrimages, it is not simply the end destination that is important, but rather the

process of the journey itself. At Jácana, pilgrimages are suggested by the repeated occurrence of pine resin from an off-island source and the presence of stylistic indicators that many potters contributed to the Jácana 4 assemblage.

Mack (2004:79) discussed the complexity of such situations:

For all residents and visitors, the landscape carried strong mythological associations with the gods Shiva and Vishnu. Kings and other elites negotiated their interactions on a landscape of power. Pilgrims and devotees traveled through a spiritual landscape, which generated a strong emotional experience. Residents experienced the landscape as their home, a place for everyday activities such as cooking and eating. The various perspectives presented here still do not form a complete picture of the past, as subgroups and individuals would have each had their own unique view of the landscape.

If Tibes and Jácana were elements of a single landscape, the relative site chronologies suggest that we may need to rethink the whole idea of the ceremonial focus of the island shifting to Caguana circa A.D. 1200. In other words, the bateys of Tibes proper remained at A.D. 1200, and the Tibes-Jácana landscape was improved to include new motifs and a large batey at Jácana proper by A.D. 1300. The Jácana batey (and arguably many of the ceremonial structures at Tibes) saw use possibly as late as A.D. 1500, and the landscape was not

abandoned or depopulated in favor of Caguana. Instead of seeing Caguana and Tibes-Jácana in competition or elements of power cycling, it might be more accurate to see Tibes-Jácana and Caguana as following similar trajectories. It is possible, then, that the establishment of Caguana was not dependent on the collapse or abandonment of Tibes-Jácana.

This argument may fit better with the settlement data from the Caguana area than the existing model of Caguana eclipsing Tibes. There appears to have been a substantial (yet dispersed) population in the Caguana area before A.D. 1200, and there is not strong evidence of a post-A.D. 1200 arrival of a new wave of people.

By this non-site perspective, Tibes-Jácana-Caguana continued to mark a culturally significant location (in the mythical or spiritual sense) from A.D. 1000-1500. The earlier developments at Tibes are not fully delineated, but there are indications that a batey or proto-batey may have been present at Jácana in the A.D. 600-900 period. Again, treating Tibes and Jácana as elements of a single entity, it may be that there was an even greater time depth (i.e., earlier than A.D. 1000) to the cultural significance of this area.

To bring the discussion back to the Jácana 2 component at PO-29, we must consider that this element of the landscape was not divorced from what was happening elsewhere. It is argued here that there was a shift in the use of the landscape near the Jácana 1- Jácana 2 interface. Although the Tibes site proper had formerly been a focus of residential and ritual life, there was a minor shift upstream and Jácana became a key residential area. Because of the limited scope of work conducted to date at Tibes, it is unknown if there continued to be

residential use of Tibes and there was simply an expansion upstream to other relatively level areas (including PO-29), or whether there was a purposeful shift. Regardless, based on the data at hand, the Jácana portion of the landform was among the most heavily occupied portions of the landscape in the Jácana 2 times. There were multiple, coeval houses, and the midden accretion and radiocarbon results suggest a lengthy occupation. The diversity of economic tree species evidenced in the Jácana 2 component also suggest that the site was occupied sufficiently long to allow for the planting or selective clearing to allow the important tree species to flourish.

There are hints that this portion of the landform also saw ritual use. The midden mound was first established in this period, and it seems to have been the focus of public ceremony. There was possibly a batey present in Jácana 2 times, but its size has not been determined. The macrobotanical, ceramic residue, and zooarchaeological data all suggest that items later associated with bateys were present in Jácana 2 times. Cojoba, datura, maize, guinea pigs, pine resin, and possibly porcupine fish all suggest batey-related ceremonialism.

The variety of burial styles, including seated and prone examples, also suggests the possibility of social differentiation as might be more readily expected at a ceremonial site than at a domestic locus. The FX-T12 area and the Midden Mound account for all but one of the prone, seated, and secondary burials at the site.

It is recognized that this scenario would have made Jácana among the earliest of bateys on the island (although it remains unclear when the first batey structures were built at Tibes). This is important not from a pride point (“we have the earliest, biggest,

best, or whatever”) but from how this may fit with broader interpretations of the development of the sacred landscape. It is argued here that the Portugués River valley became a spiritually and ritually charged landscape, possibly as early as A.D. 400 (with the high-status burials at Tibes; Curet and Oliver 1998). From that point to A.D. 1500, the valley remained a historically or religiously important location, with minor shifts in the use of the landscape.

In considering the possible cultural importance of the Portugués River valley, the ongoing work of Martínez-Cruzado (2010) and his students may eventually provide valuable insight. In a recent publication, Martínez-Cruzado (2010:70) looked at the geographical distribution of lineages C-I versus C-II, C-III, and C-IV (Figure 2). Lineage C-I is considered to represent a population expansion at 1195 \pm 690 B.P. (A.D. 755 \pm 690), and lineage C-II a population expansion at 2731 \pm 1931 B.P. (781 B.C. \pm 1931). Although the two-sigma results cover a wide calendar range, the dates will undoubtedly be refined as more samples are processed. Nonetheless, the data of Martínez-Cruzado (2010) minimally suggest that different groups settled first in different parts of the island, and that the Portugués River region was possibly one of the key arrival points for the C-II groups. The mtDNA data are not presented here as proof of anything, but rather are noted as possibly supporting the notion that the Portugués River may have had cultural significance going back to the actual histories of group movements. During Jácana 2 times, the PO-29 portion of the landscape saw both intensive residential use and public ceremonial use. Residents and possibly others from the region were buried at the site in a variety of locations, positions, and treatments. Medicinal and ritualistic plants were grown at the site, and

guinea pigs may have been raised at the site. The site occupants may have also been responsible for gathering and processing the normally toxic porcupine fish.

One of the puzzles of our Jácana 4 occupation is why the batey is here, rather than at Tibes? There can be little doubt that Tibes was the paramount ceremonial center on the island circa A.D. 1100-1200, yet Tibes saw almost no expansion at all after A.D. 1200. Instead, it is common to argue that the site structure and presumed function were shifted *en toto* to Caguana. The alternate explanation is that the construction of the Jácana batey represented an expansion of the still thriving El Bronce-Tibes-Jácana landscape, rather than a replacement of the Tibes site.

At first look (and by certain current models), it appears that the ritual significance of the Portugués River valley peaked in Jácana 3 times, with ceremonial importance shifting to Caguana. Such a model is based on the rarity of bateys first established in Jácana 4 times (PO-29 being one of the only documented examples). However, such a model ignores that many (if not all) of the previously established ceremonial structures continued to be used in Jácana 4 times. It is imperative that we recognize Jácana 4-span use of Tibes (Curet 2010), El Bronce (Robinson et al. 1985), and PO-39 (Garrow 1995). Although these centers were not expanded, they were still in use. The landscape was not abandoned, and did not lose its cultural importance.

The emphasis of Oliver on bateys for caciqual power-building may cloud our understanding if bateys and ceremonial centers also had other roles. It is argued here that not all bateys served similar masters. Oliver (2009) presented a compelling argument that certain bateys were important

in establishing or maintaining the power of a cacique. However, it is argued here that the ceremonial structures of the Portugués Valley may have served a different role, a more long-lasting role. If the Portugués landscape served as a shrine of supra-caciqual cultural significance, the ceremonial structures in such a landscape would have maintained their importance regardless of changes in local politics and demographics. That is, the Jácana 4 occupants and pilgrims to the valley would not have visited or used only those ceremonial structures created in Jácana 4 times. The effect would have been cumulative, and the ceremonial landscape in Jácana 4 times would have included all ceremonial structures established before that time. There was not a shrinking of the ritual landscape, but a continued use and development.

