

PRE-COLUMBIAN ART AT DUMBARTON OAKS • NUMBER 5

PRE-COLUMBIAN ART
FROM CENTRAL AMERICA
AND COLOMBIA AT
DUMBARTON OAKS



PRE-COLUMBIAN ART AT DUMBARTON OAKS • NUMBER 5

PRE-COLUMBIAN ART *from*
CENTRAL AMERICA
and COLOMBIA
AT DUMBARTON OAKS

COLIN MCEWAN *and*
JOHN W. HOOPES
editors

With additional contributions by

HARRIET F. BEAUBIEN • WARWICK BRAY • DIANA ISABEL CALDERÓN
KIM CULLEN COBB • BRYAN R. COCKRELL • RICHARD G. COOKE
FRANCISCO CORRALES ULLOA • CLAUDIA P. DÍAZ • JAMES DOYLE
PATRICIA FERNÁNDEZ ESQUIVEL • GLENN GATES • MERCEDES GUINEA BUENO
AMANDA GUZMÁN • AINSLIE HARRISON • MÁXIMO JIMÉNEZ ACOSTA
BRIGITTE KOVACEVICH • JULIE LAUFFENBURGER • CARLOS MAYO TORNÉ
JULIA MAYO TORNÉ • DAVID MORA-MARÍN • JUAN ANTONIO MURRO
KAREN O'DAY • MICHELLE PAWLIGER • JUAN PABLO QUINTERO GUZMÁN
ANTHONY J. RANERE • STEWART D. REDWOOD • SEBASTIÁN RIVAS ESTRADA
JUANITA SÁENZ SAMPER • SILVIA SALGADO GONZÁLEZ • LUÍS A. SÁNCHEZ HERRERA
NICOLE E. SMITH-GUZMÁN • MARÍA ALICIA URIBE VILLEGAS

DUMBARTON OAKS RESEARCH LIBRARY AND COLLECTION | WASHINGTON, D.C.

© 2021 Dumbarton Oaks
Trustees for Harvard University, Washington, D.C.
All rights reserved.
Printed in China through Martin Book Management.

LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA

Names: McEwan, Colin, editor. | Hoopes, John W., editor. | Dumbarton Oaks. | Robert Woods Bliss
Collection of Pre-Columbian Art.

Title: Pre-Columbian art from Central America and Colombia at Dumbarton Oaks / Colin McEwan and
John W. Hoopes, editors ; with additional contributions by Harriet F. Beaubien [and thirty others].

Other titles: Pre-Columbian art at Dumbarton Oaks ; no. 5.

Description: Washington, D.C. : Dumbarton Oaks Research Library and Collection, [2021] | Series:
Pre-Columbian art at Dumbarton Oaks ; no. 5 | Includes bibliographical references and index. |
Summary: "Catalogue of the collection of Pre-Columbian Art from Central America and Colombia
at Dumbarton Oaks. The catalogue, written by leading international scholars of Pre-Columbian art
history and archaeology, contains detailed analyses of specific works of art along with thematic essays
situating these works within the broader context of greater Central American culture"—Provided
by publisher.

Identifiers: LCCN 2020042809 | ISBN 9780884024699 (cloth)

Subjects: LCSH: Dumbarton Oaks—Catalogs. | Robert Woods Bliss Collection of Pre-Columbian
Art—Catalogs. | Indian art—Central America—Catalogs. | Indian art—Colombia—Catalogs. |
Indians of Central America—Antiquities—Catalogs. | Indians of South America—Colombia—
Antiquities—Catalogs.

Classification: LCC F1434.2.A7 P735 2021 | DDC 975.3—dc23

LC record available at <https://lcn.loc.gov/2020042809>

GENERAL EDITOR: Colin McEwan
MANAGING EDITOR: Sara Taylor
ART DIRECTOR: Kathleen Sparkes
DESIGN AND COMPOSITION: Melissa Tandysh

PHOTOGRAPHS:

(*front jacket and frontis*) Pendant, PC.B.372 (Plate 102)

(*back jacket*) Pendant, PC.B.390 (Plate 105)

(*front flap*) Dipper, PC.B.422 (Plate 205)

(*back flap*) Pendant, PC.B.295 (Plate 85)

Photographs of catalogue objects by John Tsantes.

www.doaks.org/publications

Resurrecting Playa Venado, a Pre-Columbian Burial Ground in Panama

NICOLE E. SMITH-GUZMÁN • LUÍS A. SÁNCHEZ HERRERA

RICHARD G. COOKE • WARWICK BRAY • CLAUDIA P. DÍAZ

MÁXIMO JIMÉNEZ ACOSTA • STEWART D. REDWOOD • ANTHONY J. RANERE

Introduction: Playa Venado, 1949–2019

In this essay, eight researchers join forces to present a reappraisal of Playa Venado, a Pre-Columbian cemetery on the Pacific coast of Panama (Figure 66). The importance of Playa Venado in understanding socio-cultural developmental processes and geographic variability among Pre-Columbian polities in Panama far exceeds the information that is available about this site in published archaeological and art historical sources. The ancient burial ground is now profoundly disturbed and largely concealed. This multidisciplinary study aims to recover and interpret Playa Venado's impressive but underestimated heritage.

Playa Venado is an unusually informative site for the lowland humid Neotropics. However, many inaccurate statements have been made in the professional literature about Playa Venado's cultural contents, chronology, regional significance, and human remains. Some data sets, such as animal bone and tooth artifacts, have been insufficiently documented. The human remains have been subjected to nonobjective analyses (e.g., Lothrop 1954). Pottery typology and its relative dating need to be brought up to date and redefined. The export of fine goldwork, shellwork, and pottery to outside museums, including items housed in the Dumbarton Oaks Collection, has had an adverse impact on academic evaluations of Playa Venado. Here, we present a preliminary effort to rectify these inaccuracies and inconsistencies, aimed at achieving a new synthesis and interpretation of the site.

Site Discovery

Pre-Columbian graves were first exposed at Playa Venado by members of the United States Navy in 1949

as they bulldozed topsoil to use for lawns.¹ The *Panama Star and Herald* announced finds of ancient goldwork and pottery in their August 5, 1949, edition under the heading: "Venado Beach Indian Cemetery 500 Years Old, RP Expert Says." The article states that the site was first brought to the attention of Archaeological Society of Panama member Philip Dade, who alerted Alejandro Méndez, then curator of Panama's Museo Nacional (now the Museo Antropológico Reina Torres de Araúz [MARTA]) in Panama City. The discovery is confirmed by an article dated October 3, 1952, in the Panama Canal Company's monthly publication, *The Panama Canal Review*, which notes that Playa Venado was a coconut plantation that was established by the Isthmian Canal Commission in 1913 and later used as a firing range by the United States Army.

The site, then known as "Venado Beach," is located within the former Howard Air Force Base, built in 1939, and adjacent to Fort Kobbe, just inside the Canal Zone. The dark-colored overlying soils made a striking contrast with the paleness of an extensive coastal hardpan, known as beachrock or coquina, which underlies a large part of the cemetery (Figure 67). Some burials were found within the superficial black soil, but many were found in the lower sandy layers and in shallow pits cut into the coquina itself.

¹ The discovery date of Playa Venado is given as 1948 by Lothrop (1954) and Bull (1958, 1961); Bull cites Vinton for that date. But Vinton does not specify a discovery date in any of his three articles from 1951 (1951a, 1951b, 1951c). The first mention of the site in print (*Panama Star and Herald*, August 5, 1949) notes that the discovery was made "a week before." The discrepancies among the various accounts are unresolved.

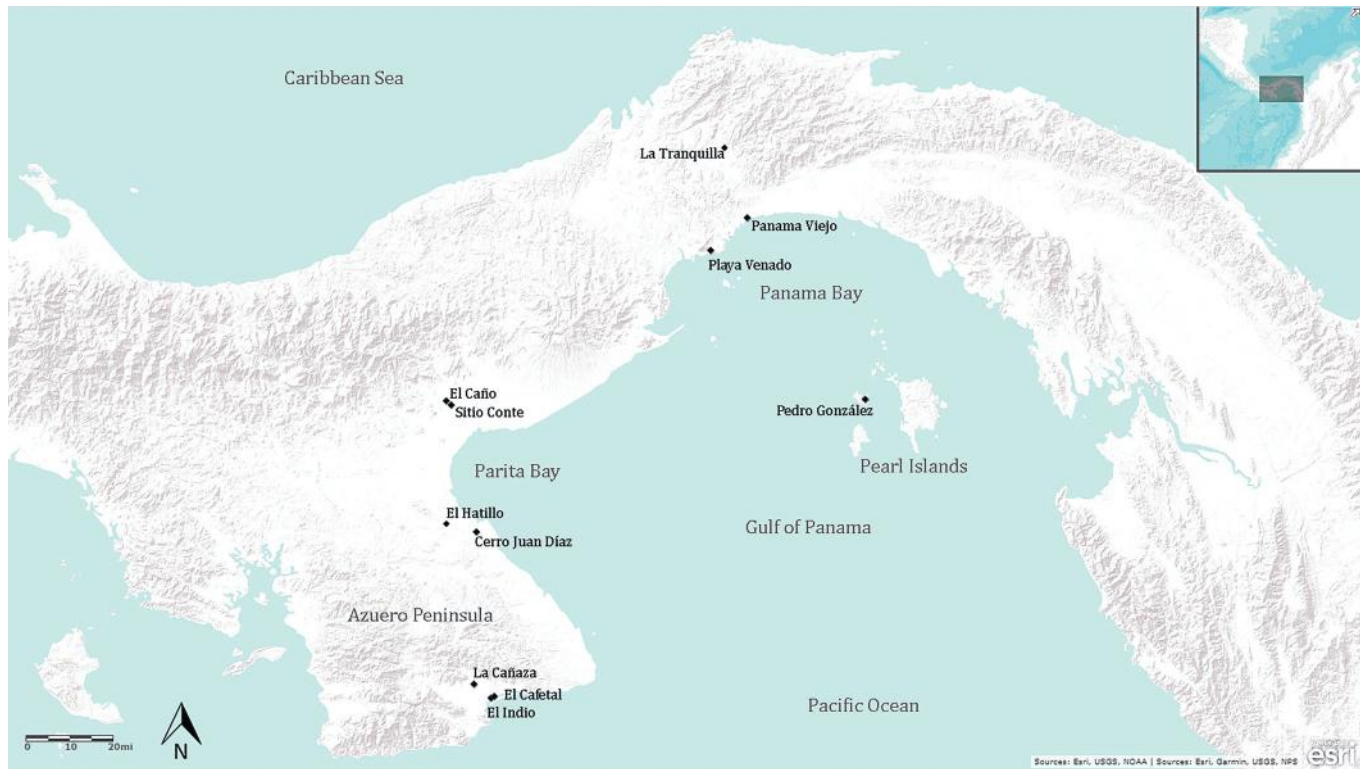


Figure 66 Map of Central and Eastern Panama, showing the locations of sites mentioned in the text. Map by Nicole E. Smith-Guzmán, based on Esri, USGS, NOAA, Garmin, and NPS.



Figure 67 Archival field photograph by Samuel K. Lothrop, showing burial pits dug into the coquina (beachrock) of his Area A, Trench 6 (as viewed from the southwest corner of the trench). Note the light sandy-colored coquina in the foreground, the bright red clay from burial fills piled on the left side, and the dark topsoil visible on the far edge. Photograph courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University, 996-27-20/75056.2.3 (digital file 99350044).

Playa Venado has featured in archaeological literature since 1951, when Samuel K. Lothrop, an archaeologist at the Peabody Museum of Archaeology and Ethnology, joined a motley group of mostly Canal Zone residents who were digging the Pre-Columbian graves. The publications, made by both the professional and amateur archaeologists working at the site, focused on interpreting the general patterns of mortuary behavior and cultural materials found at Playa Venado (Lothrop 1954, 1956; Vinton 1951a), as well as interpreting the specific grave contexts as isolated units (Bull 1958, 1961). Lothrop was writing a broad monograph focused on the site at the time of his death in 1965, but this document was never published.

Three Influential People: Samuel K. Lothrop, Karl Curtis, and Robert Woods Bliss

Three U.S. citizens stand out during the only episode of professional excavations at Playa Venado. Though the site was discovered in August 1949, it was not until February 19, 1950, that news of its discovery reached the ears of Lothrop (Samuel Lothrop's Panama trip journal, February 19, 1950, Samuel K. and Joy Mahler Lothrop Papers [SKJML Papers], Peabody Museum of Archaeology and Ethnology Archives, 996-27, 4.6). He was by then a prominent figure in American archaeology, due largely to his detailed descriptions of a vibrant culture at Sitio Conte in the lowland plains of Coclé province (Lothrop 1937, 1942; see also Erickson and Fenton 2021). The mortuary offerings found at this large necropolis defined a new "Coclé culture," which was typified by eye-catching works of Pre-Columbian art that are now widely distributed around the world's museums and art galleries. To a larger extent, Sitio Conte drew attention to the resource richness of the lowland tropical chiefdoms in Panama, and to the hoarding and display of fine artifacts and deceased ancestors, whose remains were adorned according to their age, social status, and activities in life.

