

EARLY SETTLERS OF THE
**INSULAR
CARIBBEAN**

Dearchaizing the Archaic

edited by

Corinne L. Hofman

Andrzej T. Antczak



EARLY SETTLERS OF THE
INSULAR
CARIBBEAN



Sidestone Press

EARLY SETTLERS OF THE
**INSULAR
CARIBBEAN**

Dearchaizing the Archaic

edited by
Corinne L. Hofman
Andrzej T. Antczak

© 2019 Individual authors

Published by Sidestone Press, Leiden
www.sidestone.com

Imprint: Sidestone Press Academics

Lay-out & cover design: Sidestone Press

Photograph cover: Cover design by Oliver Antczak. Cover photo is a composite of photo's by Tiago Fioreze (sea and cloud, Wikimedia Commons), Patrick Nouhailler (island, Flickr.com), and David Bottome (canoe).

ISBN 978-90-8890-780-7 (softcover)

ISBN 978-90-8890-781-4 (hardcover)

ISBN 978-90-8890-782-1 (PDF e-book)

Contents

List of Contributors	9
List of Figures	17
List of Tables	20
1. Introduction	21
Corinne L. Hofman and Andrzej T. Antczak	
2. Dearchaizing the Caribbean Archaic	29
Andrzej T. Antczak and Corinne L. Hofman	
Part One: Environmental Challenges and Subsistence Strategies	45
3. Gone with the waves: Sea-level rise, ancient territories and the socioenvironmental context of Mid-Holocene maritime mobility in the pan-Caribbean region	47
Isabel C. Rivera-Collazo	
4. Archaeological evidence and the potential effects of paleotsunami events during the Archaic Age in the Southern Caribbean	57
Jay B. Havisier	
5. Natural and anthropogenic landscape change and the submergence and emergence of Archaic Age settlement on the eastern edge of the Anegada Passage	65
John G. Crock	
6. Ecosystem engineering during the human occupations of the Lesser Antilles	77
Peter E. Siegel, John G. Jones, Deborah M. Pearsall, Nicholas P. Dunning, Pat Farrell, Neil A. Duncan, and Jason H. Curtis	

7. On the way to the islands: The role of domestic plants in the initial peopling of the Antilles	89
Jaime R. Pagán-Jiménez, Reniel Rodríguez Ramos, and Corinne L. Hofman	
8. Subsistence strategies and food consumption patterns of Archaic Age populations from Cuba: From traditional perspectives to current analytical results	107
Yadira Chinique de Armas, Roberto Rodríguez Suárez, William M. Buhay, and Mirjana Roksandic	
Part Two: Local Developments and Regional Entanglements	121
9. The first settlers: Lithic through Archaic times in the coastal zone and on the offshore islands of northeast South America	123
Arie Boomert	
10. Early indigenous occupations of Margarita Island and the Venezuelan Caribbean	131
Andrzej T. Antczak, Luis A. Lemoine Buffet, Ma. Magdalena Antczak, and Valentí Rull	
11. The Archaic Age of Aruba: New evidence on the first migrations to the island	147
Harold Kelly and Corinne L. Hofman	
12. Construction and deconstruction of the “Archaic” in Cuba and Hispaniola	163
Jorge Ulloa Hung and Roberto Valcárcel Rojas	
13. Levisa 1. Studying the earliest indigenous peoples of Cuba in multicomponent archaeological sites	177
Roberto Valcárcel Rojas, Jorge Ulloa Hung, and Osmani Feria García	
14. Situating Jamaica	191
William F. Keegan	

15. <i>Guácaras</i> in early precolonial Puerto Rico: The case of Cueva Ventana	201
Reniel Rodríguez Ramos, Jaime R. Pagán-Jiménez, Yvonne Narganes Storde, and Michael J. Lace	
16. The Krum Bay sites revisited. The excavations in the Krum Bay area on St. Thomas, U.S. Virgin Islands	215
Casper Jacobsen Toftgaard	
Part Three: Mobility and Exchange	229
17. An Archaic site at Upper Blakes on Montserrat: Discovery, context and wider significance	231
John F. Cherry and Krysta Ryzewski	
18. Archaic Age voyaging, networks and resource mobility around the Caribbean Sea	245
Corinne L. Hofman, Lewis Borck, Emma Slayton, and Menno L.P. Hoogland	
References	263
Appendix: list of radiocarbon dates	319

Guácaras in early precolonial Puerto Rico: The case of Cueva Ventana

*Reniel Rodríguez Ramos, Jaime R. Pagán-Jiménez,
Yvonne Narganes Storde, and Michael J. Luce*

In Puerto Rico, we colloquially use the phrase “*el tiempo de las guácaras*” to make reference to the times of old, when a mythical past unfolded. Although the definition of the word *guácara* has been debated, its most common use in the islands, particularly in the Spanish-speaking Greater Antilles, is to refer to caves; thus the phrase means the “time of the caves.” The use of the term *guácara* is still noted in the names of important archaeological caves on Hispaniola, such as Guácara del Comedero and Guácaras de Sierra Prieta, among many others (Alberti y Bosch 1912; López Belando 2010).