From this perspective, the Jácana 4 batey at PO-29 was simply the final embellishment of the El Bronce-Tibes-Jácana sacred landscape (*sensu* Glowacki and Malpass 2003). The batey incorporated the latest, most complex, rock art, and served as the focus for large (i.e., hundreds of participants), holy day ceremonies. This batey provided the space for significant numbers of participants and observers. In keeping with Taíno and pre-Taíno norms, it was built upon an earlier batey (inferred), at a location containing the remains of ancestors. It was not built as the focus of a residential location, but rather as place specifically visited for holy reasons. The batey was managed by one or a few behiques, who grew the plants and raised the animals important to public ceremonies held at the site. These would be the same individuals charged with preserving the oral history, by sharing songs, dances, and *arietos* with visiting behiques and the general public.

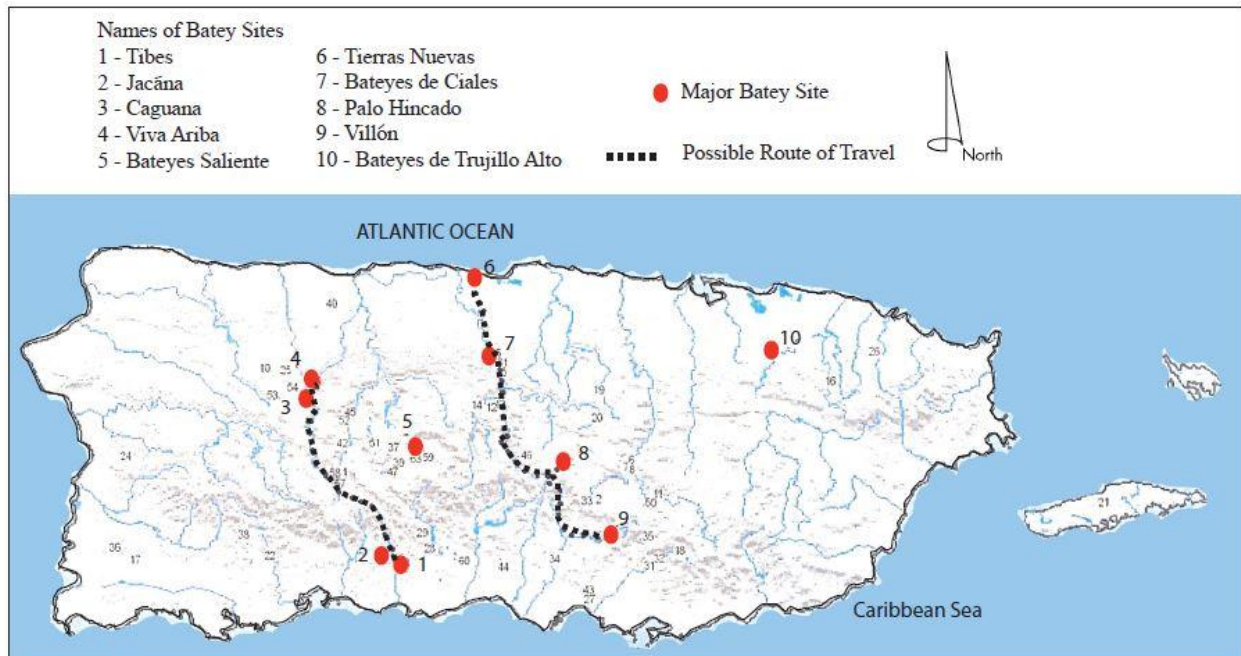
The batey at Jácana may have been the focus for large gatherings, but it remained only a single element of the experience in the period A.D. 1300-1500. The importance of the batey was firmly based on the foundation of the remainder of the ritual landscape. A pilgrim to the batey would also have visited a number of other stops, including single-batey sites such as El Bronce (Robinson et al. 1985), PO-42, PO-43, and possibly the now-destroyed PO-2 (Torres et al. 2008) and the multiple-structures of Tibes. Again, it must be emphasized that these locations were not seen as separate sites, but rather as elements of a grand whole. Almost from the time that a pilgrim landed his/her boat on Ponce Bay until they reached Jácana, the pilgrim would have been immersed in a complex and expansive ceremonial landscape. We know little of the archaeological record between

Jácana and Caguana, but it is likely that rock art and sacred caves may have served as way stations as the journey continued upstream from Jácana.

This model for the development and use of the Portugués River valley may have been repeated in other key landscapes in Puerto Rico. The data from Caguana seem to fit this model, and as further studies are conducted around Los Bateyes de Trujillo Alto, Palo Hincado, Villón, and Tierras Nuevas, we may begin to define other holy landscapes.

With regard to potential sojourns or pilgrimages, it is instructive to look at a plotting of major ballcourt sites on a river map of Puerto Rico (Figure 1). It is recognized that other major batey sites may have existed, only to have been destroyed

Figure 1. Locations of Major Ceremonial Centers (modified from Rodríguez Meléndez 2007).



before they were archaeologically recognized. It is also acknowledged that we cannot be certain that all the major batey sites were coeval. However, we can only work with the available data. Tibes, Jácana, Caguana, and Viva Ariba fall along a single journey from the coast to Utuado, with Bateyes Saliente somewhat isolated in a nearby side-valley. In the next cluster of related drainages, Villon, Palo Hincado, Bateyes de Ciales, and Tierras Nuevas can be visited in a single journey from the south-central coast to the northern central coast. Of the nine major batey sites, only Bateyes de Trujillo Alto is relatively isolated. There is much acreage on the island without a major batey site nearby, and it appears significant that two relatively linear clusters (following two sets of paired drainages) access eight of the 10 major batey sites. If bateys were designed only for local communities and not for pilgrimages, one would expect a more random distribution of the major bateys. This argument is somewhat consistent with the conclusions of Oliver (1998; 2009) from the Caguana area, where he argues that the bateys at small, single-batey sites such as Site U-53 served a different audience and function that major batey centers like Caguana.

The sequence of major batey sites may have been related to mythic orderings, with each major batey site hosting a specific segment of the Taíno mythology. By undertaking a proper sojourn or pilgrimage, the actor would have been exposed to the myths in the proper order, and would have each myth linked to a specific location, thereby assisting memory and recall (*sensu* Harwood 1976). In many pilgrimages, a specific prayer, story, or song is to be performed at each way station along the journey (e.g., Greene 2003). The minor batey sites, caves, and rock art may have served as secondary way stations along the pilgrimage route (see

Coleman and Elsner 1994). In our discussion of the rock art in the batey at Jácana that we suggested that a formalized movement or *arieto* would have facilitated the teaching/learning of the oral history associated with the site. It is possible that similar processes were operating on various levels to accomplish the same goal – providing spatial referents to elements of the oral history.

In addition to batey-specific arietos and ceremonies, the behiques at each major batey site probably controlled specialized, esoteric knowledge. This may have included a detailed knowledge of how to grow or locate, process, and use plants and animals of medicinal or ceremonial use. For example, it would have been difficult for the interior batey centers to obtain a supply of fresh porcupine fish, so the behique(s) at Tibes/Jácana may have maintained the knowledge of how to properly process this species. It is important to recall that sojourns were not simply about visiting places. Rather, sojourns often included a quest for esoteric knowledge.

The recent research by Torres (Torres 2005, 2010, 2012; Torres et al. 2008; Curet and Torres 2010) has emphasized the role of bateys in integrating and reinforcing local communities. We are arguing that certain constellations of bateys may also have served to integrate Taíno/pre-Taíno culture on a supra-community level. These two points of view are not necessarily mutually exclusive. In many preliterate societies, the themes of social integration work on several levels. For example, O’Gorman (2010:591) reviewed cultures that lived in long-houses and concludes:

I suggest that residential use of longhouses in farming communities engendered

significantly different worldviews of community life and different scales of integration from those of groups not using longhouses. The functional and symbolic aspects of longhouse life, created and reified in the structure and position of longhouse villages linked by individuals into a network, create distinct signatures within community territories.