Karl Curtis was a good friend of Lothrop. He traveled the country widely and was respected for his knowledge of Panama's prehistory. He was also a close acquaintance of Juan Gratacós, a *huaquero* (looter or gravedigger). Curtis bought Pre-Columbian artifacts, including some from Gratacós, and subsequently resold many of them to Lothrop for the collections at the Peabody Museum of Archaeology and Ethnology (Samuel Lothrop's Panama trip journal, February 19, 1950, SKJML Papers 996-27, 4.6; Letters from Karl Curtis to Samuel Lothrop, 1938–1951, Samuel Kirkland Lothrop Papers [SKL Papers], Peabody Museum of Archaeology and Ethnology Archives, 996-20, 8.5).

Arguably, the defining influence on Lothrop's involvement at Playa Venado was Robert Woods Bliss.

Upon learning about the Playa Venado finds, Bliss wrote a January 3, 1951, letter to Alfred Tozzer at Harvard University, suggesting that he would anonymously finance an excavation *with Lothrop in charge* (our emphasis). He explained that his motive was to add spectacular objects to his own collection of Pre-Columbian art, and he claimed first choice of anything that took his fancy in the excavations at Playa Venado. He underlined that he was not interested in "ceramics or sherds," only "gold, stone sculpture, and other objects . . . of artistic value" (51-25, Peabody Museum Expedition, Samuel K. Lothrop, Director, 1951, Peabody Museum of Archaeology and Ethnology).

Lothrop's Initial Scholarly Publications

Three scholarly publications publicized Lothrop's work at Playa Venado in the academic world. In the first article, Lothrop (1954) described the widespread evidence for the sacrifices, suicides, bodily mutilations, and other forms of violent death that were evident among the osseous remains of the large mortuary population. Many archaeologists still accept this article as a model for interpreting elite behavior in southern Central America and Colombia. Smith-Guzmán and Cooke (2018) have offered an alternative viewpoint to Lothrop's inferences in light of a new analysis of mortuary treatment and osteological analysis of the Playa Venado human remains, which is summarized in the subsequent human remains section. The second article (Lothrop 1956) described goldwork and shellwork that exhibited exquisite crafting skills; he drew attention to ideological parallels between the art of Playa Venado and that of the Coclé culture, acknowledging idiosyncrasies that he interpreted to be regional variants at this cemetery, which was located 112 km east as the bird flies, or approximately 137 km by canoe along the Pacific coast from Sitio Conte. In the third article, Lothrop described and illustrated three gold ornaments and six shell ornaments of exceptional quality in the collection of Robert Woods Bliss (Bliss 1957). Fine shellwork was not found at Sitio Conte (Lothrop 1937), but the iconography of several shell artifacts from Playa Venado paralleled closely that of ceramic, stone, and gold artifacts from Sitio Conte, suggesting a general continuity of cultural stylistic traits.

Contradictory Behavior: The Archaeological Society of Panama

Archaeological finds made at Playa Venado prior to Lothrop's arrival in 1951 attracted the attention of the newly formed Panama Society for the Advancement of Archaeology and Natural Science (Brown 1958). One of the chief organizers of the society and first members of its board of directors was Kenneth Vinton, a

science teacher at the Panama Canal College in the Balboa Canal Zone township. The society's goals soon degenerated, however, and the expanding group became the Archaeological Society of Panama, whose members were, for the most part, less serious and more self-serving than those of the original society.

As the digs intensified, more goldwork, shellwork, and decorated pottery appeared. Notwithstanding the local newspaper's praise for the "ardent Canal diggers" who salvaged the site from destruction (Panama Canal Review 1952), the members of the archaeological society had no overall strategy for their digging activities. Each participant dug his or her own piece of the site with variable skill, objectives, and conscientiousness, disposing of the finds as they thought fit. Internal frictions were rife. In a November 5, 1950, letter to Lothrop, Karl Curtis wrote: "The [society members] are having dissensions and are willing to have the Peabody Museum take over" (Letters from Karl Curtis to Samuel Lothrop, 1938–1951, SKL Papers 996-20, 8.5). Lothrop later remarked that the members "did not work as a group, but as individuals and rivals" (Playa Venado manuscript draft, "History of the Site" [page 5], SKJML Papers 996-27, 6.3). Nevertheless, some members, such as Leo Biese, Russell Mitchell, and Dan Sander, were serious individuals who invited bona fide researchers to evaluate their fieldwork, presented papers at international conferences, and published articles in professional books and journals (Biese 1964a, 1964b, 1967; Mitchell 1964; Mitchell and Heidenreich 1962; Sander 1964). Others seemed interested only in digging at the site for personal gain.

The United States Army placed restrictions on digging at Playa Venado in 1952 (Playa Venado manuscript draft, "Venado Beach in 1951" [page 9], SKJML Papers 996-27, 6.3). Two years later, however, digs sponsored by the Archaeological Society of Panama were again allowed; they continued until 1958 without any academic supervision. Most of the Pre-Columbian graves had been ransacked by the latter date (Lothrop 1959:88).

Professional Dealers in Pre-Columbian Art

Two prominent art dealers from the United States figured in the roster of the Archaeological Society of Panama: André Emmerich and John Wise (represented by his wife). The association between society members and art dealers helps to explain the exportation of important art objects. On paper, the society appeared to be respectable, with forty-seven foreign universities, libraries, and museums included among its "institutional members" (Archaeological Society of Panama 1962). But society members Neville and Eva Harte, Philip Dade, Lt. Col. Lee E. Montgomery (and his wife, Dee), and Fred Morrill, among others, indulged

in a lucrative business of selling the finest artifacts from Playa Venado (and many other sites in Panama) to museums and commercial art dealers in Europe and the United States. In a letter dated May 19, 1984, Neville Harte told Warwick Bray that "the major part of [his] findings were distributed to various museums *according to the rules of [his] permit from Panama* (emphasis ours)." Lothrop was not happy, writing that: "Harte's [Playa Venado] collection was ordered to be sold at cost by a board representing the army (for whom he [is a civilian employee]), but including [Costa Rican archaeologist Carlos] Charley Balser. I don't understand. [Harte] was told to sell at cost, figuring his time [at] \$5. This came to \$2,700+ which [art dealer Alfred] Stendahl paid him, although previously he had offered Harte \$4000 with a year to decide" (Lothrop notes on Harte Collection, 1952, SKJML Papers 996-27, 3.13). From the beginning, there seems to have been no concerted attempt at controlling the dig-and-sell behavior at Playa Venado (McMullen 2013).

The geopolitical situation in Panama facilitated the movement of artifacts outside the country. Theoretically, Panama was sovereign in the Canal Zone, which had been leased in perpetuity to the United States by the terms of the 1903 Hay–Bunau–Varilla Treaty. A 1904 court ruling declared that the Canal Zone was not a part of the United States, but, in practice, the "zone" functioned as a colonialist enclave. Until 1979, the Canal Zone had its own police, schools, courts, and judges. The territory was administered by the Panama Canal Company, which employed thousands of U.S. and Panamanian citizens (Mauer and Yu 2011; McCullough 1977). The U.S. armed forces wielded considerable power within the territory, and digging at Playa Venado required permits from either the Navy, Army, or Air Force, who were sometimes at loggerheads. Lothrop also commented that "the commanding officer at Howard Field allowed [the amateur archaeologists] to dig and keep their finds. Several enlisted men and Canal Zone employees have dug, presumably without hired help" ("Archaeological Site Venado Beach, Canal Zone," SKL Papers 996-20, 2.4).

Individual concepts of acceptable behavior varied greatly in the Archaeological Society of Panama. Some members demonstrated a positive attitude toward Panama, and they donated a collection of ceramic vessels to the national museum. This donation occurred before Lothrop's arrival, and according to a November 25, 1950, letter from Karl Curtis to Lothrop, was part of the agreement between the society and museum director Alejandro Méndez, whereby society members were given permission to dig in the interior of the country as long as they shared half of their finds with the museum (Letters from Karl Curtis to Samuel Lothrop, 1938–1951, SKL Papers



Figure 68
Kenneth Vinton in
the field at Playa
Venado. Photograph
courtesy of the Ripon
College Archives.

996-20, 8.5). Other society members behaved similarly, at least temporarily. For example, Thelma Bull, a statistical assistant at the Panama Canal Company, donated her finds to the Museo Nacional (now the Museo Antropológico Reina Torres de Araúz) in Panama City; these objects were consulted during the present study.

Kenneth Vinton (Figure 68) was protean, and he developed a special interest in Isthmian geology, Holocene soil formation, bone preservation in the humid tropics (Vinton 1951b, 1951c), and sea level changes (Vinton 1959). He drew attention to the similarities among the pottery wares from Playa Venado and Sitio Conte (Vinton 1951a). However, like other society members, he also kept a personal collection of objects recovered from Playa Venado, which was donated to Ripon College in Wisconsin after his death, where it remains today (Jeffrey Frost, personal communication, 2017).

Lothrop was more circumspect in his relations with Panama. He thought that the society's gifts of pottery vessels to the Museo Nacional were sufficient to satisfy the authorities. In a letter to John Otis Brew, then director of the Peabody Museum of Archaeology and Ethnology, dated March 14, 1951, he commented that he had "no reason for giving the Museo Nacional

anything ... [since] the local archaeology society has already given them a collection, [and he suspected that museum director] Alejandro Méndez [had] sold museum material to Stendahl" (51-25, Peabody Museum Expedition, Samuel K. Lothrop, Director, 1951, Peabody Museum of Archaeology and Ethnology). Effective heritage protection laws did not exist in Panama until May 1982, although some prominent Panamanian citizens protested the shipment of the country's Pre-Columbian heritage before the Second World War (Ferrari 1928, 1932).

Tracking Down Playa Venado's Heritage

The exportation of the finest art objects from Playa Venado out of Panama began as soon as the site was revealed and continued for many years after digging stopped in 1958. Since the 1980s, Warwick Bray has tracked the whereabouts of these objects. He has exchanged letters with participants in the 1950s excavations, and recorded artifacts and unpublished documentation in museum and private collections. Likewise, in 1996, Luís A. Sánchez Herrera visited museums in Panama and the United States in order to incorporate Playa Venado pottery into his reassessment of the development of Greater Coclé ceramics

Table 8 Descriptions for all existing radiocarbon dates of material recovered from the Playa Venado site.

LAB. NO.	CONTEXT	METHOD	MATERIAL	MEASURED AGE BP	±	
GrN-2200	inside burial urn, unknown context	radiometric	charcoal			
β-443713	surface coquina at mouth of Río Mangopobre	AMS	marine shell	1260	30	
β-443948	surface coquina at mouth of Río Mangopobre	AMS	bulk carbonate	1420	30	
β-507049	Skeleton B4-4 (NMNH P381824)	AMS	human bone collagen	1360	30	
β-465876	casting core of gold catfish pendant	AMS	charcoal	1560	30	
β-446967	pouch from “shaman” burial	AMS	bird bone collagen	1540	30	
β-507051	Skeleton C4-41 (NMNH P381847)	AMS	human bone collagen	1530	30	
Y-125	alongside burial urn, Cache B4-5	radiometric	charcoal			
β-465698	upper coquina near Area A	AMS	marine shell	1980	30	
β-465697	upper coquina near Area A	AMS	bulk carbonate	2170	30	
β-507050	Skeleton B5-4 (NMNH P381830)	AMS	human tooth collagen	2140	30	
β-465695	lower coquina near Area A	AMS	bulk carbonate	3010	30	
β-465696	lower coquina near Area A	AMS	marine shell	3160	30	

* The calibrated dates for marine shell and sediment samples from the coquina were corrected for the marine radiocarbon reservoir effect using the Marine13 curve for the local ΔR value (39 ± 25 , based on Isla Iguana value; Toth et al. 2012).

** The radiocarbon date based on the tooth sample from Skeleton B5-4 is considered too early to be accepted based on associated pottery styles.

and their role in regional interactions. Surprisingly, Lothrop had published images of only two painted vessels found in his 1951 excavations at Playa Venado; in his article on southern Central America in the *Handbook of Middle American Indians*, he described the vessels simply as “Early Painted Pottery from Panama” (Lothrop 1966:fig. 18b, 18d). In this essay, we bring together both Bray and Sánchez Herrera’s knowledge of the site materials, as well as information gathered from the photographic catalogues and archival documentation at several museums in the United States. Finally, new data from recent geological, archaeological, and osteological assessments add meaningfully to our overall interpretation of the site. Six new radiocarbon dates are combined with the two existing dates in Table 8, and illuminate the reconstruction of the environmental history and human occupation of the site over time.

The Environmental Setting

Playa Venado lies on a marine shoreline on the strongly tidal central Pacific coast, approximately 0.7 km east of the town of Veracruz (Arraiján district, Panamá Oeste province), which was called Camarón in the 1950s. Looking southward across Panama Bay, the rocky islet of Isla Venado stands out approximately 2 km away, and, farther in the distance, the larger islands of Taboga and Taboguilla, at 11 km and 13.5 km, respectively. Both

of these islands harbored Pre-Columbian settlements that would have participated in Playa Venado’s coastal social and exchange network (Figure 69).

CLIMATE

The climate is “Tropical Savannah” (Aw), according to the Köppen-Geiger system (Peel, Finlayson, and McMahon 2007). A short but pronounced dry season occurs currently from January through April, although its length, duration, and intensity vary from year to year. Lothrop observed in his 1951 field diary that February was unusually humid and stormy that year, and that rain fell regularly on the excavations (Samuel Lothrop’s field diary, 1951, SKJML Papers 996-27, 4.7).