According to the creation myth that was narrated by the inhabitants of the Lower Macorix region of Hispaniola to the Catalan friar Ramón Pané, who in 1493 accompanied Christopher Columbus on his second voyage to the Caribbean, their ancestors came from a *guácara* known as Cacibajagua, while the rest of the people originated in another, named Amayahuna, or “cave without importance” (Stevens-Arroyo 1988). The lexical form *guaca*, based on the term *guácara*, is also used in Guacayarima, meaning the region where the anal cavity of the earth was located, which was supposedly inhabited by cave-dwelling savages known as the Guanahatabey. Today, Guacayarima is a toponym for a peninsula located in the western quadrant of Hispaniola. It was also located to the mythical west where Coabey, or the house of the spirits of the deceased (*opías*), was located. Per the Spanish chronicles, the Guanahatabey also inhabited the Peninsula de Guanahacabibes, which was situated in the extreme west, or in the mythical rear, of Cuba, a region that is home to some of the most famous caves of that island, such as Cueva Funche, Cueva de los Pictogramas, and Cueva de Enrique, among many others, where early evidence of human occupation has been recorded.

The belief expressed to the Spaniards on Hispaniola – that life originated from one cave, regarded as a cosmic uterus, located where the sun is born, while either

lesser beings or the spirits of the dead dwelled in what was regarded as a mythical anus or a receptacle of souls located where the sun dies – makes it evident that these spaces were envisioned, at least by some Caribbean indigenous groups, as cosmological bodies within which a liminal reality unfolded. These were, and for many still are, scapes that existed between and betwixt, pulsating entities that were impregnated with subjectivities, serving as metaphors of the intertwined cycles of life and the celestial (Carr *et al.* 2012).

Puerto Rico is one of the areas in the world that has the highest density of *guácaras*, containing more than 2000 of these negative physiographic features. Most archaeological cave contexts on the island are located within the *mogotes* or haystack hills developed by the natural sculpting of the karstic formations, mainly due to the solution of limestone (Lugo *et al.* 2001). In Puerto Rico, most of the attention that has been placed on these natural enclosures thus far has been relegated to the ancient use of the walls of dry caves as rock art canvases, where ideas, knowledge, and beliefs were portrayed in the form of petroglyphs, which tend to be prevalent in photic zones, and pictographs, which are mostly situated in the deeper or darker confines of the caves.

In addition to the focus on rock art, cave research in Puerto Rico has often been directed toward the documentation of the purported habitation contexts of the earliest occupants of the islands, commonly known as the “Archaic” Age. These were traditionally considered as iconic cave dwellers that lacked agricultural and ceramic-making traditions, while only having embryonic artistic capacities. The direct link of the discoverers of the Antilles with cave use led to the search for their residential locations in these sheltered contexts, as was the case at Cueva María de la Cruz in Puerto Rico, the site where the first corroborated evidence of the presence of “Archaic” Age people on the island was recorded (Alegría 1955; Rouse and Alegría 1990). Although the ritual use of caves has been deemed the “longest-lasting religious tradition in the history of the world” (Moyes 2012, 2), the use of these encapsulated spaces by pre-Arawak societies in Puerto Rico has often been relegated to the structural domain, even in cases where burials, sumptuary artifacts, and rock art have been documented. The downplay of the superstructural use of cave spaces during the earliest periods of Puerto Rican precolonial history has partially resulted from the assumption that the figural rock art present in some of these caves is related to the groups associated with what has been termed the Ostionoid series of the island, based on the notion that pre-Arawak societies did not have these sorts of symbolic behaviors, aside from the purported production of geometric and abstract pictographs (Hayward *et al.* 2009; Roe 2005).

However, recent evidence recovered from northern Puerto Rico at a site known as Cueva Ventana underlines the need for reevaluating some of the ideas we have had regarding the early use of caves on the island. In this work, we will argue that the engagement with caves in pre-Arawak times was much more complex than traditionally assumed, and that their consideration as liminal spaces seems to have started much earlier than previously thought.