O’Gorman argued that the imagined communities of longhouse users existed on multiple levels within the society but that the longhouse was a consistent model of integration on all levels. We similarly argue, in agreement with Torres and Oliver that certain bateys served to integrate on the local community level. However, we further suggest (here breaking with Torres and Oliver) that other bateys or clusters of ceremonial sites served a higher purpose, to integrate on a regional or cultural level.

It is argued here that the Jácana 4 occupation consisted of a ceremonial center with a small caretaker population (perhaps only 2-6 people). The site was used both by individual pilgrims or sojourners throughout the year and by large gatherings for short visits on specific holy days a few times a year. Rodriguez (2015) examined the astronomical alignment of the batey at Jácana, and suggested that the summer solstice might have been a key holy day for the site. The paleo-ethnobotanical remains, the pollen, and the ceramic residues suggest that ritual and medicinal plants were grown at the site and that exotic materials were processed or used at the site. The zooarchaeological record suggests that the caretakers may also have been responsible for the raising of guinea pigs and possibly

the capture and processing of porcupinefish. On quiet days, the site would have appeared as a shaman’s farmstead.

The efficiency of a ritual – in terms of creating a memorable experience to reinforce a belief system – is dependent on many factors. The evidence for the Jácana 4 component suggests that a high effective ritual experience was possible at this location. Schiffer and Miller (1999) discussed the roles of artifacts and features in ritual communication. In the terms of Schiffer and Miller, those in charge of rituals at Jácana strengthened their ritualistic messages, not only through the use of palatial artifacts (batey, batey border slabs, petroglyphs, midden mound) but also by creating artifacts to engage the full range of senses. This goes to the immensely strong role of smells/odors in creating and triggering memories. A batey ritual would have been strengthened through the unusual (but cross-culturally positive) smell of roasting mammal flesh (as well as fresh seafood, just-cooked manioc bread, etc.) and the burning of pine resin as incense. The pan-Amazonian idea that hunger means lack of protein (for example Clastre 1998:194) could reinforce the special nature of occasions when mammal meat is consumed. Even if only token amounts were prepared the smell, sound, and taste would leave a strong tag. The sounds and smells of food preparation may also have been part of creating the memory, transmitting the message. This all ties into which pots are used in ceremonies, as opposed to those used day-to-day. Music is another key to creating a literally memorable experience (also important in enhancing altered state experiences). Dance (rhythm and movement) is a documented means of teaching and sharing oral history in preliterate societies.

On holy days, the site would have attracted peoples from the surrounding communities and possibly even further afield (i.e., possibly from other islands). There is presently no evidence of any large, communal structure, but we cannot yet infer the form of the structures atop the Midden Mound.

For the rest of the year (i.e., the days not considered annual holy days), the site would have received sojourners or pilgrims. Among the Taíno, one means of enhancing one's reputation and power was to broaden your knowledge and experiences. Among many cultures, the means to acquire more knowledge is to trek (or paddle and trek) to a range of holy places important to one's culture (Keegan 2007). At each location, new oral history and esoteric knowledge can be gained, perhaps in addition to broadened knowledge of medicinal and ritual plants (see Carr 2006 for a similar discussion relative to Hopewell, and Helms 1980 for a cross-cultural review). As well, the pilgrim could obtain artifacts (souvenirs, in modern usage) that physically symbolized that particular stop on his journey (Renfrew 2001). The sojourner might also gather medicines and narcotics not available at home.

A major outcome of recent provenance studies of stone and clay artifacts has been the realization of the wide-spread links and ongoing interaction between the Caribbean islands and mainland areas during the late prehistoric period (e.g., Rodriguez Ramos 2010b; Hofman et al. 2010). Pots, clays, jades, serpentines, and cherts did not move themselves. They symbolize active and intensive linkages between far-spread groups (see also Oliver 2009 on the role of *guaízas* in linking cultures across long distances). Carr (2006) has suggested that long-distance pilgrimages may have been

one mechanism by which exotic goods were moved over long distances. A decade ago, it would have been considered wildly speculative to posit pilgrims coming to Jácana from other islands throughout the Caribbean. However, today such a suggestion seems much more reasonable.

Population Considerations

At a time when the posited Tibes- Jácana - Caguana sacred landscape was at its zenith, it is hard to see who the many bateys and ceremonial centers were serving if we limit their use to local populations. Survey in the neighborhoods of two of the largest, late batey sites on the island has shown a similar lack of villages. If you follow the evidence, you arrive back at a question offered by Roe (1998:279):

*... in the Dominican Republic,
a vast number of Chican
Ostionoid sites contain deep
and rich middens with
enormous quantities of
pottery. . . Could there have
been a massive population
displacement from Puerto
Rico to the Eastern
Hispaniola in late prehistoric
times as resident populations
outgrew the local resources
on their much smaller island?*

Although Roe's (1998) causation would seem to imply a population density not yet evidenced in Puerto Rico, he is correct in noting very real differences in late period manifestations in Puerto Rico and the Dominican Republic (see Siegel 2004 for another perspective on warfare and out-migration). Asked another way, where are the Late villages in Puerto Rico? It has been argued above that a possible weakness of Torres' regional settlement reconstructions

is that the largest sites are assumed to be either Villages Without Bateys or Villages With Bateys. Likewise, Siegel's (2010) examination of late settlement assumes that all the late settlements were occupied coevally and that the largest communities are villages (despite his acknowledgement that good size data are lacking for most of the sites). The assignment of the "village" label is typically based on total site area, even though most of the sites in the samples of Torres and Siegel have not been adequately sampled, and even though it is difficult to know if all deposits at a site are the product of a single occupation.

We are not the first to note the lack of large, late villages (Roe 1998; Oliver and Fontán 2004, 2005; Rivera-Fontán and Oliver 2006; Oliver 2019). As an example, Oliver and Rivera-Fontán have searched intensively and extensively for large villages in the Caguana area, but have not found any likely candidates. Roe is explicit in his belief that the largest late communities in Puerto Rico were in a different league than those in Hispaniola. Roe based his argument on site size, midden volume, batey size and complexity, and ceramic complexity.

Were villages necessary? Rather than begin with the assumption that there must have been villages somewhere, let's begin with questioning the role of villages. Could the social cohesion functions of villages be achieved through alternate means, such as centralized ritual areas? Were there economic activities that demanded a village working together?

In a 2000 article, Espenshade argued that site function is often inferred on very scanty data. He modeled ceramic use lives to reconstruct possible scenarios for the occupation of PO-21 on the Cerrillos River. Based on midden volume and site area, the

site had originally been interpreted as a hamlet (Espenshade et al. 1987), as one of the most intensively occupied sites in the Cerrillos foothills. Espenshade's (2000, 2006) subsequent modeling based on ceramic refuse suggests that, instead, one to three small households may have occupied the site for 21 or seven years, respectively. Espenshade (2000; 2006) warned that archaeologists might be significantly overestimating the duration and complexity of occupations in south-central Puerto Rico.

It is easy to predict that the ethnographic record will be brought to bear here. There are undoubtedly certain readers thinking "what about the chronicles?" What, indeed? The first point that must be remembered is that the detailed descriptions of Taíno villages most commonly refer to Hispaniola, not Puerto Rico (Curet and Stringer 2010). As many researchers have noted, there was not a monolithic Taíno lifeway shared by all islands. Curet and Stringer (2010) warn against the pan-Caribbean application of the cacique model derived from the chronicles. Curet and Stringer (2010:4) argued:

Considering that the great majority of the ethnohistorical information was collected from various groups on the island of Hispaniola, it is unclear how much the cultural and social reconstructions are applicable to other islands, or even to all parts of Hispaniola itself. There are strong reasons to doubt that all polities within Hispaniola and in the rest of the Caribbean were highly stratified and centralized societies.