GEOLOGY AND TERRESTRIAL LANDSCAPE

Lothrop was aware that reconstructing the Pre-Columbian history of Playa Venado was as much a geological as a cultural problem. The area around Playa Venado is underlain by volcanic rocks of the Oligocene Panama Formation, which is intruded by numerous volcanic domes of basalt of the Late Basalt Formation of inferred Middle Miocene age (over fifteen million years old) that form steep hills (Farris et al. 2017; Redwood 2016, 2017; Stewart, Stewart, and Woodring 1980). The largest of these nearby hills is Cerro Cabra, which rises to 512 masl and overlooks

	$\Delta 13\text{C PDB}$	CONVENTIONAL AGE BP	1-SIGMA	CONVENTIONAL AGE BCE/CE	CALENDAR CALIBRATION (95.4% PROBABILITY)
		1125	65	825 CE	723–1024 cal CE (1227–926 cal bp)
	-1.1	1650	30	300 CE	680–784 cal CE (1270–1166 cal bp)*
	-0.5	1820	30	130 CE	543–654 cal CE (1407–1296 cal bp)*
	-12.4	1570	30	380 CE	416–556 cal CE (1534–1394 cal bp)
	-24.5	1570	30	380 CE	416–556 cal CE (1534–1394 cal bp)
	-12.8	1740	30	210 CE	235–385 cal CE (1715–1565 cal bp)
	-10.5	1770	30	180 CE	138–345 cal CE (1812–1605 cal bp)
		1750	60	200 CE	131–406 cal CE (1819–1544 cal bp)
	0.8	2400	30	450 BCE	153 cal BCE–72 cal CE (2102–1878 cal bp)*
	1.2	2600	30	650 BCE	377–180 cal BCE (2326–2129 cal bp)*
	-13.1	2330	30	380 BCE	486–262 cal BCE (2435–2211 cal bp)**
	-0.2	3410	30	1460 BCE	1400–1171 cal BCE (3349–3120 cal bp)*
	0.7	3580	30	1630 BCE	1591–1391 cal BCE (3540–3340 cal bp)*



Figure 69
View of the Pacific Ocean, looking southeast from Playa Venado on July 26, 2016. Isla Venado stands prominently in the foreground, with the Taboguilla and Taboga Islands to the left and right, respectively. Note the ships lined up to enter the Panama Canal on the far left. Photograph by Raiza Segundo.

Playa Venado from the west (Figure 70). Fifty years ago, Cerro Cabra was covered with various successional stages of arboreal growth, interspersed with scrub and grassy patches. Postcolonial small holdings, as well as cattle-ranching, left their mark on this vegetation. But forest and culture histories along Panama's central Pacific slopes indicate that anthropic plant formations project backward in time from 1515 CE to several millennia before the Pre-Columbian occupation

at Playa Venado (Cooke, Norr, and Piperno 1996; Piperno 1985, 2011; Piperno and Jones 2003).

This millennial anthropogenic and seasonally dry landscape in the vicinity of Playa Venado, intercalated with agricultural fields and multiple successional phases, provided suitable habitats for important mammals to the Indigenous inhabitants of the isthmus, such as white-tailed deer (*Odocoileus virginianus*), gray fox (*Urocyon cinereoargenteus*), agouti

Figure 70
View of Cerro Cabra,
looking northwest from
Playa Venado on July 26,
2016. Photograph by
Stewart D. Redwood.



(*Dasyprocta punctata*), paca (*Cuniculus paca*), and collared peccary (*Pecari tajacu*). The bones and teeth of these mammals were used to make ornaments and tools at Playa Venado.

MARINE-COASTAL ENVIRONMENT

The Continental Divide descends to its lowest elevation along the Isthmus of Panama in the Panama Canal area and is much closer to the Pacific Ocean than to the Atlantic Ocean. The nearest rivers to Playa Venado are short. The Río Grande was canalized to form the Pacific reach of the Panama Canal. Before the 1907–1914 construction of the waterway, it experienced a seasonally strong flow, and discharged into a small mangrove-fringed estuary at the old Canal Zone community of La Boca, 7 km from Playa Venado (Bonilla 2016).

Sandy beaches, rocky reefs and headlands, extensive tidal mudflats in front of the site, and small offshore islands would have provided habitats appropriate for different fishing methods and for the collection of marine-coastal invertebrates for human sustenance and ornamental use. Some marine shells, such as razor clams (Pharidae), were regularly placed in Playa Venado graves as offerings, and three shell taxa—pearl oyster (*Pinctada mazatlanica*), thorny oyster (*Spondylus* spp.), and Pacific giant conch (*Titanostrombus galeatus*)—were selected for the fine shell ornaments found at the site. Spectacular ornaments crafted from the Pacific giant cockle (*Larkinia grandis*) are also noteworthy.

The Beachrock or Coquina

A salient feature of the marine-coastal environment near Playa Venado is the beachrock or coquina. Many graves at Playa Venado were dug into this hard surface.

Ever since Lothrop (1954) observed that waterworn sherds were found in and under the coquina at Playa Venado, a relatively young age for this feature was a distinct possibility.

Lothrop's field notes and articles show that he was aware of the stratigraphic importance of the coquina at the funerary precinct and that he understood that it was but one component among a complex mosaic of marine and terrigenous features in the vicinity. In a letter to Bliss, Lothrop commented: "We have developed an important and unexpected archaeological problem, namely the presence of ancient refuse below the level of any graves, below thick layers of breccia [*sic*] and below several ancient beaches. This, of course, implies geological antiquity—but not very great as the earliest finds are water-worn sherds."² This complex stratigraphic issue perplexed Lothrop, and he spent the following ten years getting Playa Venado samples radiocarbon dated and corresponding with geologists in Panama, the United States, and the Netherlands in an attempt to understand Playa Venado's geological, and related chronological, history (Correspondence, SKJML Papers 996-27, 4.8, 4.15, 5.10). Lothrop succeeded in obtaining dates for two charcoal samples: one taken from beside an urn burial cut into the coquina [Y-125, 1750±60 bp, 130–410 CE; Deevey et al. 1959:166],³ and the other taken from within a burial

2 Samuel K. Lothrop to Robert Woods Bliss, March 14, 1951, Lothrop correspondence, Pre-Columbian Collection files, Dumbarton Oaks Research Library and Collection.

3 Deevey et al. (1959:166) cites the context of this charcoal sample as "Area A, Trench 8, between A-7 and B-2, 29 in. deep, under S edge of urn-cache 5." But in a letter dated May 6, 1957, Deevey notes that the original recorded context for the sample was listed as

urn of unknown context [GrN-2200, 1125 ± 65 bp, 720–1020 CE; Vogel and Waterbolk 1964:365].

Lothrop (1954) described the graves as “in or just under” the black topsoil, which “rested on old raised beaches of white sand or on coquina, vast shell lenses as much as 7 feet [2.1 m] thick which had turned to stone.” A sketch of a “simplified profile” within his unpublished notes shows, from the top: “black muck” 4 feet [1.2 m], “beach sand” 2 feet [0.6 m], “coquina” 6 feet [1.8 m], “sand and coquina of unknown depth” greater than 5 feet [1.5 m], underlain by “Tertiary clay” (“Venado Beach—Simplified Profile,” SKJML Papers 996-27, 6.28).

Beginning in August 2016, Stewart D. Redwood started a field evaluation of the coquina at Playa Venado; this investigation is ongoing, and the comments herein must be considered provisional. There is a clear stratigraphy with 0.7 m of dark sediment overlying coquina about 1.6 m thick, which rests either on muddy shell sand or volcanic bedrock that is often weathered to clay. The elevation of the coquina is approximately 2.20–3.80 masl. Coquina forms in the intertidal zone and is a sea level indicator (Bird 2008:161–162; Dickinson 2000; Voutsoukas et al. 2007). The elevation of the Playa Venado coquina indicates that it is a fossil-raised beach formed at a higher relative sea level. There has been a drop in the relative sea level or an uplift of the land since the youngest radiocarbon date [Beta-443713, 1650 ± 30 bp, 680–780 CE], as described below. This was accompanied by a seaward shift of the shoreline by up to approximately 120 m, although in one place the coquina is now exposed at the present shoreline. The overlying dark, organic-rich sediment may have formed in a fresh water lagoon dammed by a beach ridge.

Radiocarbon determinations of the coquina were made in 2016 and 2017. After consultation with Ron Hatfield at Beta Analytic, we requested one total sediment date, as well as another measurement for the

“Trench B#4, between A-7 and B-2, 29” deep, under S edge of urn cache #5” (Letter from Edward Deevey to Samuel Lothrop, SKJML Papers 996-27, 4.15), which is confirmed by a provenience notation with the exact same wording within the field notebook for this context (Frederick Orchard’s field notebook, 1951 [pages 107–108], SKJML Papers 996-27, 5.8); the field notebook does not mention the coquina. For unknown reasons, Lothrop told Deevey in a subsequent letter dated May 18, 1957, that “under our final nomenclature, the point where it was found will be called Area A, Trench 8, Cache 5” (Letter from Samuel Lothrop to Edward Deevey, SKJML Papers 996-27, 4.15). In fact, the numbering of Cache 5 from Area B, Trench 4 did not change (“Venado Beach Field Note References and Final Changes in Numbering Skeletons” [page 11], SKJML Papers 996-27, 6.10).



Figure 71

View of Unit 2 excavations cut alongside a recent drainage ditch in the dry season of 2017. The test pit cut through the lower of the two coquina members, which contained preceramic stone tools, is visible in the lower right corner. Photograph by Anthony J. Ranere.

most intact and uneroded marine shell fragment recovered from the sample by Beta Analytic technicians. One sample for radiocarbon dating was taken from the top of the approximately 0.5 m-thick coquina that outcrops at the mouth of the Río Mangopobre at the present shoreline. Radiocarbon dates for this section of coquina based on a bulk sediment sample [Beta-443948, 1820 ± 30 bp, 540–650 CE] and a whole shell embedded therein [Beta-443713, 1650 ± 30 bp, 680–780 CE] are remarkably consistent with Sánchez Herrera’s typological evaluation of the mostly Cubitá-style pottery in the funerary features, thus suggesting that the shoreline coquina outcrop formed around the same time that the burials were laid at Playa Venado.

A stretch of coquina is also exposed in the profile of a deep drainage ditch, near Lothrop’s Area A, approximately 120 m from the current shore. Anthony J. Ranere and Princeton University students cleaned off faces of the coquina in April 2017 (Figure 71). The exposed coquina attains a vertical thickness of 1.6 m and is bedded. Radiocarbon dates were obtained from the bottom layer of the coquina based on a bulk sediment sample [Beta-465695, 3410 ± 30 bp, 1400–1170 BCE] and a marine shell

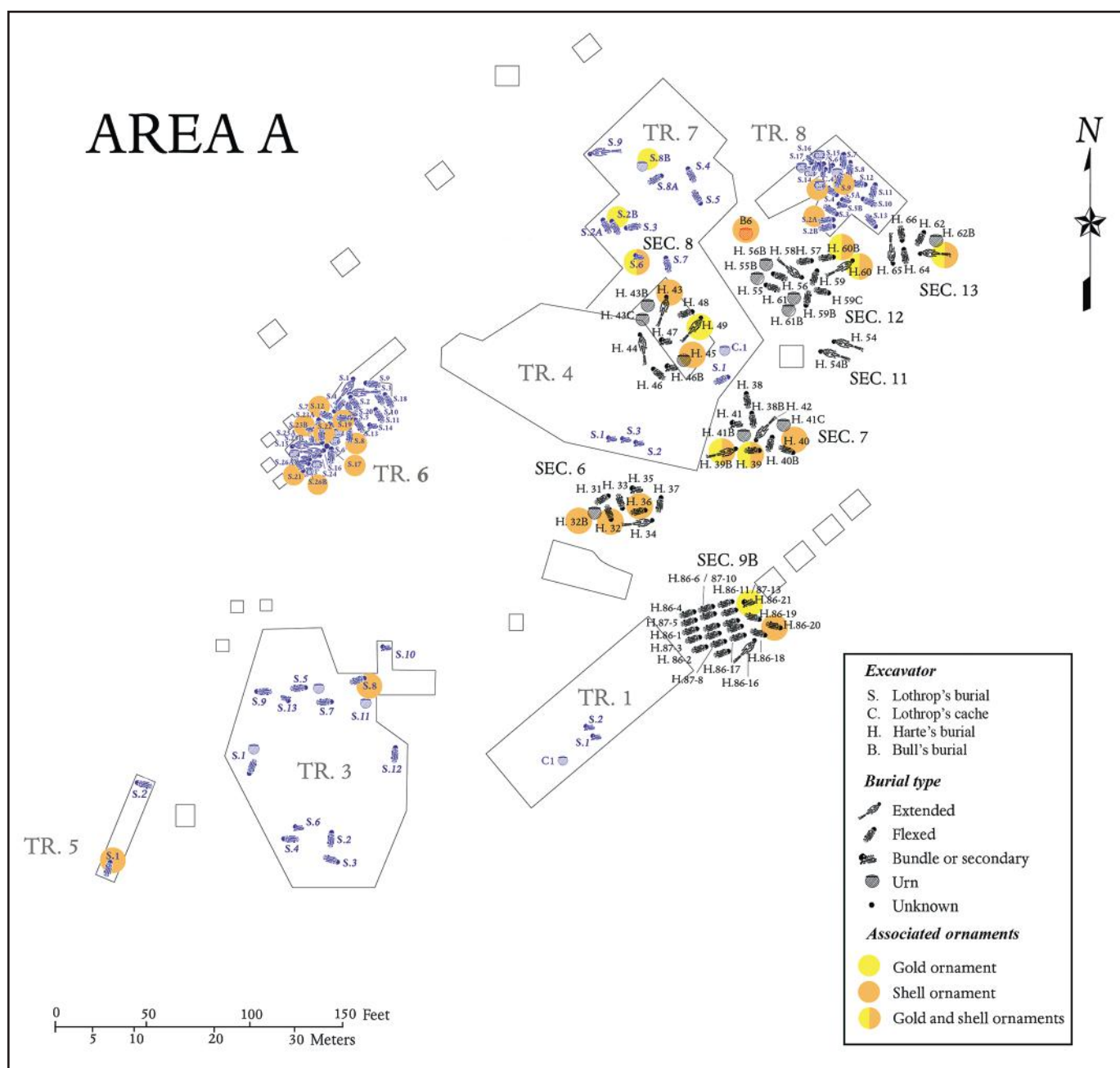


Figure 72 Lothrop's Area A of Playa Venado. Illustration by Claudia P. Díaz.

embedded therein [Beta-465696, 3580±30 bp, 1590–1390 BCE]. The upper layer of the coquina was dated similarly based on a bulk sediment sample [Beta-465697, 2600±30 bp, 380–180 BCE] and an embedded marine shell [Beta-465698, 2400±30 bp, 150 BCE–70 CE]. A small (50 × 40 cm) test pit excavated below the lower coquina stratum in 2017 contained a cobble tool fragment and a jasper flake. Further excavations under the lower coquina in April 2018 revealed several thin, waterworn ceramic sherds, suggesting the presence of an earlier ceramic occupation at the site.