The body of the cave

Cueva Ventana is a solution cave located within the early Miocene-aged Montebello limestone of the Cibao formation, part of the karst belt of north-central Puerto Rico

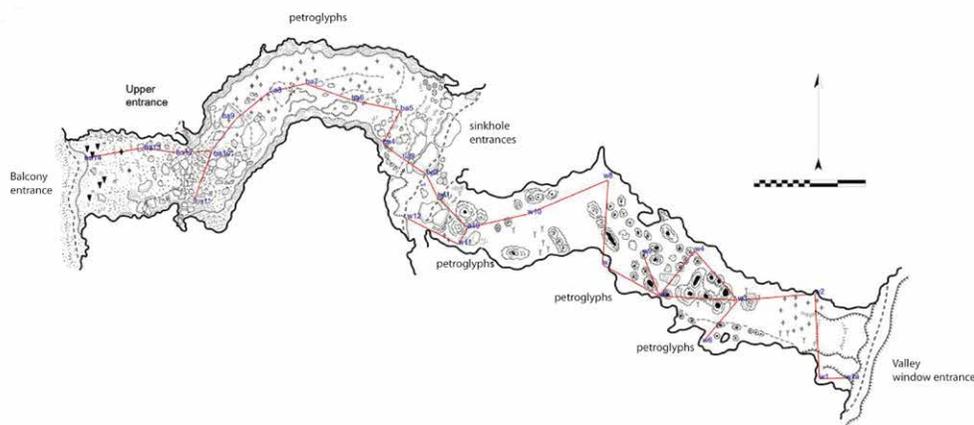


Figure 15.1. Map of Cueva Ventana (by Patricia Kambesis and Michael Lace).

(Monroe 1968, Renken *et al.* 2002). Given its location on a limestone cliff overlooking the valley of the Río Grande de Arecibo, at about 220 m above sea level, this cave has one of the most breathtaking views in the island, having been featured in several Hollywood movies and numerous TV commercials. This cave is composed of three morphologically distinct levels that span a total vertical extent of more than 69 meters. The uppermost level extends 177 meters in length with chambers 20 meters wide in some areas, having a ceiling that rises to 13 meters. It is oriented on an east – west axis, being bifurcated by a collapsed ceiling that divides it into two cave segments, called Cueva Oscura and Cueva Clara due to their differential light exposure (Figure 15.1). The entrances to both cave segments contain petroglyphs, thus indicating that the collapse of the roof took place prior to their human use.

We have conducted excavations in Cueva Clara as part of a larger community archaeology project that aims to make the people from the area active agents in the construction of the earliest chapter of their history. This work has made evident the importance of caves as three-dimensional contexts of engagement with our indigenous past, as these provide the public a unique opportunity to feel immersed within an ancestral space given the absence of sheltered precolonial architecture in the Caribbean.

The work in Cueva Clara included the excavation of three units (Figure 15.2), situated near the cave entrance, based on the results of previous testing conducted by Martínez Torres (1996). Although there was some variability in the stratigraphic make-up of the test units, fortunately in each case the archaeological layers containing precolonial materials were sealed under colluvial sediments derived from the slope wash of a mound located just to the east of the deposit (Figure 15.3). The detrital mound that produced such sediments seems to have formed after the precolonial use of the cave, given the lack of the clay-rich sediments associated with it within the artifact-bearing layers. Most archaeological materials were recovered from a stratum that consisted of an organic-rich silty loam, varying in thickness and artifact density in the different tested areas. In two of the units, this archaeological layer was intersected by ash lenses of varying thickness. Underlying the deposits was a layer of weathered bedrock mixed with allochthonous sediments, where the earliest traces of occupation were registered.

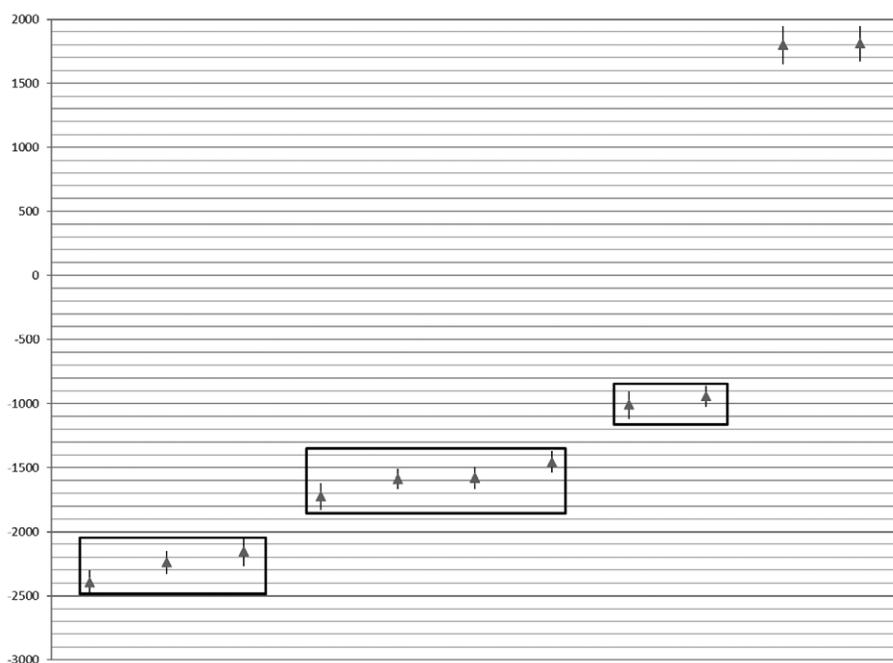


Figure 15.2. Spread of radiocarbon dates (years BC/AD) in Cueva Ventana.