In other words, we may have been too fast to Hispaniolatize (i.e., apply a model derived from Hispaniola) Puerto Rico.

Secondly, the Spanish sought and were led to the most substantial communities on the islands, and did not make any effort to survey or record the smaller communities. We may have a very skewed idea of what the late settlement system looked like. We may – as has so often been done in the archaeological history of the islands – have projected our expectations derived from mainland cultures onto the Puerto Rican Taíno. We may be ignorantly assuming that we know what a chiefdom looks like when we see one. We may have too readily Mississippianized (i.e., applied a model of Mississippian chiefdoms) the Taíno (Torres 2012).

To carry this line of argument further, what if we are guilty having Hispaniolatized and Mississippianized the Taíno of Puerto Rico? Where does that leave us? Who was living in Puerto Rico, what were they doing, and what did their communities look like? If midden volume can be used as an indicator of population density, there were simply not that many people in Puerto Rico after A.D. 1200-1300. This is essentially the argument presented by Roe (1998), who felt that the bulk of the Taíno migrated to Hispaniola at some point after A.D. 1200.

It might reasonably be asked why anybody would build and maintain batey/plaza complexes when there were not major local populations to use those complexes? This is where we must turn back to the Taíno's strong link to ancestral landscapes. The myths of the Taíno are dense with landscapes of ritual/historical importance (e.g., Cacibajagua, the cave from which the ancestral Taíno emerged; Pane 1999). It is suggested here that the post-AD 1200,

ceremonial complexes on Puerto Rico were shrines visited by pilgrims/sojourners from Hispaniola (and elsewhere), but with a strong mythic linkage to Puerto Rican. It is suggested that Puerto Rico may have evolved into the ancestral homeland, the Old Country, in response to the movement of much of its original population to Hispaniola. It is appropriate here to again touch on the tantalizing data from Martínez-Cruzado (2010), whose study suggests that one of the early population movements to Puerto Rico may have been centered on the south-central coast.

By this argument, the number of pilgrims/sojourners would never equal the resident populations in Hispaniola. This explains why the size, number, and complexity of ceremonial centers in Hispaniola exceed those from Puerto Rico. This also explains why the Hispaniola complexes commonly contain domestic middens and planting mounds. The ceremonial centers in Hispaniola were playing a vital and highly visible role in chiefdom competition on that island. In contrast, the shrines of Puerto Rico were not directly active in promoting (or demonstrating) the status of a given cacique. Rather than illustrating specific caciques, it is argued that the shared iconography of Jácana and Caguana represent mythical characters of over-arching importance to the Taíno.

The possible contrast in the roles of bateys in Puerto Rico and Hispaniola is also supported by ceramic differences. Ethnographically and ethno-archaeologically, a number of researchers have convincingly argued that the size, form, and decoration of pots will vary with their intended ceremonial use (Eriksson 2008; Mills 2007; Potter 2000; Lau 2002; Blitz 1993). Visibility (the ability to transmit

cultural information) is a key factor in designing pots for public events, such as supra-family feasting. The incising on a pot is not functional if most of the participants in the event cannot see it. The pot will not

be valued as a unique or rare item if it resembles everyday cooking and serving pots. Table 1 tracks the possible correlation between pottery and size of audiences for public rituals/feasts.

Table 1. Attributes of Late Prehistoric Culture in Puerto Rico and Hispaniola

	Puerto Rico	Hispaniola
Square Meters of Batey Surface per Site (Range based on examples in Alegría 1983)	64 to 4,080 square meters	288 to 49,049 square meters
Inferred Group Size	Small to Moderate	Large to Huge
Pots with Exterior Incisions in Myth-Inspired Patterns	Common	Common
Compound, stacked pots	Very rare to absent	Common at ceremonial sites
Compound, horizontally joined pots	Very rare to absent	Common at ceremonial sites
Complex bottle forms	Very rare to absent	Common at ceremonial sites
Interior-painted forms	Absent	Rare, but present

Bateys are significantly larger in Hispaniola than in Puerto Rico. Based on the data in Alegria (1983), the **mean** size for Hispaniola is more than three times the **largest** example in Puerto Rico (note: additional bateys, including some greater than 1,800 square meters like the one at Jácana, have been found since 1983). Only two of the 39 examples cited by Alegria (1983) from Puerto Rico are greater than 1,800 square meters, but only two of the eight Hispaniola examples are smaller than 1,800 square meters. Although the smallest bateys may not be known for both islands, it is likely that the largest have been recognized. There is no doubt that the bateys of Hispaniola were made at a much larger scale.

If the size of the batey can be considered a reflection of the numbers of people expected to celebrate there, then there were different processes occurring. The Puerto Rico examples would have afforded a level of intimacy, and the crowds in and around the batey could have seen and recognized the designs on ritual vessels. In Hispaniola, however, the ceremonial structures and inferred crowd sizes were so large that visibility would have been an issue. It may have become necessary to defer to vessel form to demonstrate the use of rare pots during public ceremonies, as vessel form has a higher visibility than incised decoration. Whether or not the incised design was legible to all, the distinctive vessel forms could be seen from farther away. Likewise, if incised panels were hard to see, they

might be replaced by the boldly painted designs on the inside of vessels.

If this interpretation is correct, it requires us to readjust our perspective of blanket Taíno, where the Taíno experience was the same everywhere. This village-free model also goes far to explain the nature of abandonment behavior at Caguana and Jácana. In both cases, large, intricately carved, easily recognized, mythically loaded, and ritually-charged petroglyphs were left in place after the abandonment of the site. These were very powerful items. Given the importance of zemis (as described for Hispaniola), one might expect the concealment, destruction, or theft of these petroglyphs if the community was overcome by another cacique. Likewise, one would expect the petroglyphs to be moved to a new location if the ceremonial focus of the region shifted.

However, if these were shrines, the petroglyphs would have been left standing for future sojourners, to mark a ritually and historically charged location. Even as the last caretaker died or moved away, the place remained marked as sacred. It is important to consider the work of Oliver (2009) at this juncture. Although he presents an excellent model of many of the Caguana petroglyphs being closely tied to Cacique status and power, Oliver (2009:26-27) is frank on the limitations of our knowledge:

If I have not discussed in any depth the archaeological evidence to evaluate the nature of pre-Spanish-contact Caribbean chiefdoms, it is simply because there is not much to put one's hands on. As I see the situation now, what we have is like a large one-hundred-thousand piece

puzzle of which only a number of bits here and there are in place, still without having the foggiest idea of what the final picture looks like. This is not to say that in the Caribbean archaeologists are not designing and conducting archaeological projects toward this end, but that the results at the necessary temporal and spatial scales to peek into the changing structures and processes of sociopolitical formations have yet to come.

Oliver (2009) is clear that he has presented a model he feels best fits the data at hand, but he also recognizes the limitations of those data. In positing a paucity or general lack of late villages in Puerto Rico, and in positing the Portugués Valley having been maintained as a ceremonial landscape, we recognize that we are also early in the puzzle, to borrow Oliver's metaphor. Much of our hypothesizing, like that of Oliver, is designed to help guide future research into these issues.