The Funerary Precinct

Lothrop was a professional archaeologist with a long history of field experience in the New World.

He possessed a good understanding of the interface between geomorphology and cultural stratigraphy in lowlands with undifferentiated Holocene drainage systems. The field notebooks recording the excavations that he directed at Playa Venado represent the most reliable records available from which to identify and interpret mortuary patterns from the archaeological contexts (Samuel Lothrop and Frederick Orchard field notebooks, 1951, SKJML Papers 996-27, 5.3, 5.8). Field notebooks kept by many members of the Archaeological Society of Panama are also available for consultation in the archives of several museums in the United States; however, these records are riddled with inconsistencies and simplifications spawning from the excavators' lack of professional knowledge.

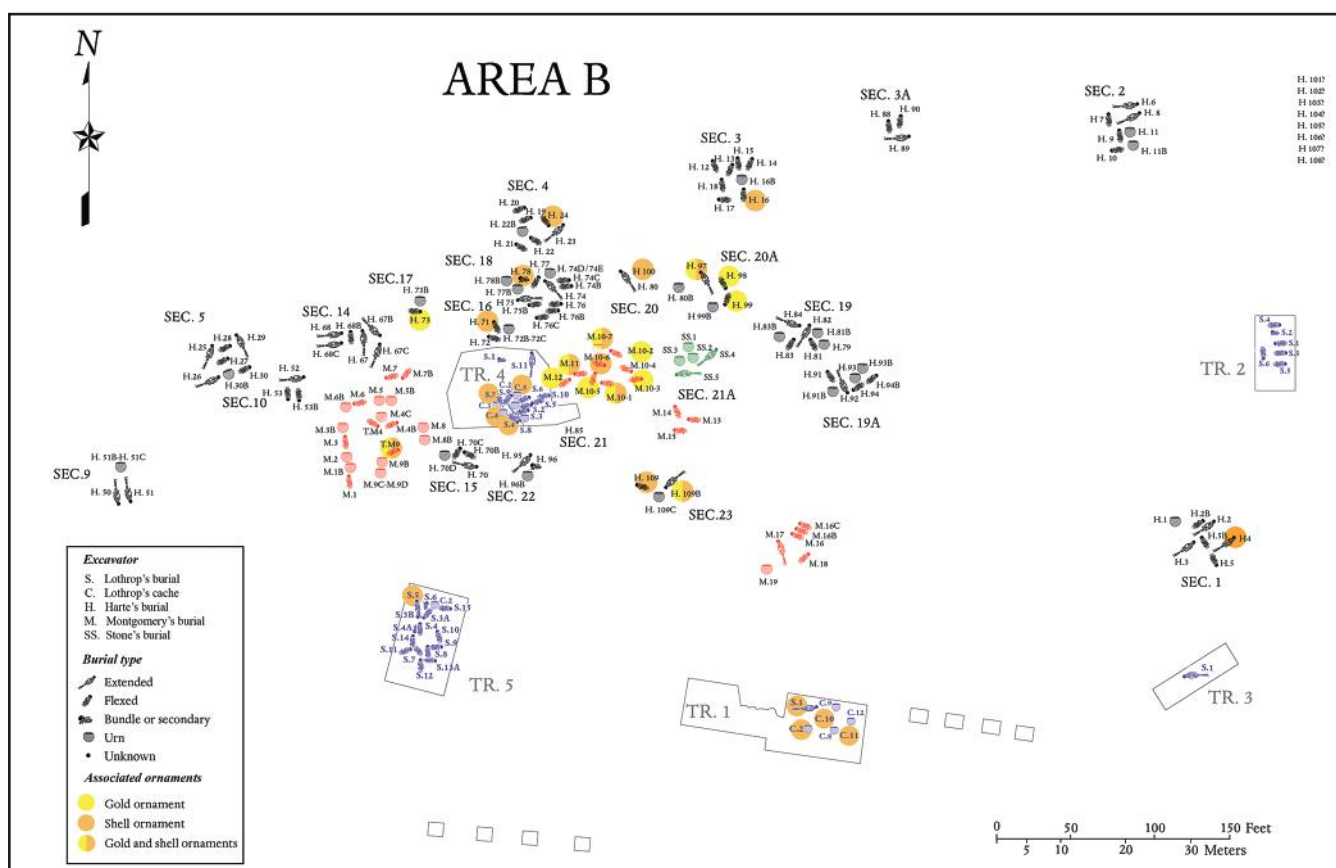


Figure 73
Lothrop's Area B
of Playa Venado.
Illustration by
Claudia P. Díaz.

Neville and Eva Harte, as well as Lt. Col. Lee E. Montgomery and his wife, Dee, worked in many burial features at Playa Venado. Both husband-and-wife teams wrote field notebooks illustrated with sketches. The illustrations drawn by the Hartes are more artistic than those by the Montgomerneys, but they are not necessarily more truthful. A puzzling aspect of Neville Harte's notebooks is that two versions exist, with substantial differences in burial numbering, skeletal positioning, and associated artifacts drawn. One version is housed in the archives of the National Museum of the American Indian (with a photostat copy at the Peabody Museum of Archaeology and Ethnology; see Neville Harte: Photostat of Field Notes, 1952, SKJML Papers 996-27, 6.21). The second version was sent as a partial photocopy directly from Neville Harte to Leo Biese, who forwarded it to Warwick Bray in the 1980s.

Grave Stratigraphy and Complexity

Several graves were laid directly on top of, or often cut into, the coquina layers that underlie Playa Venado. However, some graves were dug into the topsoil or sandy layers alone. In areas where the bulldozers did not eliminate all blackish surface soils, a complete, or nearly complete, stratigraphic sequence with the depths of each stratum can be inferred using the field notebooks, which have cross sections, as guides.

According to Lothrop (1959), in graves where the coquina was deep enough, and the buried individuals sufficiently important, side chambers were dug for the placement of several bodies. But it appears that Lothrop may have extracted this information from Harte's field notebook and word of mouth from other society members, as no such features are specifically recorded in the field notebooks from the Peabody Museum of Archaeology and Ethnology excavations. Harte and Montgomery also refer to a fill of red clay in the Playa Venado burials, which had been noted by Lothrop. Lothrop thought that this clay was brought in from outside the funerary precinct, and that it may have been placed intentionally with the burials (Lothrop 1954:226).

A detailed sketch map made by Neville Harte records the location of mortuary features and their relation to excavations conducted at the site by Lothrop and individual diggers of the Archaeological Society of Panama (Neville Harte's site map, SKJML Papers 996-27, 4.16). The map has been digitized by Luís A. Sánchez Herrera and Claudia P. Díaz as well as divided, for convenience, into three sections (Figures 72–74). Area D is not included, as it featured only one burial.

A total of 357 recorded individual human skeletons were excavated by the Peabody Museum of Archaeology and Ethnology dig, Canal Zone residents, and Dr. Hans Feriz, a medical doctor and anatomy

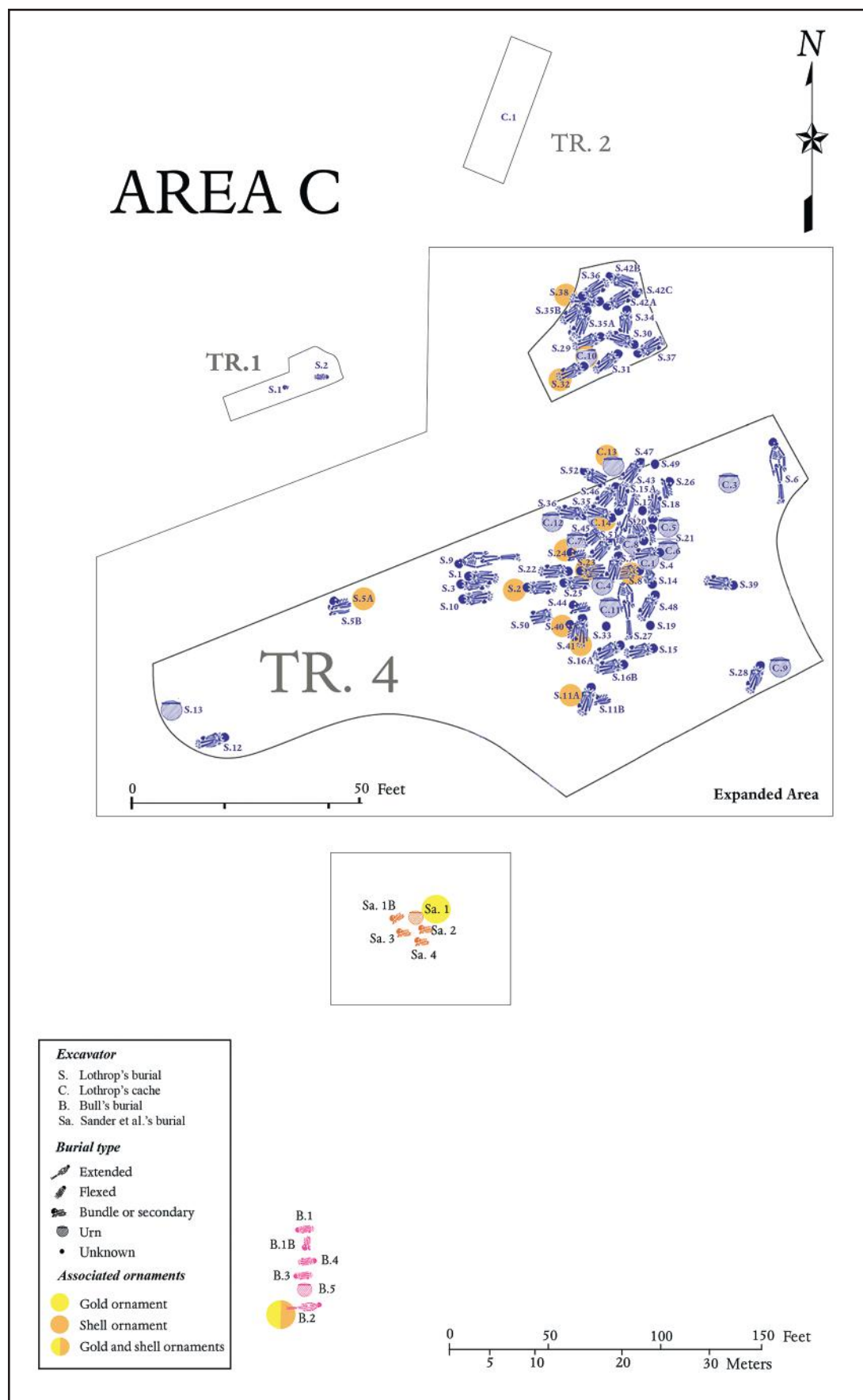


Figure 74 Lothrop's Area C of Playa Venado. Illustration by Claudia P. Díaz.

professor at the University of Amsterdam (Feriz 1957, 1959a): 54 of the skeletons were in extended burials, 206 in flexed burials, and 81 in urns. The remaining sixteen were recorded as belonging to disturbed or bundle burials. Harte's field notebooks describe graves with burial urns containing infant or child remains that were found on ledges cut as much as 1 m higher than the coquina or other floor materials—but, again, we must take his account with a grain of salt. Many of the burials at Playa Venado were part of multiple burial units, often featuring several primary burials with associated secondary urn burials. The multiple burial that had the largest purported number of occupants (twenty-one) was Harte's Grave H.86–87, which contained one isolated skull, nineteen primary flexed burials, and one primary extended burial. However, it remains uncertain if Harte distinguished secondary bundle burials from primary flexed burials in his field notebook.