Prior to our research, common wisdom in Puerto Rico was that the pre-Arawak inhabitants of the island tended to restrict their settlements to coastal locations, and that it was only after AD 600 that indigenous groups entered their mountainous interior (see discussion in Rodríguez Ramos 2014). However, the work at this cave clearly demonstrates that the island interior began to be humanized much earlier, as the dates from this site extend back to 2270 and 2040 cal BC, more than two and a half millennia prior to previous expectations. This, in tandem with the recent finding of inland pre-Arawak sites in open-air locations (e.g., Paso del Indio, el Cerro, and Jose Pilar Reyes, among others; see Martínez Torres 2013), has underlined the need to reconsider the strictly coastal nature of these groups and the evaluation of their potential adaptations to the mountainous interior, which clearly started much earlier than previously assumed.

The spread of radiocarbon dates at the site seems to indicate three main occupations, all of which fall in pre-Arawak times. To date each of these deposits, a combination of charcoal and shells (*Neritina* and *Phacoides* sp.), both of which are exogenous to the cave, was used (Table 15.1; Figure 15.4). Although *Neritina* shells are widely available on the coast, these also tend to migrate upriver, thus being obtainable in more inland locations (Pyron and Corvich 2003). However, in order to provide the most conservative date for those *Neritina* samples, the marine curve was used in their calibration (Reimer *et al.* 2009). The three ranges of dates fall (at a 2-sigma level) between: (I) 2490–2060 cal BC; (II) 1830–1370 cal BC; and (III) 1120–860 cal BC. The two most recent dates fall outside the range of pre-Columbian occupations, being related to more recent use of the cave, perhaps beginning in the nineteenth century, as indicated by the presence of blown glass and domesticated animals such as pigs and chickens.



Figure 15.3. Excavation units in Cueva Ventana (Cueva Clara portion).

Unit	Stratum	Age (BP)	1sigma low	1sigma high	2sigma low	2sigma high	Mean	Sample	δ13C	Process	Material
C	D-2	4250±25	-2460	-2370	-2490	-2300	-2395	UGM-17566	-4.1	AMS	Shell (Phacoides)
C	C-4	3810±25	-2290	-2210	-2330	-2150	-2240	UGM-17565	-12	AMS	Charcoal
C	C-6	3740±30	-2200	-2060	-2270	-2040	-2155	UGM-5106	-13.4	AMS	Charcoal
B	C-1	3740±30	-1770	-1660	-1830	-1620	-1725	UGM-5108	-8.3	AMS	Shell (Neritina)
A	B-3	3640±25	-1630	-1540	-1670	-1510	-1590	UGM-17561	-8.5	AMS	Shell (Neritina)
A	C-1	3630±25	-1620	-1530	-1670	-1490	-1580	UGM-17562	-7	AMS	Shell (Neritina)
B	C-3	3520±30	-1490	-1410	-1540	-1370	-1455	UGM-5107	-7.3	AMS	Shell (Neritina)
A	B-2	3170±30	-1070	-960	-1120	-900	-1010	UGM-5105	-8.1	AMS	Shell (Neritina)
C	C-1	3120±20	-990	-900	-1030	-860	-945	UGM-17564	-7.1	AMS	Shell (Neritina)
A	B-2	100±20	1700	1920	1650	1950	1800	UGM-5109	-28.3	AMS	Charcoal
A	C-3	140±20	1680	1950	1670	1950	1810	UGM-17563	-26.7	AMS	Charcoal

Table 15.1. Radiocarbon dates from Cueva Ventana.