The model of Caguana and Jácana as shrines and Oliver's model of these sites being pivotal in creating or maintaining caciquial power really only vary in degree. Neither Oliver nor the present authors argue that such sites served only a single function; instead, it becomes a question of modeling the primary role of the sites. By the shrine model, the key role of the landscape was to maintain a broad heritage, one that may have been shared by much of Puerto Rico and the eastern portion of Hispaniola. The ceremonial landscape belonged to all Taínos, not to a specific cacique. That said, even under the shrine model, the local cacique probably had his status elevated

both by controlling the territory around this important location and by being responsible for the maintenance of the shrine (and possibly sponsoring ceremonies there).

It will be recalled that Oliver's (2005; 2009) model recognizes the presence at Caguana and Jácana of monumental zemis. Unlike the petroglyphs representing the post-death transformations of key caciques, the central figures at both Caguana and Jácana were of broader cultural significance and refer clearly and directly to Taíno mythology. Oliver recognizes the importance of these monumental zemis, but still feels that the other petroglyphs suggest the importance of creating and maintaining caciquial power.

The shrine concept, as offered here, is not terribly removed from Oliver's (2009) interpretation of Caguana. The abandonment behavior, as discussed above, seems to better fit the shrine model. The way the sites were left makes more sense if they were principally shrines than if they were principally markers of caciquial power. However, the evidence is not absolute, and we share Oliver's (2009) opinion that much more data are needed before we can refine these models.

It might be appropriate to consider recent research on the Hopewell. In North America starting circa A.D. 100, there was a geographically wide-spread belief network that was marked by both iconography and the use of extra-local resources. Long-distance trade in the Hopewell network probably paralleled that seen in the late Pre-Columbian Caribbean. Indeed, many of the same materials (e.g., high-quality lithics, shell) and artifact types (e.g., maskettes, effigies, pots) moved through the Hopewell and Caribbean systems. Carr (2006) has argued that individual sojourners played key roles in the spread and maintenance of the

network. Hopewell shrines were burial places, but were also tightly linked to distinctive, sacred landscapes. Community efforts are seen in the construction of large earthworks, but large villages were not common.

Renfrew's (2001) reconsideration of Chaco Canyon also has relevance. Renfrew argues that Chaco Canyon (in the American Southwest, circa A.D. 900-1130) was a Location of High Devotional Expression (LHDE). He defined LHDEs as places imbued with extreme significance to the belief system of a culture. The sites typically have a small, permanent population, and a large number of pilgrims, either sporadically or on calendrical holidays. Renfrew argues that there are four varieties of economic activity at LHDEs: 1) normal subsistence by the full-time residents; 2) exchange economy of locals, for trade with pilgrims or other communities; 3) normal subsistence of pilgrims/visitors; and 4) sacred economy of the visitors. At Jácana, we have sparse domestic midden, attributable to variety 1. The production of celts and three-pointed zemis would qualify under exchange economy, but the celts may also serve as "badges" (souvenirs or markers of the pilgrims' journeys). Extralocal pots at Jácana (suggested by paste variation and more variability in decorative modes than expected in a small community; Espenshade 2011b, 2013, 2015) may be related either to pilgrim subsistence (i.e., visitors bringing their own cooking gear with them) or sacred economy (i.e., pots or their contents being offerings). Renfrew (2001:18) reviewed examples of LHDE, and noted:

In each case a prodigious amount of labor, or valuable goods, has been expended in order to achieve an effect that while impressive has

little evident utilitarian purpose (other than to impress). But while some of these special sites are found in systems that display prominent social ranking, there are others (like Stonehenge, the Maltese temples, and Chaco itself) where the converse seems to be the case.

A large batey with intricate rock art at a minimally occupied site fits Renfrew's model of an LHDE. Renfrew (2001:19) further argued "in many cases LHDE are found in circumstances where either a large center of population would not have been predicted, or where the labor input on so large a scale by the established rural population may not have been anticipated." This certainly seems to have been the case for both Caguana and Jácana. Renfrew (2001:18) continued with expectations of LHDE, stating "part of the material culture associated with locations such as these will usually serve to facilitate ritual, with the use of means to engage the senses – fire, light, musical instruments, foodstuffs, beverages (sometimes hallucinatory), perfumes, etc."

In terms of foodstuffs, Jácana has evidence of much consumption of hutia and guinea pig. Marine shell has also been brought to the site. The rock art, large incised pots, and batey provide a strong visual experience, probably enhanced by body markings. The *cojón* and *datura* certainly fit the hallucinatory slot, and fermented, slightly alcoholic beverages may also have been consumed. Porcupine fish may have served a hallucinogenic role. The presence of pine resin in several pots may indicate the use of pine resin in an olfactory role as incense. Lastly, Renfrew (2001:19) argued "most pilgrimage centers in any religious system

serve also as locations for commercial exchange (i.e., as markets)." Non-local foodstuffs, pottery made off-site, exotic lithic raw material, and other goods may have come to Jácana through its added function as a market on key holidays (see also García Arévalo 1991).

The archaeological record of Puerto Rico demonstrates the trade goods were moving widely through the region. There were clearly traders, voyagers, or pilgrims helping to maintain the flow of items.

Ethnohistorically, the most famous of these may have been Caonabó, an "adventurer captain" (Oviedo 1944[1]:133) who was born in the Bahamas and who came to be a powerful cacique in Hispaniola (Keegan 2007). The chronicles leave a gap in their account of this marriage. It is simply said that the people in Hispaniola recognized him as a person of quality or status. It is possible that Caonabó was such a person of quality because he had completed a sojourn, he had been to many of the sacred sites of the Taíno, had participated in ceremonies, and had learned. To the Spanish frame of reference, somebody who had boated through the Caribbean was an "adventurer captain" rather than a sojourner or pilgrim.

Jácana during the Jácana 4 span fits Renfrew's model for a Location of High Devotional Expression. Given our knowledge of Taíno beliefs, ancestor veneration would likely have played a significant role at any Taíno LHDE. The presence of the remains of the ancestors nearby (i.e., the Jácana 2 and 4 burials on-site, Saladoid and Elenoid burials at Tibes, and Jácana 2 or 4 burials [as yet undated] beneath the batey) would be consistent with the expectations. Renfrew makes a compelling case that a large, local population is not necessary to support a prominent ceremonial center. Given the lack

of documented late villages in south-central Puerto Rico, it is certainly appropriate to consider that Jácana may have been a LHDE, with only a limited number of full-time residents.

It seems outlandish to even suggest such a significant departure from the traditional model of late settlement on Puerto Rico. However, the past ten years of Caribbean archaeology have clearly underlined how little we really know, even when we were confident we understood it all. The village-free model fits the data. To argue against this, one has to go out and find the villages to provide enough people to use Caguana and Jácana. Further, nobody can really argue against the differences between Hispaniola and Puerto Rico late sites (indeed, nobody has challenged Roe 1998 on this).

The model of a Tibes- Jácana -Caguana sacred landscape is not injured by the lack of large local populations. Indeed, if we are correct that there were not significant numbers of people in the landscape, this supports the contention that the landscape drew from a much broader cultural catchment, possibly the entire island and beyond. Again, it suggests that this area served the ritual needs of much or all of Taíno culture. This is not to say that all Taínos visited the landscape on each holiday, rather the location served as a referent for all Taíno. Not all Catholics worship at the Vatican, but all Catholics are aware that it is the center of their religion.

Why Here?

If one accepts that the available evidence supports the suggestion of a mythic

landscape of importance to the Taíno, the natural question is why here rather than somewhere else on the island. By this model, the importance of the valley goes back to at least AD 400. One possible suggestion is equally tantalizing and tentative. The upper map in Figure 2 plots the results of the DNA studies conducted by Martinez-Cruzado (2010:70). In this plot, the white areas show the highest density of DNA indicative of the earliest migration to the island. When compared with the lower map of Figure 2, it is clear that the Portugués River valley was one of the likely founding areas. As one of the earliest settled areas, the valley may have been assigned extra cultural importance in the eyes of the Taíno. As the peoples who became the Taíno spread across Puerto Rico and other islands, the Portugués River valley may have developed as the spiritual homeland.