Due to the aforementioned uncertainty involving the field notes taken by the amateur archaeologists digging at Playa Venado, Lothrop's excavation notebooks at the Peabody Museum of Archaeology and Ethnology provide the most reliable information from which to understand the burials and their associated contents. Lothrop worked in four different areas of Playa Venado (Areas A through D), and was assisted by museum employee Frederick Orchard and a team of local workmen from the village of Camarón. Nineteen trenches revealed approximately 219 human individuals in burials and so-called caches. Lothrop (1942:3) popularized the term *cache* at Sitio Conte, surmising that these were secondary offerings to the dead that were deposited after the original interments. The term described more ambivalent offerings at Playa Venado, as they often contained several ceramic vessels, as well as a burial urn in which fetal, infant, or young child remains were placed.

The Human Remains from the Peabody Museum of Archaeology and Ethnology Excavations

Although Lothrop did not recover all of the human remains from his excavations, a sample of skeletal material that he deemed important was sent to Smithsonian physical anthropologist T. Dale Stewart for analysis in the 1950s (Letter from T. Dale Stewart to Samuel Lothrop, May 15, 1953, SKJML Papers 996-27, 4.8; Stewart 1958). The sample, which comprises at least seventy-one individuals, remains in the National Museum of Natural History, where it was analyzed by Smith-Guzmán in 2017. The details presented in this essay summarize the technical analysis report (Smith-Guzmán 2017b) and an article that reinterprets notions of violence at the site (Smith-Guzmán and Cooke 2018).

EVIDENCE OF VIOLENCE

After his initial observation of the skeletal material, Stewart seemed surprised both by the small number of individuals represented in the sample and by the absence of “tooth filing and bone cutting” that would have corroborated Lothrop's interpretations of violence at the site (Stewart 1958:46). Lothrop's (1954) paper on suicide, sacrifice, and mutilation at Playa Venado has been cited over thirty-five times, including by several authors as an example of violence, cannibalism, and trophy-head taking among Pre-Columbian populations (Smith-Guzmán and Cooke 2018). However, Lothrop did not actually present evidence of these practices at the site; instead, he used words indicative of violence (e.g., mutilated, cut-off, and buried alive) to describe the Playa Venado burials, thus implying that such practices existed.

Lothrop notes that many skeletons at Playa Venado are missing heads, which he equates with deliberate decapitation. In a photograph of one skeleton, the mandible and all cervical vertebrae are still visibly in situ and fully articulated (Lothrop 1954:fig. 64a). A maxillary incisor lies alongside the mandibular dentition, as often happens after the decay of the soft tissue holding single-rooted teeth, leading these teeth to fall out due to gravity. Thus, the evidence from the photograph suggests that the cranium was removed after the burial and decay of the body.

Lothrop also notes that several skeletons were found with their mouths open, which could indicate that they were buried alive. This idea is a common misconception that several archaeologists published at that time. In fact, the jaw muscles relax after death and the mandible falls open due to gravity. Furthermore, the positioning of the Playa Venado burials either in extended or flexed modes indicates that the interred did not move after burial.

Lothrop suggests that some skeletons showed signs of broken backs or necks. In another photograph, we see a skeleton whose face is pointed in the opposite direction as its arms and legs (Lothrop 1954:fig. 63b–c). The position of the ribs, spine, and right clavicle shows that this person was buried flat on the back, with the limbs flexed to the left and the head turned to the right. The cervical vertebrae do not appear to be fractured, but rather are in a normal anatomical position for this turn of the head. Finally, in the example of a purported broken back shown in another photograph, we see sharp-edged breaks on the anterior of two vertebral bodies that were directly underneath the forearm bones (Lothrop 1954:fig. 62). Such sharp-edged breaks are consistent with post-mortem damage to the bone. If the back had been broken traumatically, we would expect compression

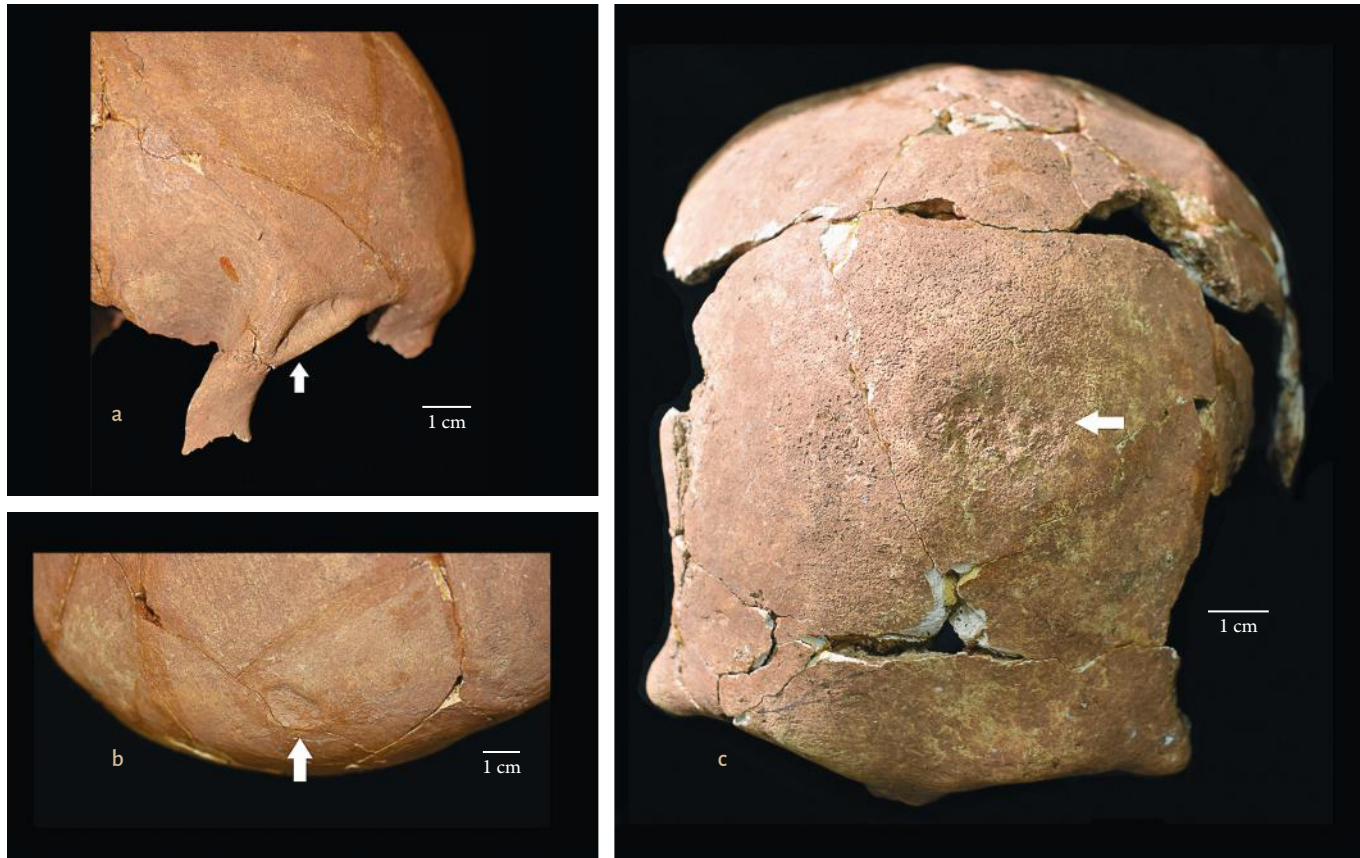


Figure 75
Crania from Playa Venado, with arrows indicating areas of antemortem blunt force trauma: a–b) healed, depressed area of bone above the right orbit and to the right parietal, respectively, of cranium from Skeleton B5-3A; and c) possible healing trauma to the mid-frontal of Skeleton C4-1. Photographs by Nicole E. Smith-Guzmán.

fractures to the tops and bottoms of the vertebrae as well as fractures to the posterior aspects.

To identify credible indicators of violent death, such as sacrifice or suicide, in archaeological contexts, researchers look for written or artistic examples of sacrificial practices within the culture, physical evidence of perimortem trauma on the human remains, abnormal body positioning of the purported victims, and an abnormal demography of the individuals buried at the site (e.g., elevated frequency of adolescent or young adult males). Sacrificial practices, though purported by Spanish chroniclers to have existed among some of the contact-period inhabitants of the isthmus, are not represented in the Pre-Columbian art of Greater Coclé. Perimortem trauma was equally nonexistent in the analyzed sample of Playa Venado human remains.⁴

⁴ In his field notebook, Harte relates his finding of a stingray spine embedded through two thoracic vertebrae of an individual in his Grave H.21. Although this represents a possible instance of interpersonal violence at the site, we find his account dubious for many reasons. Harte's field notes tend to contain fanciful information (e.g., that the beaded aprons were strung on human hair), which is discussed at several points in this essay. No photographs exist of the supposed stingray spine injury, and the bones were not left in the National Museum of Natural History. Most importantly, an incredible force

In fact, the only trauma seen on the bones included some postmortem excavation damage, a few healed injuries, and two instances of healed antemortem blunt force trauma to the cranium of two male individuals: Skeleton C4-1 (NMNH P381837) and Skeleton B5-3A (NMNH P381829) (Figure 75) (Smith-Guzmán and Cooke 2018:fig. 2).

Even with the absence of perimortem trauma among the remains at Playa Venado, it should be noted that some methods of possible sacrifice or suicide in the Pre-Columbian populations of Panama might leave no traces on the bones. Some plausible methods mentioned in early Spanish chroniclers' accounts include death by ingesting a toxic drink and by smothering within the burial pit (Fernández de Oviedo y Valdés 1851–1855:3:153–156). The latter would likely lead to irregular body positioning in the grave, but the former could be indistinguishable from a natural death.

Further evidence for violence was lacking in the recorded mortuary contexts at Playa Venado. Harte and Lothrop describe four characteristic types of burials: flexed, extended, urn, and bundle. The

and velocity would be required for the spine to perforate the bones at an oblique angle from above, which seems unlikely from a human assailant using a spear or club encrusted with a stingray spine.

existence of bundle burials, isolated skulls, and disturbed burials signals a pattern of reutilization of burial contexts, manipulation of human remains after death, and secondary burial practices. None of the interred appeared to be shackled or thrown into the graves. From the field notebooks, it also seems that mostly infants and children were buried in urns, and, based on drawings and photographs of these contexts, that at least some of these burials appear to be primary, articulated burials. These urn burials tended to be associated with primary burials of adults, perhaps reflecting a belief that young individuals need to be accompanied in the afterlife. Rather than sacrifice or suicide, the children of Playa Venado were likely buried in urns for the convenience of burying them when an adult died and was buried.

In considering the demography of individuals buried at Playa Venado, the recent osteological analysis showed a high infant and child mortality (i.e., 34 percent of individuals died before the age of fifteen), which is an expected rate for preindustrial societies. Nevertheless, almost half of the individuals (48 percent) were adolescents or young adults, which is not a normal time to die. Thus, it is possible that some of these deaths were nonnatural deaths from which no mark was left on the skeleton. Many of these individuals are women (43 percent of adolescents and 52 percent of young adults), meaning some of these deaths could represent expected rates of maternal mortalities. It is also important to consider that Lothrop did not recover all of the skeletons that he dug, so the actual demography of the cemetery may have looked different.

In a regional perspective, Playa Venado's demography appears to follow patterns seen in Pre-Columbian burials at nonelite sites in Central Panama, such as Cerro Juan Díaz, Sitio Sierra, Cerro Mangote, and Panama Viejo (Smith-Guzmán and Cooke 2018). The numerous infants, children, and women present in burials at Playa Venado stand in contrast to the paucity (or complete lack) of these early age groups, as well as to the mostly male adult individuals, represented in burials at the elite sites of Sitio Conte and El Caño.

In sum, Playa Venado appears to have contained burials of nonelite individuals in nonviolent contexts. Nevertheless, the material culture associated with several of the burials suggests the presence of important individuals, which will be discussed further in the artifact record section of this essay. The absence of evidence of violence at Playa Venado stands against Lothrop's (1954) interpretation of ritual killing. Instead, Playa Venado fits well with patterns seen at other nonelite sites in Panama, where burials represent all members of the population, with males and

females in equal proportion. The observed mortuary behaviors of reutilizing burial contexts and manipulating human remains suggest cultural practices of ancestor veneration rituals similar to those recorded by Spanish chroniclers.

EVIDENCE OF DISEASE

One of the most interesting aspects of the human remains from Playa Venado is the high frequency of disease that left its mark on the bones. One individual, Skeleton B4-8 (NMNH P381828), stands out in terms of the visual manifestation of disease on the bones. The extended burial of this young adult female measured just 107 cm in situ, and featured a scoliotic spine, several antemortem fractures and abnormally bowed long bones, and general osteoporosis affecting the entire skeleton (Figure 76) (Frederick Orchard's field notebook, 1951 [pages 91–92], SKJML Papers 996-27, 5.8). The extensive osseous pathologies seem to represent a systemic disorder, of which the most likely preliminary diagnosis is osteogenesis imperfecta, a rare brittle bone disease of genetic origin. This disease results from a lack of collagen synthesis, leading to generally low bone density and high incidence of fractures and limb bowing in childhood. Most individuals affected die before reaching adulthood due to respiratory failure from the extreme scoliosis which shortens the space for the lungs in the chest. The irregular angle of the femoral head to the shaft suggests that this individual would have had great difficulty walking, if indeed she was walking at all by the end of her life. The amount of community-based care that this individual would have required during her lifetime paints a very different picture indeed than the violent interpretations previously assigned to the Playa Venado population.