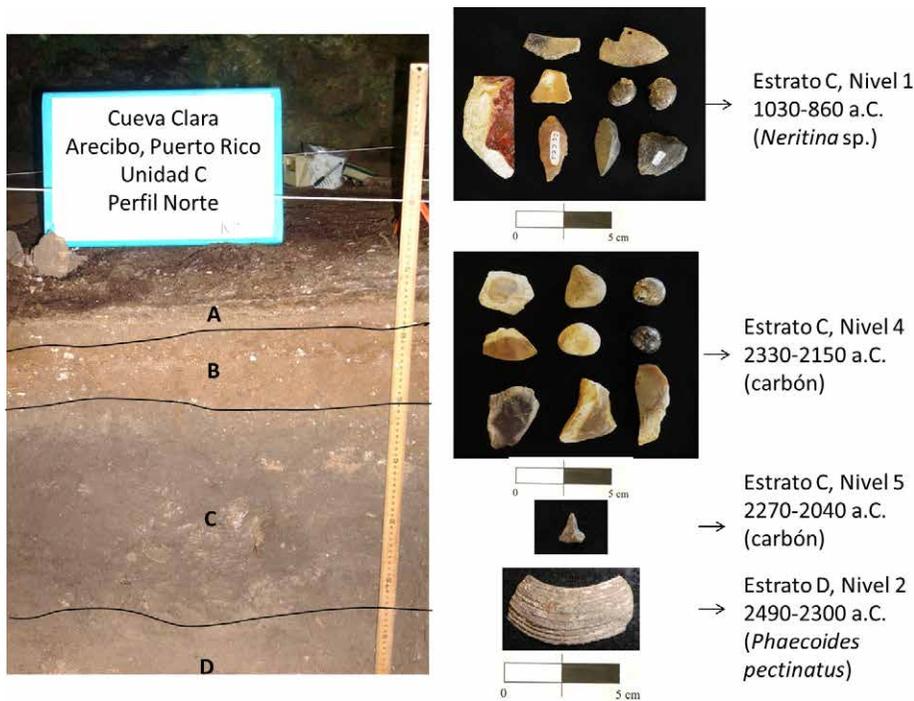


Figure 15.4. Profile, Unit C, north wall with associated materials and dates.

The things in the cave

Despite the limited nature of the testing conducted at the cave, a myriad of artifacts and ecofacts was unearthed, which provide a glimpse of the different sorts of activities that took place within this space over time.

Lithics

In the lithic realm, the use of chert since the initial use of the cave is evident. The lack of tested nodules and cores indicates that this raw material was imported in the form of flakes, most of which were manufactured using a parallel flaking format, often resulting in flakes of blade-like proportions, of up to 8 cm in length, brought to the site for consumption (Figure 15.5). Interestingly, this site also evidenced the presence of bipolar flakes, a technique not often associated to these early groups. In contrast to later periods, the bipolar technique seems to have also been aimed at producing elongated flakes, some of which were up to 5 cm in length, with flat profiles, to be used as handheld tools for tasks similar to those of freehand flakes. The nearest source of chert is located more than 50 km west of the site, between the municipalities of Moca and San Sebastián (Rodríguez Ramos *et al.* 2008b). The use of chert at this site adheres to the trends observed in other contemporaneous locations, signaling that exchange networks of this raw material placed emphasis on the movement of flakes and blades, which were detached at or near their procurement contexts, to the consumption locations (Rodríguez Ramos 2002). The extraction of flakes in the source areas has also been noted in the case of the locally available meta-volcanic stones that were obtained from the Abacoa River, which runs just south of the cave. The production of these



Figure 15.5. Artifacts recovered from Unit A, Stratum C, Level 1 (scale is in cm).

flakes also adhered to the parallel flaking format previously termed the “cobble-slicing technique,” which involved their detachment from single or inverted platform cores, prepared for sequential flake extraction by trimming (see Rodríguez Ramos 2005a). This led to the production of rather large flakes, some of which measured up to 9.2 cm in length. The faunal assemblage does not seem to correspond with any emphasis on the production of these flakes for meat extraction, while the plants that are present mainly seem to have been processed by pounding or scraping (with coral files; see below). Thus, it is possible that some of the larger flakes were employed to carve wooden objects or to process fronds for basketry production, among other possible things. This site also evidenced the presence of use-modified artifacts. These consisted of meta-volcanic cobbles that served as irregular *manos* for the processing of vegetative products, as will be discussed below.

Pottery

Pottery has also been recovered at this location, though in limited quantities, starting at the intermediate level of occupation of the site. Thus, as has been documented in other contexts, this cave reflects the existence of a pre-pottery period, followed by layers in which ceramics increase in quantity. In contrast to other Early Ceramic contexts of the Greater Antilles, where some of this early pottery shows the presence of lineal and dotted incisions (e.g., Ulloa Hung and Valcárcel Rojas 2002; Veloz Maggiolo *et al.* 1974), the pottery found at this site is untreated, except for one piece that contains red slip and two fragments that are highly burnished. Interestingly, some pieces also contained traces of *espatulado*, a technique observed in the pre-Arawak pottery of Cuba (Ulloa Hung and Valcárcel Rojas 2002) and Puerto Rico (Rodríguez Ramos *et al.* 2008b). All of the recovered rim fragments seem to be from globular vessels. The fact that there are no documented “Ostionoid” contexts in the archaeological sequence of this site clearly shows that these clay objects are not the result of intrusion from later occupations, as is commonly assumed when pottery is found in pre-Arawak deposits (Ayes Suárez 1996) or in contexts radiocarbon dated to pre-Arawak times (e.g., Siegel and Joseph 1993). The presence of red-slipped and burnished pottery has also been documented in other early sites of northern Puerto Rico, such as Cueva Soto and Cueva Tembladera

(Martínez Torres 2013). In all contexts, however, the quantity of pottery is quite scarce, perhaps indicating its use in a restricted suite of activities.