In this regard, it is appropriate to recall the religious importance of objects or places existed even before the Taíno found an object. That is, a rock had the spirit of a zemi within it, and that spirit led the Taíno to find that rock and work it into a formal representation of a zemi. Likewise, the ancestors of the Taíno may have felt that the first settled specific locations in the Caribbean because those locations had chosen the Taíno, rather than the Taíno choosing the location. By this logic, the lands first settled were always of cultural importance, and that is why they were first settled. The Taíno, over centuries, elaborated and commemorated this landscape to mark its mythic importance to their culture.

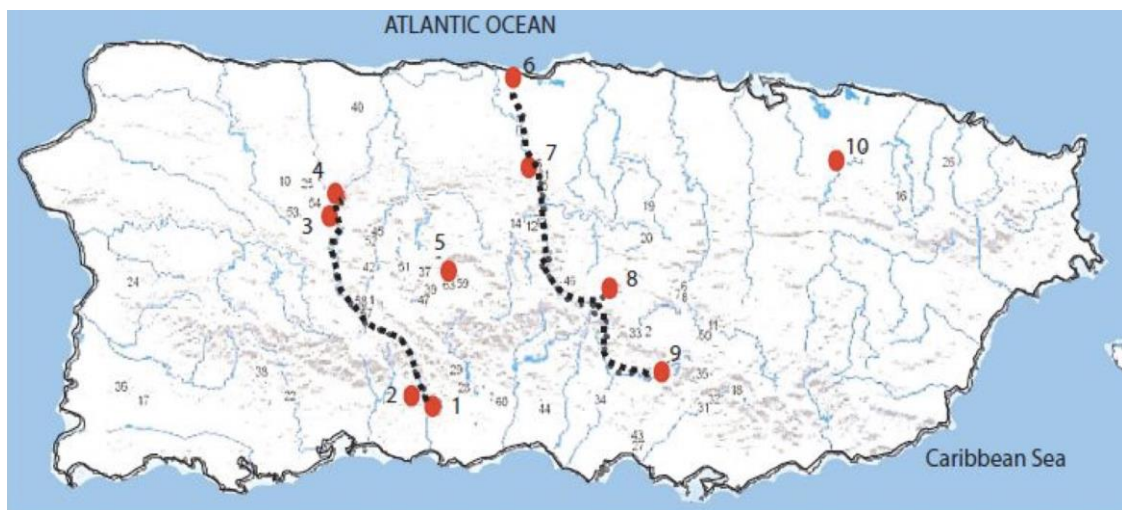
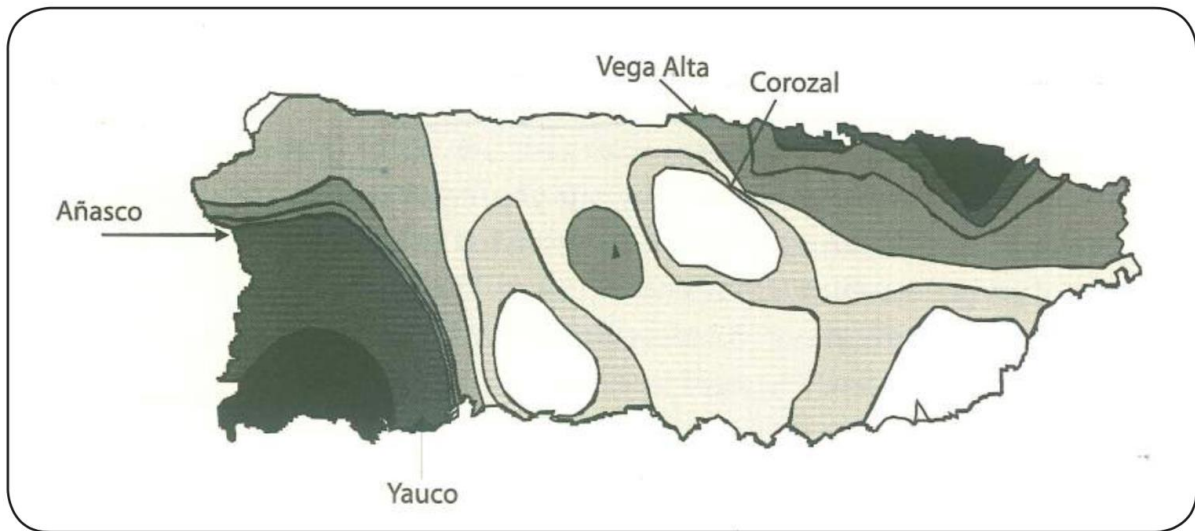


Figure 2. Top: Density Map of Ancient DNA Groupings. White areas have highest density of DNA indicative of earliest migration to island (from Martínez-Cruzado 2010:70). Bottom: Locations of Major Ceremonial Centers (modified from Rodríguez Meléndez 2007)

Conclusions

Having stepped away from the site-driven perspective, and having brought the idea of site abandonment behavior to the bateys of the south-central Puerto Rico, we have stepped through the looking glass. Instead of competing sites ebbing and flowing and ultimately being replaced, we can see a broader sacred landscape upon which elaboration was the driving force. The old

bateys continued to be used even as new bateys were added.

A sacred landscape perspective has suggested that the transect or sojourn from Ponce Bay to Utuado covered ground of deep cultural importance to all Taíno. This valley was where the origins and traditions of the Taíno were maintained, taught, and

celebrated. The cultural importance of the landscape may date as far back as A.D. 400, and the sacred landscape was elaborated upon going forward.

It is recognized that to reach this conclusion, the author has built premise upon premise upon premise. The limitations of the data are acknowledged, and the mythic landscape is offered as a potential idea for further examination. An additive mythic landscape would explain why certain batey sites continued to be used after their residents moved away, why the creation of major ceremonial centers seemingly required more labor than was locally available, why the bateys at Jácana, Caguana, and Tibes were so large, and would explain why Jácana (in the later period) functioned as an unoccupied ceremonial center.

References Cited

- Alegría, Ricardo E.
1983 Ballcourts and Ceremonial Plazas in the West Indies. *Yale University Publications in Anthropology*, no. 79.
- Ashcraft, Scott, Chris Espenshade, and J. Loubser
2012 Hiwassee Petroglyphs Riverscape, in the "Rock Art: Methodology and Interpretation in the Archaeology of the Site" symposium, 2012 meetings, Society for American Archaeology.
- Blitz, John H.
1993 Big Pots for Big Shots: Feasting and Storage in a Mississippian Community. *American Antiquity* 58(1):80-96.
- Bruno, David, and Julian Thomas
2008 *Handbook of Landscape Archaeology*. Left Coast Press, New York.
- Carr, Christopher
2006 Rethinking Interregional Hopewellian "Interaction." In *Gathering Hopewell: Society, Ritual, and Ritual Intervention*, edited by Christopher Carr and D. Troy Case, pp. 575-623. Springer, New York.
- Clastres, Pierre
1998 *Chronicle of the Guayaki Indian* (Translated from French by Paul Auster). Zone Books, New York.
- Coleman, Simon, and John Elsner
1994 The Pilgrim's Progress: Art, Architecture, and Ritual Movement at Sinai. *World Archaeology* 26(1):73-89.
- Curet, L. Antonio
2010 The Archaeological Project of the Ceremonial Center of Tibes. In *Tibes: People, Power, and Ritual at the Center of the Cosmos*, edited by L. Antonio Curet and Lisa M. Stringer, pp. 38-49. University of Alabama Press, Tuscaloosa.
- Curet, L. Antonio, and José R. Oliver
1998 Mortuary Practices, Social Development, and Ideology in Precolumbian Puerto Rico. *Latin American Antiquity* 9(3):217-239.
- Curet, L. Antonio, and Lisa M. Stringer
2010 Introduction. In *Tibes: People, Power, and Ritual at the Center of the Cosmos*, edited by L. Antonio Curet and Lisa M. Stringer, pp. 1-18. University of Alabama Press, Tuscaloosa.