Many of the individuals at Playa Venado, like others at Panamanian sites in general, showed signs of infection by the spirochete bacterium *Treponema pallidum*, representative of either venereal syphilis or yaws. One of the most common lesions indicative of this type of infection is a reaction of the periosteum (i.e., the thin tissue overlying the surface of the bone), comprising abnormal bone growth outside and inside of the normal bone cortex. Such lesions affect 30 percent of the individuals at Playa Venado, which represents a higher frequency than that seen among the early period burials at Cerro Juan Díaz (26 percent) and the Pre-Columbian burials at Panama Viejo (14 percent). However, based on just periosteal reaction alone, it is difficult to distinguish between treponemal infection and other nonspecific infections causing a similar systemic inflammation.

Nevertheless, cranial lesions, such as those commonly seen in tertiary syphilis patients, can allow us

Figure 76

Field photographs of Skeleton B4-8, in situ, found stored with the human remains. Note the asymmetrical abnormal bending deformities of the long bones, particularly severe in the left humerus and right leg. A healed displaced fracture of the right femur is visible in the lower right photograph. Photographs courtesy of the National Museum of Natural History, Washington, D.C.

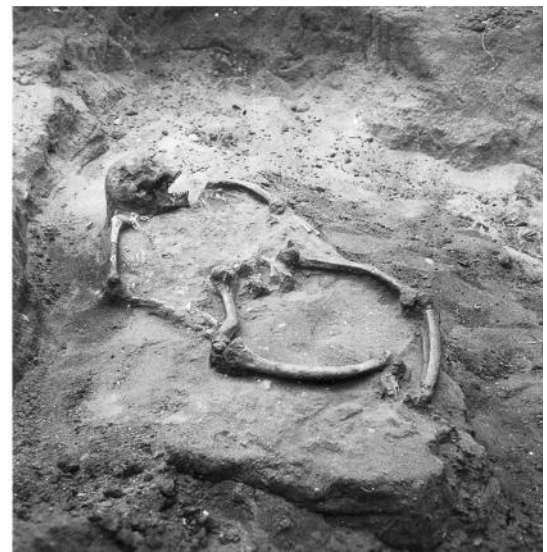
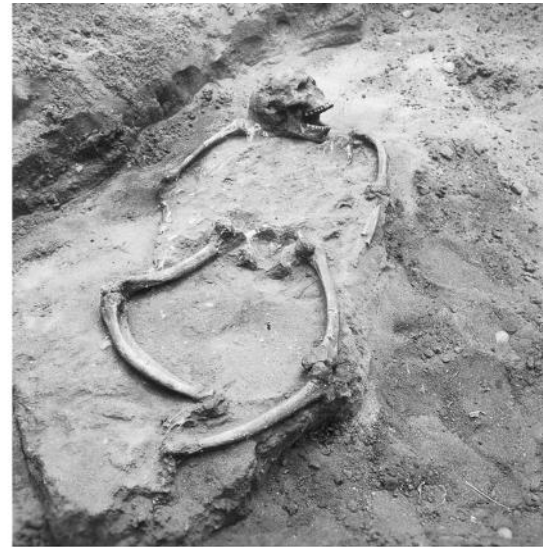


Figure 77 Anterior view of the cranial vault of Skeleton C4-16A, showing both active and healing lesions affecting the frontal bone. Photograph by Nicole E. Smith-Guzmán.

to be more certain of the presence of treponematoses in ancient skeletons (Hackett 1976). Both healed and active stages of these lesions, known as caries sicca, are apparent in one of the crania recovered by Lothrop from Playa Venado (Skeleton C4-16A; NMNH P381841) (Figure 77). Interestingly, this adult individual of indeterminate sex constituted a primary burial with an associated secondary bundle burial of an adult female (Skeleton C4-16B; NMNH P381842) placed directly on top of it (Samuel Lothrop's field notebook, 1951 [pages 137–138], SKJML Papers 996-27, 5.3). According to Lothrop's field notebook, the bones of Skeleton C4-16B were painted purple, although this color seems to have faded and was not apparent during the 2017 analysis. Lothrop posits that the purple color might have originated from the juice of the *jagua* fruit (*Genipa americana*), which is currently used as body paint by the Emberá and Wounaan Indigenous groups in Eastern Panama for a variety of purposes, including as both a protective and curative agent against diseases, particularly those

affecting the skin (Ulloa 1992:298–299). Based on the presence of severe skeletal lesions on the cranium of Skeleton C4-16A, as well as the unusual mortuary treatment with the secondary “painted” human remains, this particular burial may signal a ritual mitigation of supernatural forces thought to cause this disease within the population. Additionally, since skeletal involvement occurs in just 1–20 percent of known modern cases of syphilis (Resnick and Niwayama 1995), a high prevalence of either yaws or syphilis must have been present in this population.

EVIDENCE OF CULTURAL ACTIVITIES

Several cultural activities were also apparent in the human remains from Playa Venado. One such activity was widespread artificial cranial modification, of the type Stewart (1958) described in depth (i.e., “obelionic” flattening at the crown of the head; see Figure 78). Smith-Guzmán’s recent reanalysis of the Playa Venado human remains found this cranial modification present in 73 percent of individuals, and at slightly higher frequencies in females (78 percent) than in males (56 percent). The overall frequency of this practice mirrored the findings from the early burials at Cerro Juan Díaz (68 percent) and contrasted with the frequency of cranial modification in the Pre-Columbian burials at Panama Viejo (27 percent).

Another interesting practice of body modification among the population at Playa Venado is that of unintentional dental modifications. The most prevalent of these is a lingual surface attrition of the maxillary anterior teeth (LSAMAT), a heavy dental wear found only on the upper front teeth. The appearance of this modification at Playa Venado was first described by dental anthropologists Irish and Turner (1987); it was subsequently seen in many populations in Central America and the circum-Caribbean region, but its etiology remains uncertain. Clearly, these individuals were habitually dragging a material of some sort across the roof of the mouth and the upper front teeth. This material was likely a plant fiber, likely evidencing the use of the teeth as tools to peel manioc or to hold fibers in basket weaving. The lower teeth are generally not affected, so it is thought that the tongue was used as a support. Whatever the activity producing this type of wear pattern, the recent analysis found LSAMAT to be present among the Playa Venado individuals only slightly more frequently in females (83 percent) than males (69 percent). LSAMAT is also seen at similar frequencies at Playa Venado (76 percent), Pre-Columbian Panama Viejo (55 percent), and early Cerro Juan Díaz burials (60 percent).

Another type of unintentional dental modification was seen among a few male individuals only at



Figure 78 Left lateral view of the cranium of Skeleton A7-5, a nineteen- to twenty-three-year-old female (NMNH P381812). This cranium shows marked obelionic-type artificial cranial modification resulting from a tabular compression focused at the crown of the head (the obelion), which has created a more angular occipital bone, flattened parietal bones, and a generally broadened cranium. Photograph by Nicole E. Smith-Guzmán.

Playa Venado; it comprised the holding or dragging of a thin material across an upper premolar tooth. This activity usually manifested simply in the accelerated occlusal wear of this particular premolar tooth in comparison to the surrounding teeth. However, one conspicuous case of an adult male individual (Skeleton A3-8; NMNH P381788) involved a visible notch, 7 mm in diameter, in the incisal edge of the maxillary right central incisor, as well as a sharp slant to the incisal edge of the lateral incisor, in conjunction with a linear groove spanning the occlusal surface of the maxillary left first premolar. This wear pattern is consistent with a habitual activity involving holding a string or line approximately 2 mm in diameter tightly at one side of the mouth, while allowing it to exit loosely out the front of the mouth. The specific activity may have been associated with using the mouth as a third hand during line fishing or net making.

Finally, one adult male individual recovered from Playa Venado (Skeleton A6-4; NMNH P381795) contained a bony growth known as an external auditory exostosis within his left ear canal. Similar exostoses have been found, albeit infrequently, at sites in the central region of Panama, almost exclusively in male individuals (Smith-Guzmán and Cooke 2019). Since this growth is thought to be produced from habitual

exposure to cold water and wind, these individuals may have been engaged in a male-dominated aquatic activity, such as diving deep in search of thorny oyster (*Spondylus* spp.) shells. High winds and the associated cold water upwelling in Panama Bay during the dry season could explain the unusual appearance of these growths in the warm, tropical climate zone of Panama.

RADIOCARBON DATING OF THE HUMAN REMAINS

In October 2018, with the permission of the anthropology department of the National Museum of Natural History, four human bone samples and one human tooth sample from the Playa Venado human remains collection were sent to Beta Analytic for AMS radiocarbon dating. From these five samples, only three yielded sufficient collagen for radiocarbon dating; of these three, only one had sufficient preservation for full stable isotope analysis ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$), which provides quality assurance of the radiocarbon date. Thus, the date obtained from the sample of human mandible bone from Skeleton B4-4 (NMNH P381824) [Beta-507049, 1570 ± 30 bp, 420–560 CE] can be considered of best quality among those attempted for the human remains. This date fits well with the relative ceramic chronology time frame estimated for the site, and exactly matches an AMS date based on charcoal taken from the organic core of a gold artifact from a different area of the site [Beta-465876, 1570 ± 30 bp, 420–560 CE]. It also provides a date for the large shell necklace (PC.B.387, Plate 107) that adorned this male skeleton (see Figure 108).

The second human sample (a portion of the left clavicle from Skeleton C4-41; NMNH P381847) yielded a date that also appears to be valid [Beta-507051, 1770 ± 30 bp, 140–350 CE] as it overlaps with that of a bird bone tube from another artifact found at the site [Beta-446967, 1740 ± 30 bp, 240–390 CE], to be discussed in the artifact record section below. Since Skeleton C4-41 was found in a primary burial, this date also provides a temporal context for one of the most unique ceramic pieces found at the site: a bowl with a scalloped rim and tall pedestal modeled with a toad figure (see Figure 83). Based on this date, we must adjust our estimated minimum date of cemetery use accordingly to ca. 250 CE.

Unfortunately, the AMS date calculated by Beta Analytic for the third human sample cannot possibly be acceptable. This sample comprised a tooth root taken from Skeleton B5-4 (NMNH P381830) that was intended to provide an upper temporal limit for cemetery use based on the Early Conte-style (ca. 700–850 CE) ceramic vessels that were found in association with this individual. Instead, the sample yielded an inexplicably early date [Beta-507050,

2330 ± 30 bp, 490–260 BCE]. It is conceivable that the individual sampled did not, in fact, pertain to the burial context with the Early Conte-style pottery. In several instances during the human remains analysis, it was possible to determine that some of the handwritten paper context designators placed within each box of skeletal elements at the National Museum of Natural History collections had become confused and attributed to the wrong individual. Nevertheless, there are no indicators based on material culture analyses that any of the burials at the site predate the first millennium CE. Thus, the date calculated for this individual cannot be considered correct.

The Artifact Record

Ceramic Chronology and Cultural Affiliation

PLAYA VENADO IN THE GREATER COCLÉ CULTURAL INTERACTION SPHERE

The current data tracing the temporal and spatial trajectory of Pre-Columbian pottery in the Isthmian area demonstrate clearly that at certain points in history, populations inhabiting the eastern shores of the Gulf of Panama shared the same material cultural heritage with those of the western shores. The idea of distinct cultural developments to the west and east of the El Valle volcano (pertaining to Greater Coclé and Greater Darién, respectively) appears to have validity, according to the supposed “Cueva” linguistic frontier and the substantial differences in material culture in the six centuries prior to Spanish conquest (Cooke 1972, 1976c, 1984; Cooke and Sánchez Herrera 1997; Cooke, Sánchez Herrera, Isaza, et al. 1998; Romoli 1987). However, the notion of a panregional shared cultural heritage at specific points in time was confirmed recently by artifactual and chronometric data from the Pearl Islands, where inhabitants used polychrome ceramics of the same stylistic and iconographic standards as their western neighbors from 620 to 800 CE, based on radiocarbon dates from Pedro González (L-3) [Beta-230800, 1350 ± 40 bp, 620–770 CE; Beta-230801, 1330 ± 40 bp, 640–770 CE; Beta-230802, 1300 ± 40 bp, 650–800 CE; Martín et al. 2016:389–392, table 1].

Several researchers have proposed a cultural interaction model that encompassed the Gulf of Panama and relied on coastal and open-sea travel by canoe, coinciding with the peak of the Cubitá style (550–700 CE) in the Greater Coclé sphere (Cooke and Sánchez Herrera 1997; Martín and Sánchez Herrera 2007; Sánchez Herrera 1995; Sánchez Herrera and Cooke 1997, 2000). This model explained the eastward expansion of ceramic features that were previously restricted in range of use and production to sites located in the Azuero Peninsula and Parita Bay. Undoubtedly, the need to acquire marine shell

and other resources for the production of sumptuary goods was one of the motives for this eastward expansion; however, a deep social and cultural history of this process beyond simple interchange between neighboring regions is possible, and it is probable that long before this time, the inhabitants of coastal sites along the Gulf of Panama were part of the same cultural tradition. This hypothesis is implicated in consideration of the following three observations: 1) a polychrome ceramic complex from 250 to 600 CE, identified in Pedro González Island and Taboguilla Island, which was contemporary and similar stylistically to Tonosí style (300–500 CE) from the south of the Azuero Peninsula, and its counterpart Aristide from the Parita Bay and western Coclé (Cooke 1972; Ichon 1980; Ladd 1964; Martín et al. 2016; Núñez-Cortés 2015; Stirling and Stirling 1964); 2) the incursion of gold technology from Colombia and the appearance of a specialized marine shellworking industry, as well as the specialized crafting of other materials like semiprecious stone, in the Gulf of Panama several centuries before the development of Cubitá-style pottery (Cooke and Sánchez Herrera 1997; Cooke, Sánchez Herrera, Isaza, et al. 1998; Cooke, Sánchez Herrera, and Udagawa 2000); and 3) all of these articles (i.e., pottery and sumptuary goods) incorporate a unified and particularly visible symbolism within the broad geographic range of the Gulf of Panama (Martín et al. 2016; Núñez-Cortés 2015; Sánchez Herrera 1995; Sánchez Herrera and Cooke 1997).