Ideotechnic artifacts

Although the area that was sampled was quite limited, we documented the presence of several artifacts of an ideotechnic nature that mirror those documented in other early cave locations of northern Puerto Rico. These include two discoid adornments made of mother-of-pearl (*Pteria* sp.), which are quite similar to others documented in later Huecoid contexts. Similar artifacts have also been found in Cueva La Tembladera (Martínez Torres 2013) as well as in Maruca (Rodríguez López 2004). The presence of mother-of-pearl at these locations indicates the early use of shells for the production of personal adornments in Puerto Rico. In fact, the use of marine shells for producing these types of artifacts has also included *Lobatus gigas* as well as bivalves (Martínez Torres 2013; Rodríguez López 2004). The presence of gastropods that were also drilled for suspension was noted at the site, as has also been observed in Cueva Tembladera and Cueva Gemelos (Dávila Dávila 1981). The use of these *caracoles* as adornments, together with the production of lithic objects that seem to depict such gastropods, known as *bobito* pendants, seem to indicate the importance attributed to these Mollusca beyond their mere use as a source of food.

In addition to shell and gastropod adornments, this site also reflected the use of quartz (Figure 15.5, top left) and calcite. None of the fragments of these types of materials showed any type of intentional modification, so they were seemingly imported to the site in crystal form for their use, very likely in activities of a ritual nature, as has been argued for other contexts (Alegría 1955; Lundberg 1991). Another material that was brought to the cave was ocher. This iron-rich material was pulverized, as noted by its presence in use-modified lithic materials, probably for pigment production for body-painting or in other types of superstructural activities (Veloz Maggiolo 1972). The use of ocher is rather common in early sites in Puerto Rico (Martínez Torres 2013), even being found deposited over the bodies of certain individuals (Alegría 1955; Dávila Dávila 1981).

Plants

Until recently, it was thought that these “Archaic” Age inhabitants of Puerto Rico were pre-agriculturalist, as the advent of cultivation was registered in association with the Saladoid migration to the island. However, important works by Pagán-Jiménez (2013; Pagán-Jiménez *et al.* 2005) on early sites such as Maruca and Puerto Ferro have clearly documented the cultivation and processing of important economic plants such as maize, manioc, and sweet potato in open-air locations during pre-Arawak times. Interestingly, Pagán-Jiménez’s starch grain study at Cueva Ventana (Clara) documented early plant assemblage in a cave context for the first time (Table 15.2). This study indicated that between 1540 and 890 BC, plants such as maize, sweet potato, yams, elephant ear, beans, and zamia were all being processed in this cave (see also Pagán-Jiménez *et al.*, this volume).

The presence of these starches in irregular *manos* and a milling base show that many of these plants were pounded, with the aim of producing a paste that could later be transformed into food or another type of consumable. The absence of clay

Code	Unit	Stratum	Level	Type of Artifact	Identified Plants
CC-1	B	C	4	Coral file	<i>Zamia erosa</i> , <i>Zea mays</i> , <i>Dioscorea</i> sp.
CC-2	C	C	3	Milling base	<i>Ipomea batatas</i> , <i>Zea mays</i> , <i>Fabaceae</i>
CC-3	B	C	3	Irregular mano	<i>Zea mays</i>
CC-4	B	C	3	Irregular mano	<i>Zamia erosa</i> , <i>Manihot esculenta</i> , <i>Zea mays</i> , <i>Xanthosoma undipes</i>
CC-5	B	C	2	Irregular mano	<i>Ipomea batatas</i> , <i>Smilax coriacea</i> , <i>Zea mays</i> , <i>Xanthosoma undipes</i>
CC-6	B	C	1	Irregular mano	<i>Ipomea batata</i> (cf.), <i>Zea mays</i>

Table 15.2. Plants identified in the starch grain analysis conducted by Pagán-Jiménez.

griddles at this site (and in other early contexts in Puerto Rico) signals that these pastes were either wrapped in leaves and cooked directly on the fire or boiled, as noted in the modern production of *guanimes* in the island (Rodríguez Ramos 2005a). Interestingly, a coral file (*Acropora cervicornis*) was used to scrape or grate zamia, yams, and maize. Although this type of processing is to be expected with tubers, the type of products obtained by grating maize – as has also been documented in grater chips in later contexts (Berman and Pearsall 2008) – is still to be ascertained. One possibility is the production of a food similar to *mazamorra*, a type of porridge made of tender corn that is still consumed on the island, most notably in its mountainous interior. Interestingly, in addition to the aforementioned plants used as foodstuffs, the starch grain study also reflected the processing of *Smilax coriacea*. This plant has important medicinal properties, used for treating fever, venereal diseases, and rheumatism, among other illnesses (Pagán-Jiménez 2013). Thus, its presence within this context might signal the preparation of medicinal products, among other activities taking place within this cave.