- Curet, L. Antonio, and Joshua M. Torres
2010 Plazas, Bateys, and Ceremonial Centers: The Social and Cultural Context of Tibes in the Ancient History of Puerto Rico. In *Tibes: People, Power, and Ritual at the Center of the Cosmos*, edited by L. Antonio Curet and Lisa M. Stringer, pp. 261-286. University of Alabama Press, Tuscaloosa.
- DuChemin, G.R., N. Cannarozzi, and S.D. deFrance
2011 Volume II, Part 9: The Zooarchaeology of Jácana. In *The Cultural Landscape of Jácana: Archaeological Investigations of Site PO-29, Municipio de Ponce, Puerto Rico*. New South Associates, Inc., Greensboro, North Carolina.
- Eriksson, Thomas
2008 Pottery and Feasting in Central Sweden. In *Breaking the Mould: Challenging the Past Through Pottery*, edited by Ina Berg, pp. 47-55. BAR International Series, No. 1861. London.
- Espenshade, Christopher T.
2013 Late Pottery of the Jácana site, South-Central Puerto Rico. *Caribbean Connections* III(1):10-29.
2015 Early Pottery of the Jácana site, South-Central Puerto Rico. *Caribbean Connections* IV(1):1-24.
- 2000 Reconstructing Household Vessel Assemblages and Site Duration at an Early Ostionoid Site from South-Central Puerto Rico. *Journal of Caribbean Archaeology* 1:1-22.
2006a The View from PO-21: Federal Compliance as a Stimulus in Caribbean Archaeology. Paper presented in the symposium "Compliance Archaeology in Pursuit of the Caribbean's Past: How Are We Doing and What Do We Have to Show?" at the 71st Annual Meeting of the Society for American Archaeology, San Juan, Puerto Rico.
2011a *The Cultural Landscape of Jácana: Archaeological Investigations of Site PO-29, Municipio de Ponce, Puerto Rico*. New South Associates, Inc., Stone Mountain, Georgia.
2011b Volume II, Part 6: The Pottery of Jácana. In *The Cultural Landscape of Jácana: Archaeological Investigations of Site PO-29, Municipio de Ponce, Puerto Rico*, compiled by Christopher T. Espenshade. New South Associates, Inc., Stone Mountain, Georgia.
- Espenshade, C.T., John Foss, and J.W. Joseph
1987 *Data Recovery Excavations at Site PO-21, Cerrillos River Valley, Puerto Rico*. Garrow & Associates, Inc., Atlanta. Report submitted to the Jacksonville District, U.S. Army Corps of Engineers, Jacksonville, Florida.

- Espenshade, Christopher T., and Johannes H.N. Loubser
 2010 *Petroglyph Survey of a Portion of the Hiwassee River Near the Mission Hydroelectric Project, Cherokee and Clay Counties, North Carolina*. New South Associates, Inc., Stone Mountain, Georgia.
- Espenshade, Christopher T., Johannes Loubser, and Hugh B. Matternes
 2007 *Detailed Phase II Archaeological Testing and Data Recovery Planning, Site PO-29, Portugués Dam and Pool, Puerto Rico*. New South Associates, Inc., Stone Mountain, Georgia. Report submitted to the Jacksonville District, U.S. Army Corps of Engineers, Jacksonville, Florida.
- Espenshade, Christopher T., and Stacey Young
 2008 *End of Field Progress Report: Phase III Investigations of Site Po-29, Municipio de Ponce, Puerto Rico*. New South Associates, Inc., Stone Mountain, Georgia. Report Submitted to U.S. Army Corps of Engineers, Jacksonville, Florida.
- Ethridge, Robbie
 2003 *Creek Country: The Creek Indians and Their World*. University of North Carolina Press, Chapel Hill.
- García Arévalo, Miguel
 1991 El Juego de Pelota Taíno y Su Importancia Comercial. *Florida Journal of Anthropology* 16:91-96.
- Garrow, P.H.
 1995 *La Iglesia de Maraguez (PO-39): Investigations of a Local Ceremonial Center in the Cerrillos River Valley, Ponce, Puerto Rico*. Garrow & Associates, Inc., Atlanta. Report submitted to the Jacksonville District, U.S. Army Corps of Engineers, Jacksonville, Florida.
- Glowacki, Mary, and Michael Malpass
 2003 Water, Huacas, and Ancestor Worship: Traces of a Sacred Wari Landscape. *Latin American Antiquity* 14(4):431-448.
- Greene, Paul D.
 2003 Ordering a Sacred Terrain: Melodic Pathways of Himalayan Flute Pilgrimage. *Ethnomusicology* 47(2):205-227.
- Harwood, Frances
 1976 Myth, Memory, and the Oral Tradition: Cicero in the Trobriands. *American Anthropologist*, New Series 78(4):783-796.
- Hofman, Corinne L., Alistair J. Bright, and Reniel Rodríguez Ramos
 2010 Crossing the Caribbean Sea: Towards a Holistic View of Pre-Colonial Mobility and Exchange. In *Mobility and Exchange from a Pan-Caribbean Perspective*, edited by Corinne L. Hofman and Alistair J. Bright, pp. 1-18. *Journal of Caribbean Archaeology*, Special Publication 3.
- Ingold, Tim
 1993 The Temporality of the Landscape. *World Archaeology* 25(2):152-174.

- Keegan, William F.
2007 *Taíno Indian Myth and Practice: The Arrival of the Stranger King*. University Press of Florida, Gainesville.
- Lau, George F.
2002 Feasting and Ancestor Veneration at Chinchawas, North Highlands of Ancash, Peru. *Latin American Antiquity* 13(3):279-304.
- Loubser, J., E. Yi-Hua Weng, C.T. Espenshade, H. Bustelo, and D. Diener
2011 Volume II: Part 3, Batey Borders/Rock Art. In *The Cultural Landscape of Jácana: Archaeological Investigations of Site PO-29, Municipio de Ponce, Puerto Rico*. New South Associates, Inc., Greensboro, North Carolina.
- Mack, Alexandra
2004 One Landscape, Many Experiences: Differing Perspectives of the Temple Districts of Vijayanagara. *Journal of Archaeological Method and Theory* 11(1):59-81.
- Malville, J. McKim, and Nancy J. Malville
2001 Pilgrimage and Periodic Festivals as Processes of Social Integration in Chaco Canyon. *Kiva* 66(3):327-344.
- Martínez-Cruzado, Juan C.
2010 The History of Amerindian Mitochondrial DNA Lineages in Puerto Rico. In *Island Shores, Distant Pasts: Archaeological and Biological Approaches to the Pre-Columbia Settlement of the Caribbean*, edited by Scott M. Fitzpatrick and Ann H. Ross, pp. 54-80. University Press of Florida, Gainesville.
- Mills, Barbara J.
2007 Performing the Feast: Visual Display and Suprahousehold Commensalism in the Puebloan Southwest. *American Antiquity* 72(2):210-239.
- Newsom, L., N.A. Duncan, D.M. Pearsall, and J.G. Jones
2011 Volume II: Part 8, Paleo-Ethnobotany of Jácana. In *The Cultural Landscape of Jácana: Archaeological Investigations of Site PO-29, Municipio de Ponce, Puerto Rico*. New South Associates, Inc., Greensboro, North Carolina.
- O’Gorman, Jodie A.
2010 Exploring the Longhouse and Community in Tribal Society. *American Antiquity* 75(3):571-597.
- Oliver, José R.
1997 The Taíno Cosmos. In *The Indigenous People of the Caribbean*, edited by Samuel M. Wilson, pp. 140-153. University Press of Florida, Gainesville.
1998 *El Centro Ceremonial de Caguana, Puerto Rico: Simbolismo Iconográfica, Cosmovisión y el Poderío Caciquil Taíno de Boriquén*. BAR International Series, No. 727
2005 The Proto-Taíno Monumental Cemís of Caguana: A Political-Religious “Manifesto.” In *Ancient Borinquen: Archaeology and Ethnohistory of Native Puerto Rico*, edited by P.E. Siegel, pp. 230-284. University of Alabama Press, Tuscaloosa.