FROM CUBITÁ TO CONTE STYLE: OBSERVATIONS ON THE CONTEXTS OF CERAMIC CATEGORIES AT PLAYA VENADO

A review of the field notebooks in the archives of the Peabody Museum of Archaeology and Ethnology shows that funerary items and cultural stratifications support the idea that the Playa Venado cemetery extended across the period during which Cubitá-style pottery was in vogue (i.e., the “Middle Ceramic D Period” in the Greater Coclé regional sequence). The general types and stylistic features of the Playa Venado sample at the Peabody Museum of Archaeology and Ethnology, observed by Sánchez Herrera in person in 1996 as well as in photographs of vessels on the online collections website, suggest the same—namely, that the peak usage of the cemetery took place in the latter part of the date range estimated for Cubitá (500–700 CE). Indirectly, the much less prevalent Early Conte (700–850 CE) funeral component at the site confirms this assertion. The same impression seems to hold in areas of the cemetery excavated by amateur archaeologists, and in what could be observed from Playa Venado ceramic pieces now housed at the National Museum of the American Indian.

Playa Venado’s ceramic component consists principally of categories analogous to the ceramic complexes of the Azuero Peninsula. The parallel to the Cerro Juan Díaz ceramic assemblage is particularly intriguing due to resemblances at all levels; there are literally identical versions in all attributes of the form, decoration, and scale of the designs. Almost all of the typological categories are shared, both in the painted and plastic decoration, and to a certain extent, in the monochrome ware. Playa Venado’s Cubitá ware is distinguished by decorative variants including Ciruelo Black-on-Red (7.8 percent; Ichon 1980:105–108, fig. 29), Cábimo Banded Lip (3.3 percent; Ichon 1980; Sánchez Herrera 1995:figs. 47–50; Sánchez Herrera and Cooke 2000), Nance Trichrome (10 percent; Sánchez Herrera 1995:figs. 51–60), and Caracucho Trichrome (2.8 percent; Ichon 1980:fig. 67ac, pl. XXXIX; Labbé 1995:figs. 22, 128; Sánchez Herrera and Cooke 2000:fig. 2). Outstanding is a variety of the Guábilo type (or Guábilo Figurative, 2.2 percent; Ichon 1980:fig. 29), a new group called Laurel Banded Lip (4.45 percent) and a substyle called Almendro Polychrome (13.4 percent). Stylistically, Almendro is an intermediate category between the Cubitá and Conte styles. Other less visible substyles in the funerary deposits of Playa Venado—including Montevideo Polychrome (Ichon 1980:224–230, fig. 71; Labbé 1995:figs. 12–15, 90, 131, 129, 130), Corotú Polychrome (Cooke 1972:pls. 17–20, 2–29, 32–34; Ichon 1980:fig. 71h–j; Lothrop 1942:fig. 179), and Montijo Transitional (Labbé 1995:figs. 23–29a), which Lothrop called Foreign Style B (Lothrop 1942:fig. 226)—can now be considered within the Late Cubitá stylistic group (like Almendro), because they contain features present in the earliest graves of Sitio Conte and because a large sample of whole vessels in private collections is known that allows for the improvement of their typological definition.

Data from Harte, Montgomery, and Bull’s Excavations

Unlike the records held by the Peabody Museum of Archaeology and Ethnology, the field notebooks left by the amateur archaeologists only offer brief clues about the association of grave goods to specific ceramic styles. Usually, the most informative descriptions and drawings either refer to “Coclé pattern design” or “black on red ware,” or refer to some morphological attribute or figure represented. Modeled incised vessels are frequently indicated, along with “incense burners.”

Interestingly, burials with the most sumptuous ornaments do not usually contain polychrome ceramics. Among the forty most prominent graves (as defined by the presence of gold ornaments or



Figure 79

The ceramic mask found by Neville Harte on the skull of the occupant of his Grave H.60 at Playa Venado. Lothrop writes that “the right cheek has been restored, also some of the white paint on the basis of a drawing made when it was first exposed to the air” (SKL Papers 996-27, 6.3). It is questionable whether the painted design was original or another figment of Harte’s imagination. However, the molded and incised designs correspond to an uncommon decorative mode identified in west and east Panama provinces, which is also seen in the toad pedestal vessel in Figure 83. Overall dimensions: 26 cm × 20.5 cm. Gift of Neville A. Harte, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-35-20/18511.

fine, complex shell artifacts) there are some interesting clues regarding the Cubitá, Almendro, or Conte association. Harte’s Grave H.60 is particularly interesting, as it contained one of only two ceramic masks found at Playa Venado (the other, which was allegedly obtained by Dade near Lothrop’s Area C, is cruder in design and material and was not found in association with a burial; NMAI 22-5889). The mask found by Harte is dark in color with incised designs and holes for tying it around the face (Figure 79). It was purportedly found in situ on the face of the deceased, who also (according to Harte’s notes) wore a nose ring and a “sun disc” (Figure 80). The patterned details of this mask recall flat appendages that, in a variety of Ciruelo Black-on-Red effigies, represent the head and plumage of a bird (Sánchez Herrera 1995:142, figs. 27b–c).

The grave that appears to contain some of the most outstanding goldwork offerings of the entire cemetery—Montgomery’s Grave M.10-7—seems to be associated with some kind of incense burner that, judging by Montgomery’s drawing, has a strap handle (i.e., an element of very clear ubiquity within the cultural sequence of Greater Coclé preceding the Conte style) that is indicative of Cubitá Red or Melina Smooth (10 percent). Within the same grave, a brown

cup or plate with a pedestal is mentioned, possibly referring to Macano or Acacio ware of the simple variety with circumferential grooves in the medial zone. In Montgomery’s Grave M.11, associated with a “gold knife,” a tall polychrome pedestal vessel is described, signaling the presence of Almendro ware pertaining to the variant with decoration on the rim and on the reverse side.

Due to its size and decoration, an urn with food from Harte’s Grave H.98, which supposedly contained a gold openwork pendant and embossed plaque (PC.B.372, Plate 102; and PC.B.382, Plate 101) (Lothrop 1956:fig. 5), possibly represents Malagueto (6.1 percent), which usually has shell stamping on the rim and a scraped outer neck area. A similar vessel, representing either Malagueto or Piñuela ware, was likely used to bury the infant in the grave described by Bull (1961), which was lidded with a thick bordered bowl, perhaps representing a vessel similar to the Laurel type (cf. Sánchez Herrera and Cooke 2003:fig. 5). A black-on-red decorated vessel, perhaps of the Ciruelo type, was also associated with this vessel.

THE PEABODY MUSEUM OF ARCHAEOLOGY AND ETHNOLOGY EXCAVATIONS:

LOTHROP AND ORCHARD’S DATA

In contrast with the scant documentation left by the amateur archaeologists, the ceramic artifacts housed in the Peabody Museum are highly organized and contextualized with associated detailed field documentation from which to analyze mortuary context. The burial goods vary considerably in the number and types of objects, including many burials that had no trace of accompanying

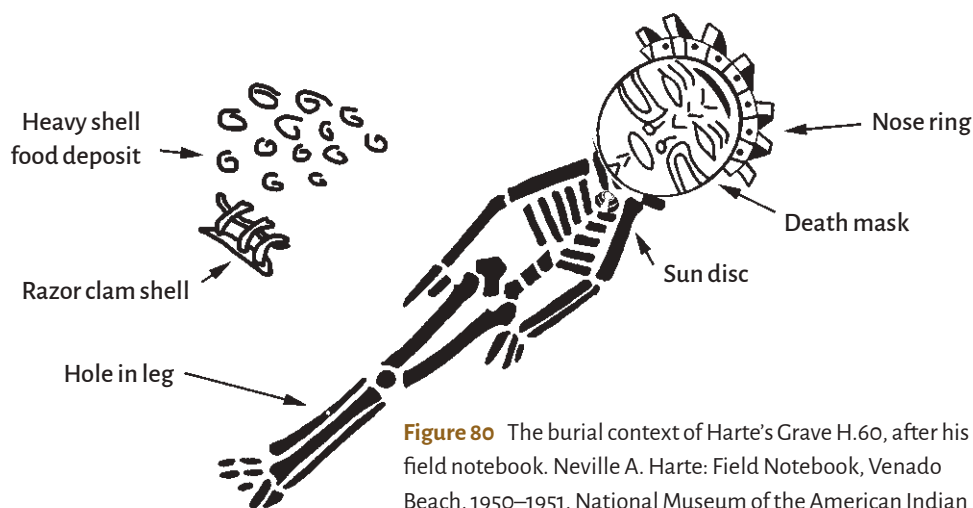


Figure 80 The burial context of Harte's Grave H.60, after his field notebook. Neville A. Harte: Field Notebook, Venado Beach, 1950–1951, National Museum of the American Indian / Heye Foundation Records, box 247, folder 6. Illustration by Claudia P. Díaz.

ceramics or other mortuary artifacts. Polychrome ceramic vessels were not found in all of the burials; many graves instead contained other types of vessels with a greater ritual or religious significance within the Greater Coclé tradition (e.g., cylindrical or goblet-shaped vessels and incense burner-type plates). For example, the double burial of Skeletons C4-35A and C4-35B (Frederick Orchard's field notebook, 1951 [pages 115–116], SKJML Papers 996–27, 5.8) contained a curious tripod cup with a circumferential appliqué band (Figure 81), which is very similar to one found in Grave 1 at Sitio Conte (Lothrop 1942:fig. 338). In another example, a cache found in Area A⁵ apparently contained two identical Melina ware cylindrical vases (PMAE 51-25-20/20233 and 51-25-20/20234), the morphology of which recalls the old Arcabú Appliqué cup common in areas of the Parita Bay. Skeleton A3-8, an adult male with activity-related wear on his teeth (see above; NMNH P381788), was accompanied not by painted pottery but by a fine Chumico vessel with a broken, constricted neck and realistic appliques of what appear to be small frog (anuran) figures (Figure 82). Skeleton A6-8, a young to middle-aged female (NMNH P381796), was placed in a flexed position within a narrow pit dug into the coquina and was accompanied by an unusual, crude vessel



Figure 81 Tripod cup with circumferential appliqué band, excavated by Lothrop from the double burial of Skeletons C4-35A and C4-35B. Overall dimensions: 17 cm × 12.5 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20812.

⁵ The Peabody Museum of Archaeology and Ethnology associates these two objects with "Area A, Trench 3, Cache 7," which does not exist according to the field documentation. We were unable to confirm the actual contextual association of these two vessels based on the field notebooks (Samuel Lothrop and Frederick Orchard's field notebooks, 1951, SKJML Papers 996-27, 5.3, 5.8).

Figure 82

Fine Chumico vessel with a broken, constricted neck and realistic appliqués of small frog (anuran) figures. Overall dimensions: 17.5 cm × 21 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20243.



in the form of a basket (PMAE 51-25-20/20294). A similar crude vessel with twin handles on the sides (PMAE 51-25-20/20235) was found with Skeleton A3-7,⁶ which according to Lothrop represented a “female [with] worn teeth” (indicating middle to older adult age) in a flexed, supine (face up) position (Samuel Lothrop’s field notebook, 1951 [page 20], SKJML Papers 996-27, 5.3). In another example, a four- or five-year-old child (Skeleton A6-19; NMNH P381802) in a flexed, supine position was associated with another miniature pot (PMAE 51-25-20/20305), along with a carved shell ornament in the shape of a frog (PC.B.390, Plate 105). Lothrop reports that Cache A6-2 contains an infant buried in a Chumico Appliqué urn (PMAE 51-25-20/20276), capped with a Melina Smooth plate (PMAE 51-25-20/20275) and an unusual red anthropomorphic effigy vessel (PMAE 51-25-20/20274) that accompanied the infant within the urn. The expressive gesture of the mouth of the anthropomorphic figure suggests that it represented a whistler or singer.

⁶ The Peabody Museum of Archaeology and Ethnology lists the context of 51-25-20/20235 as “Area A, Trench 3, Skeleton 1,” but this does not accord with the information in Lothrop’s field notebook (Samuel Lothrop’s field notebook, 1951 [page 13], SKJML Papers 996-27, 5.3). Instead, the notebook lists a “very small jar—two handles,” drawn very similarly to 51-25-20/20235, as associated with Area A, Trench 3, Skeleton 14 (which was renumbered 7). Since the original Skeleton 7 from this trench was renumbered Skeleton 1, this must have been the source of the confusion.