The fact that these aforementioned cultivars were obviously planted in contexts outside of the cave, probably near the residential locations where the pottery was produced, is an aspect being addressed in an ongoing evaluation of the relationship of these enclosed spaces with the open-air locations with which they were associated in this early chapter of Puerto Rican history. Furthermore, the existence of these phytocultural traditions demands that we consider in greater detail aspects such as the development of fertility-driven rituals and their representations in pre-Arawak times, elements that have thus far been completely neglected in the study of these primeval societies.

Animals

The archaeological deposits in this cave also contained a wide array of animal remains (see Pagán-Jiménez *et al.*, this volume). Most of these were representative of fauna found in the immediate vicinity of the cave, including gastropods, frogs (*Anura* sp.), lizards (*Ameiva exsul*), iguanas (*Sauria* and *Iguanidae*), and Puerto Rican boa (*Epicrates inornatus*). In addition, some riverine resources were also collected, such as freshwater shrimp (*Atya* sp.), freshwater crab (*Epilobocera sinuatifrons*), and fish such as mountain mullet (*Agonostomus monticola*) and bigmouth sleeper (*Gobiomorus dormitor*).

Marine products were also imported to the site, including common snook (*Centropomus undecimalis*) and the previously mentioned *Phacoides* bivalve. An interesting occurrence, also noted in other inland cave sites of northern Puerto Rico such as Cueva Gemelos and Cueva Tembladera, is that of imported *Neritina* sp. shells. Their presence at this site, which began to be registered during its second period of occupation, is remarkable given the small amount of protein that these provide and the long distances that need to be transversed to procure them. This could indicate that it was a special-purpose or “luxury” food, likely linked to communalizing activities such as feasting, as has also been suggested for other food types found in this cave, such as freshwater crab, Puerto Rican boa, and lizards, among others (Curet and Pestle 2010; Oliver and Narganes Storde 2005).

Flying creatures were also represented in the analyzed sample. These include pigeons (*Zenaida aurita zenaida*), *guaraguao* (red-tailed hawks, *Buteo jamaicensis*), and short-eared owls (*Asio flammeus*), as well as a wide representation of bats, most notably the Antillean fruit-eating bat (*Brachyphylla cavernarum*). It is interesting to note that most of the remains of this bat were concentrated in several anthropogenic levels of two of the units (A and C), being virtually absent in the other (Unit B). The high quantity of bat remains together with their disparate concentrations could indicate their use as a special-purpose food by indigenous communities of the island, as was noted much later in the Spanish chronicles (Rodríguez Durán 2002).

Objectifying the cave

Another salient element documented in this cave is related to the presence of carved rock art. As previously noted, the most widely accepted notion in Caribbean archaeology is that the rock art manifestations of these early groups in the Caribbean were limited to geometric and abstract pictographs, while the production of petroglyphs were supposed to have started only after AD 600 (Hayward and Cinquino 2012; Roe 2005). However, the presence of petroglyphs at this location where no evidence of post-AD 600 occupations has been documented thus far, coupled with the location of at least some of them immediately overlying these early deposits, allows us to make the case for the production of this type of rock art on the island at this time (Figure 15.6). It should be noted that the closer proximity of these images to the archaeological deposit at this site – compared other sites such as Maisabel (Roe 1991) and Cueva Juan Miguel (Oliver and Narganes Storde 2005), where this spatial association has been used as evidence for a cultural correspondence between archaeological deposits and petroglyphs – underlines the higher resolution of such type of correlation in Cueva Ventana. Furthermore, some of the images that we have documented at this site, which we labeled the “segmented faces” (Figure 15.6, bottom right), have also been observed in other pre-Arawak contexts, particularly in northern Puerto Rico, such as Cueva Soto and Cueva Tembladera, which further underlines the likelihood of their production by these early groups. In addition, the petroglyphs on the wall adjacent to the excavation units include the *barbudos* (Figure 15.6, top right), an anthropomorphic element that has commonly been associated with later cultural components of the island.

As is observed in later contexts, some of these images are located in cave entrances. This might indicate that the ideas or narratives that were being objectified with their



Figure 15.6. Relations of petroglyphs to Unit A (Pictures to the right are from Martínez Torres 1996).

production, which in later contexts have commonly been linked to the mythical being known as Macocael, had already started to take shape much earlier than previously assumed. According to what was told to Pané on Hispaniola, Macocael, whose name means “he of the eyes that do not blink,” was in charge of keeping watch over the entrance of Cacibajagua at night to make sure that its inhabitants returned before sunrise. One day, he arrived late, and the sun carried him off on account of his poor vigilance, and thus he was turned into stone near the door of the cave (Stevens-Arroyo 1988).