- 2009 *Caciques and Cemí Idols: The Web Spun by Taíno Rulers Between Hispaniola and Puerto Rico*. The University of Alabama Press, Tuscaloosa.
- 2019 El Parque Arqueológico de Caguana y Su Paisaje: Perspectivas del Presente y Pasado. *Patrimonio* No. 8. Oficina Estatal de Conservación Histórica de Puerto Rico, San Juan, Puerto Rico.
- Oliver, J.R., and J. Rivera Fontán
 2004 *Informe Técnico: Reconocimiento Intensivo del Sitio Arqueológico 'Los Bateyes de Viví' (U-1), Bo. Viví, Utuado*. Institute of Archaeology, University College-London, London, England.
- 2005 *Informe Técnico: Reconocimiento Intensivo del Sitio Arqueológico, Trabajos Adicionales en 'Los Bateyes de Viví' (U-1), Bo. Viví, Utuado*. Institute of Archaeology, University College-London, London, England.
- Oviedo y Valdés, G.F.
 1944 *Historia General y Natural de las Yndias, Yslas y Tierra Firme del Mar y Océano*. Editorial Guaranía, Asunción de Paraguay.
- Pane, R.
 1999 *An Account of the Antiquities of the Indians*, edited by J. J. Arrom and translated by S. C. Griswold. Duke University Press, Durham.
- Potter, James M.
 2000 Pots, Parties, and Politics: Communal Feasting in the American Southwest. *American Antiquity* 65(3):471-492.
- Renfrew, Colin
 2001 Production and Consumption in a Sacred Economy: The Material Correlates of a High Devotional Expression at Chaco Canyon. *American Antiquity* 66(1):14-25.
- Rivera-Fontán, Juan A., and José R. Oliver
 2006 The Bateyes de Viví Project: Integrating Puerto Rican Heritage, Public Archaeology, and Academic Research Toward a Common Goal. Paper presented in the symposium "Compliance Archaeology in Pursuit of the Caribbean's Past: How Are We Doing and What Do We Have to Show?" at the 71st Annual Meeting of the Society for American Archaeology, San Juan.
- 2007 Impactos y Patrones de Ocupación Histórica Jíbara Sobre Componentes Taínos: El Sitio 'Vega de Nelo Vargas' (Utu-27), Barrio Caguana, Municipio de Utuado, Puerto Rico. Proceedings of the 20th Congress of the International Association of Caribbean Archaeologists, pp. 2-14. Reprinted in 2007 in *IACA I-XXI*. Cultural Resources Solutions, Saratoga, Florida.
- Robinson, Linda S., Emily Lundberg, and Jeffery B. Walker
 1985 *Archaeological Data Recovery at El Bronce, Puerto Rico, Final Report, Phase 2*. Archaeological Services, Inc.
- Rodríguez, Angel
 2015 Archaeoastronomy at Jácana, Puerto Rico: Evaluating the Evidence from the Archaeological Investigations. *Caribbean Connections* IV(1).

- Rodríguez Meléndez, Yasha N.
2007 *Social Life of Bateys: Archaeology, Preservation and Heritage in Puerto Rico*. Unpublished PhD dissertation, Department of Anthropology, Cornell University, Ithaca, New York.
- Rodríguez Ramos, Reniel
2010 What is the Caribbean? An Archaeological Perspective. In *Mobility and Exchange from a Pan-Caribbean Perspective*, edited by Corinne L. Hofman and Alistair J. Bright, pp. 19-51. *Journal of Caribbean Archaeology*, Special Publication 3.
- Roe, Peter G.
1998 Utilitarian Sculpture: Pictorial Kinesics and Dualism in Dominican Republic Chican Ostionoid Pottery. Proceedings of the 16th Congress of the International Association of Caribbean Archaeologists, pp. 272-291. Reprinted in 2007 in *IACA I-XXI*. Cultural Resources Solutions, Saratoga, Florida.
- Schiffer, Michael B., and Andrea R. Miller
1999 A Behavioral Theory of Meaning. In *Pottery and People: A Dynamic Interaction*, edited by James M. Skibo and Gary M. Fienman, pp. 199-217. The University of Utah Press, Salt Lake City.
- Siegel, Peter E.
1999 Contested Places and Places of Contest: The Evolution of Social Power and Ceremonial Space in Prehistoric Puerto Rico. *Latin American Antiquity* 10(3):209-238.
- 2004 What Happened After A.D. 600 on Puerto Rico? Corporate Groups, Population Restructuring, and Post-Saladoid Social Changes. In *Late Ceramic Age Societies in the Eastern Caribbean*, edited by André Delpuech and Corinne Hofman, pp. 87-100. Paris Monographs in American Archaeology No. 14. BAR International Series No. 1273. Archaeopress, Oxford.
- 2010 Continuity and Change in the Evolution of Religion and Political Organization on pre-Columbian Puerto Rico. *Journal of Anthropological Archaeology* 29:302-326.
- Siegel, Peter E., Christopher T. Espenshade, and David L. McCullough
2009 Mitigation Plus: The U.S. Army Corps of Engineers Application of Section 106 to Site Ponce 29, Puerto Rico. *The SAA Archaeological Record* 9(4):24-29.
- Torres, Joshua M.
2005 Deconstructing the Polity: Communities and Social Landscapes of Ceramic-Age Peoples of South Central Puerto Rico. In *Ancient Borinquen: Archaeology and Ethnohistory of Native Puerto Rico*, edited by P.E. Siegel, pp. 202-229. University of Alabama Press, Tuscaloosa.
- 2010 Tibes and the Social landscape: Integration, Interaction, and the Community. In *Tibes: People, Power, and Ritual at the Center of the Cosmos*, edited by L. Antonio Curet and Lisa M. Stringer, pp. 231-260. University of Alabama Press, Tuscaloosa.

2012 The Social Construction of Community, Polity, and Place, in Ancient Puerto Rico (AD 600 – AD 1200). PhD dissertation, Department of Anthropology, University of Florida, Gainesville.

Torres, Joshua M., Geoff DeChemin, and Carmen Lugares
2008 *The Tibes Archaeological Survey Project: Location, Documentation, and Preliminary Evaluation of the Pre-Colonial Cultural Resources*. Department of Anthropology, University of Florida, Gainesville. Submitted to the Puerto Rico State Historic Preservation Office, San Juan.

Acknowledgements: The research at Jácana was sponsored by the U.S. Army Corps of Engineers, Jacksonville District, and the Puerto Rico Department of Natural and Environmental Resources. Dr. Joshua Torres and Dr. Antonio Curet provided comments on an early version of this paper. The writing of this paper was supported by New South Associates, Inc. The paper benefitted from a thorough peer review by Dr. Peter Seigel.

Christopher T. Espenshade, New South Associates, Inc., 53 Central Avenue, Wellsboro, Pennsylvania 16901 (cespenshade@newsouthassoc.com).