Cueva Ventana forms part of a stacked group of enclosures that were likely attached by more than just geography. We paid an initial visit to the intermediate cave, where we documented a wide array of pictographs, some of which overlie previous images, perhaps reflecting the differing but related set of narratives that were attached to these spaces through social memory and ritual performance. Some of the personages or ideas reflected by these images were not only produced and reproduced within this intermediate cave, but were also portrayed in the upper cave, even in different media, thus denoting continuity in the ritual grammar and the articulation of its attended meanings in both spaces. The presence of similar images in other areas of the island indicates that the symbolic reservoir that was carved and painted in these caves was horizontally negotiated, most likely during ritual engagements between the peoples that participated in its structuration during this early time.

Early *guácará* use in Puerto Rico: Some final thoughts

As has been shown in this work, Cueva Ventana contains an assortment of elements that provide insights into the types of activities that took place there, indicating that

guácaras served varying purposes throughout time and space. This illustrates the problems with essentializing cave use during this early period of Puerto Rico's ancestral history, and underlines the need to look beyond the mere use of these spaces for domestic *or* ceremonial purposes as commonly assumed for these early societies, as it is likely that both types of activities (and perhaps others as well; e.g., *recreational* ones) took place in these spaces at any point in time. However, the noted changes in artifact and ecofact distribution in Cueva Ventana signal the shifting emphases in its use through time. The limited amount and low richness of lithic artifacts in the earliest phase of occupation of this site, together with the lack of evidence for plant use (neither cultivars nor wild, as evidenced by the analysis of a bivalve scraper and a use-modified cobble), pottery and ideotechnic artifacts, indicates the likelihood that this cave was initially used intermittently for short periods for a limited suite of logistical activities, although not precluding its potential concomitant ceremonial use.

Starting in the second phase of the cave's use, the marked increase in the quantity and richness of ecofacts and artifacts shows a shifting and more intensive use of this cave, while also corroborating recent lines of evidence that indicate the need to reconceptualize some previous notions of pre-Arawak groups of the island, including aspects such as: the presence of cultivation practices; pottery production; rock art; pigment production, likely for body ornamentation; and the manufacture of ideotechnic artifacts. Some of the artifacts produced could also have included wooden objects and basketry, as is indicated by the presence of flakes with blade proportions made of local and extraneous raw materials. If this was the case, perhaps the context of their production could have played a role in their biographies and, thus, in the attendant social value placed on those objects.

Interestingly, the presence of some of these elements clearly attests that activities beyond the domestic domain were taking place in this cave, most notably between periods II and III. These include the processing of ocher, the presence of calcite and quartz crystals, the presence of symbolically loaded fauna (e.g., lizards, frogs, boa, bats, river crabs), the production of figurative rock art and the use of ideotechnic artifacts. In tandem, the presence of these elements provides us the means to argue that activities related to the superstructural realm took place in this cave, most intensively since its second phase of use. Interestingly, testing conducted by Martínez Torres (1996) on the eastern end of the cave indicated a very different scenario because, although there is rock art, no similar archaeological deposits have been documented. Thus, it is quite possible that the orientation of the cave played into the different activities that took place at its eastern and western ends, perhaps signaling aspects analogous or homologous to the aforementioned cosmological narratives associated with these spaces much later in time. Although other features associated with superstructural activities were not documented within this cave, particularly the presence of burials (only two adult teeth were recovered), there is evidence for the use of a cave with a similar artifactual and rock art assemblage in the vicinity of Cueva Ventana, known as Cueva Matos, where human interments have indeed been recorded, as well as at later sites such as Cueva Gemelos and Cueva María de la Cruz. The presence of remains of activities clearly associated with quotidian food processing and artifact production, together with others that might be related to ceremonial feasting, ancestor worship or any other activities related to the superstructural sphere, indicate that both realms of activities

(and others as well) might have taken place concomitantly in this cave, as has been also argued by Oliver and Rivera-Collazo (2015) for Cueva María de la Cruz.

The presence of rock art is particularly notable, given its likely association with the early occupants of this cave sometime between periods II and III. The fact that some of the documented representations mirror some of the personages associated with later “Ostionoid” rock art manifestations, together with their similar spatial location within the cave, underlines the possibility that pre-Arawak engagements with these enclosed spaces and the articulation of their cosmovision served as a substratum for some of the ways in which later societies envisioned such spaces and constructed their worldviews, as has been also noted for other social aspects (Chanlatte Baik and Narganes Storde 1990; Rodríguez Ramos 2005b, 2010). Thus, to understand the varying ways in which precolonial indigenous societies engaged with caves and the myriad of narratives and symbolic behaviors that ensued from such engagements in later cultural contexts, more attention needs to be paid to the subjectivities that were already being emplaced by pre-Arawak societies on such still pulsating lithified bodies.

Acknowledgements

The present work was funded with a HPF Grant from the Puerto Rico State Historic Preservation Office. Much thanks to Cándido Oliveras, from Cueva Ventana, Inc., for access to the terrains where this important cave nestles. A deep gratitude goes to all the volunteers from the *Sociedad Arqueológica del Otoao*, whose dedication was pivotal to bring this research to fruition.