Another burial at Playa Venado contains one of the most unique ceramic objects from the site: a bowl with a scalloped rim and a tall pedestal modeled with a toad figure (Figure 83). The decoration on the base and within the bowl is derived from the practice of filling incisions with a white substance (e.g., calcium carbonate or kaolin) to separate red areas from black in the design—in this case, formed with rectilinear spirals. This piece was found alongside the double burial of Skeletons C4-40 and C4-41, which, according to Orchard’s field notebook (Frederick Orchard’s field notebook, 1951 [pages 125–126], SKJML Papers 996-27, 5.8) and the published photographs of the burial (Lothrop 1954:fig. 62), appears to consist of a bundle burial (Skeleton C4-40) placed on top of a primary flexed burial (Skeleton C4-41) in a supine position. The former pertains to a fourteen- to sixteen-year-old adolescent of indeterminate sex with signs of infection or malnutrition, while the latter represents a female over thirty-five years of age with heavy lifting injuries (NMNH P381846/7). Although the offerings associated with this burial do not include polychrome vessels, they do include a type of plastic decoration typical of the Cubitá style: an appliqué, stamped Quirá pedestal bowl with zoomorphic lizard (saurian) figures (PMAE 51-25-20/20847); a Culebra Appliqué cup (PMAE 51-25-20/20836); a Macano Punctate-Incised effigy vessel with a crocodilian head on each side (Figure 84); a fluted bowl with a modified pedestal representing Acacio ware (PMAE 51-25-20/20851); a deep Cubitá Red bowl with a strap handle (PMAE 51-25-20/

20837); and a Melina Smooth plate (PMAE 51-25-20/20838). Nevertheless, a radiocarbon date based on a bone sample from Skeleton C4-41 (discussed further in the human remains section) places this burial context slightly earlier in time [Beta-507051, 1770±30 bp, 140–350 CE].

Skeleton A7-2B pertained to an infant (in the field, Lothrop calculated this infant's age at around three years), positioned flexed, and, unusually, not inside an urn like most of the infants buried at Playa Venado. Six ceramic vessels were deposited in the grave; they were aligned roughly on top of the body, and consisted of two monochrome pots (PMAE 51-25-20/20637 and 51-25-20/20638) and four modeled and incised vessels belonging to the Macano-Acacio styles (PMAE 51-25-20/20363, 51-25-20/20364, 51-25-20/20365, and 51-25-20/20366). This infant burial also stands out due to the gilded copper crocodilian pendant that rested on the head (see the following section on gold artifacts).

The numerous burials and caches with polychrome pottery at Playa Venado compose the best-known documented reference collection associated with the Cubitá style. The use of large polychrome vessels with broken necks as funerary receptacles is consistent over time. The Nance and Almendro pots stand out in particular. Interestingly, Nance vessels were transformed into large effigies representing very specific animals in the natural world, such as frogs and turtles. Cache A8-6 included a large



Figure 83 Scalloped rim bowl with a tall pedestal modeled with a toad figure, found with Skeletons C4-40 and C4-41. Overall dimensions: 20 cm × 23.5 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20845.



Figure 84 Macano Punctate-Incised effigy vessel with a crocodilian head on each side, found with the double burial of Skeletons C4-40 and C4-41. Overall dimensions: 7.5 cm × 15.5 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20835.

Figure 85

Nance urn found in Cache C4-6. Overall dimensions: 28 cm × 42 cm × 37.5 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951. © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20747.



Nance vessel (PMAE 51-25-20/20418) containing the remains of an infant, along with a metate leg, a celt, and a Cubitá Red plate (PMAE 51-25-20/20417) at the bottom (Frederick Orchard's field notebook, 1951 [pages 55–56], SKJML Papers 996-27, 5.8). Another Nance infant urn (Figure 85) from Cache C4-6 is shaped like a turtle and had a monochrome cover plate (PMAE 51-25-20/20750) of probable Melina Smooth ware. A third context that includes a large Nance effigy urn is especially relevant for its inclusion of several Cubitá-style painted categories other than Almendro, indicating that this context represents an early period of cemetery use. This was a double burial containing a five- to twelve-month-old infant urn burial (Skeleton A7-8B; NMNH P381815) and a sixteen- to seventeen-year-old adolescent of probable male sex (Skeleton A7-8A; NMNH P381814) in a flexed, supine position, both clearly placed in pits dug into the coquina. The circular pit where Skeleton A7-8A was placed contained a partial large fluted pot pertaining to an unusually large Acacio vessel (PMAE 51-25-20/20393) along the edge of the pit. There were eleven offerings related directly to the Nance urn (PMAE 51-25-20/20399) containing the infant, including the gold double frog pendant detailed below. The urn was covered with what looks like a Laurel bowl, and beside it was a globular pot with a broken rim (PMAE 51-25-20/20397), a fluted Macano-Acacio pedestal bowl (PMAE 51-25-20/20394), and a deep Ciruelo plate (PMAE 51-25-20/20390). Within the urn, in association with the infant, was a Macano Punctate-Incised effigy bowl (PMAE 51-25-20/20391) modeled as a crocodilian figure

with a prominent snout, the second such design found by the Peabody Museum of Archaeology and Ethnology excavations at Playa Venado (Figure 84). The remaining associated accoutrements consisted of a Cubitá Red plate that lay under the infant's torso, a ground stone axe (PMAE 51-25-20/20776), and a small shell bead.

Other funerary deposits typical of Cubitá style, which highlight the absence of Almendro, include that of Skeleton A7-3, a probable female individual of over thirty-five years of age (NMNH P381807) in a flexed, supine position within a coquina pit. This burial was accompanied by five ceramic vessels, including two Nance jars with the typical "laurel leaf in negative" design (PMAE 51-25-20/20370 and 51-25-20/20373; Figure 86), two constricted neck Cubitá Red jars (one of which is PMAE 51-25-20/20371), and a deep bowl with a long strap handle (PMAE 51-25-20/20372). Another context exemplifying Cubitá offerings is that of Skeleton A7-4, which contained a male individual over forty-five years of age (NMNH P381808) in a flexed, supine position and accompanied by two Nance vessels: a large pot to the left of his head with a "YC" scroll design (PMAE 51-25-20/20375; Figure 87) and a pedestal base with black circumferential bands (PMAE 51-25-20/20376) at his feet. Although Skeleton C4-34 (a flexed infant burial) and Skeleton A8-16 (a flexed five- to seven-year-old child; NMNH P381816) had only a single ceramic vessel offering each, these vessels pertained to Cábimo Banded Lip ware (PMAE 51-25-20/20811 and 51-25-20/20429); they were identical to those documented within various deposits at Cerro

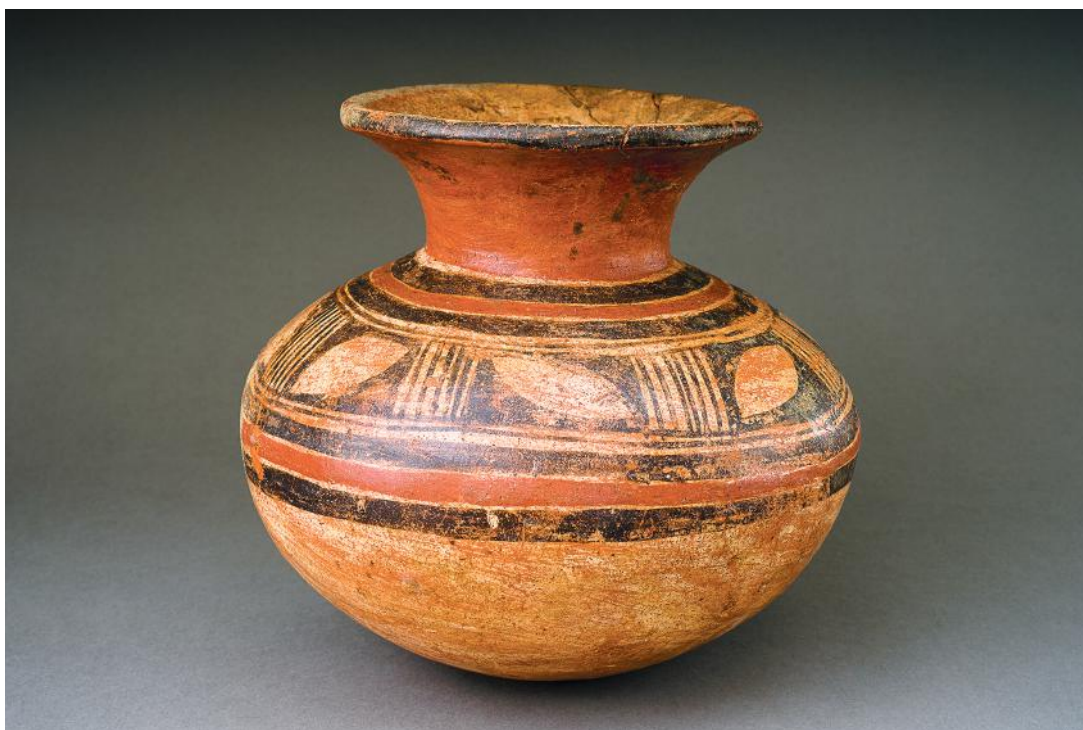


Figure 86

Nance jar with the typical “laurel leaf in negative” design, found with an adult female (Skeleton A7-3). Overall dimensions: 21 cm × 23 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951. © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20373.

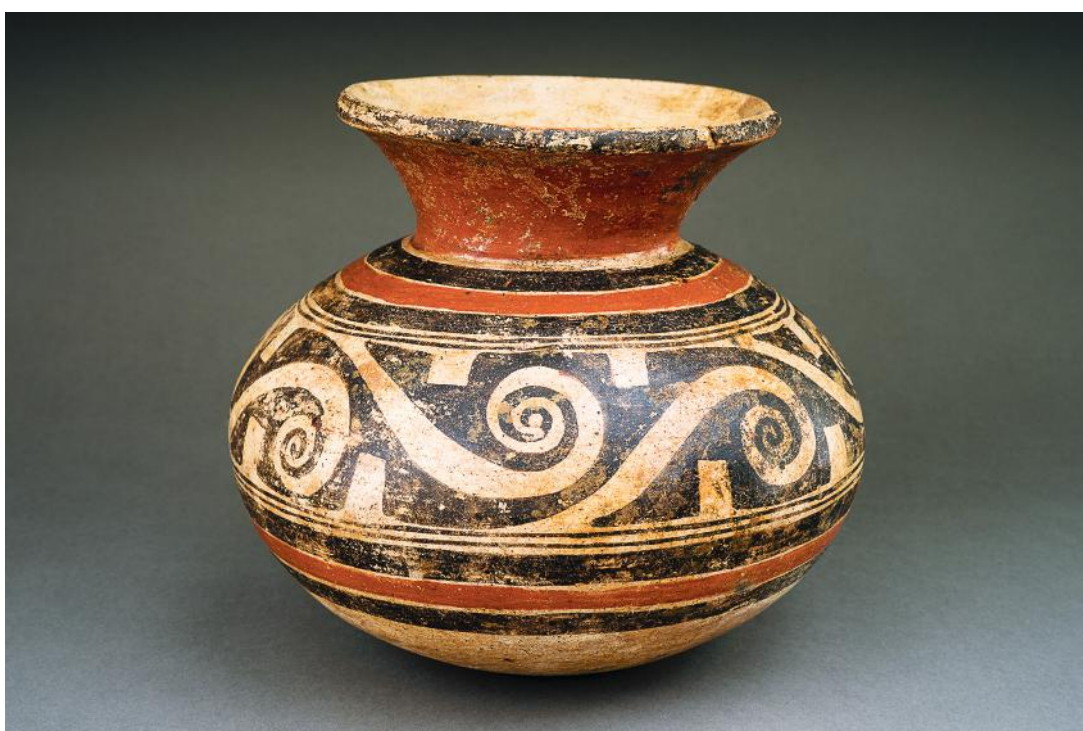


Figure 87

Large Nance vessel with a “YC” scroll design, found with an adult male (Skeleton A7-4). Overall dimensions: 19 cm × 21.5 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951. © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20375.

Juan Díaz. Another large Cábimo bowl (PMAE 51-25-20/20763) pertains to an infant urn burial in Cache C4-12.

Finally, other Cubitá contexts are especially relevant, such as that of Skeleton B4-4, an adult male adorned with the large shell necklace (PC.B.387, Plate 107; NMNH P381824). Although the context did not contain polychrome vessels, it did contain a Melina Smooth incense burner (PMAE 51-25-20/20658)

and a small vessel with a surface finish very similar to Culebra ware (PMAE 51-25-20/20660). The recent AMS radiocarbon date obtained from a bone sample from this human skeleton confirmed its chronological placement [Beta-507049, 1570±30 bp, 420–560 CE] (discussed in the human remains section). Skeleton B4-8 (a young adult female with severe abnormal bone bowing deformities detailed in the human remains section) was buried with the

Figure 88

Large Laurel deep bowl found with a young adult male (Skeleton A6-12).

Overall dimensions: 19 cm × 42 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20296.



Figure 89

Late Cubitá-style Almendro pot that shows an early stage in the development of the “YC” scroll pattern, found in Cache B5-3.

Overall dimensions: 19.5 cm × 23.5 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20684.



body portion of a Macano or Acacio ware anthropomorphic effigy vessel with an incised spiral design (PMAE 51-25-20/20657). A double burial containing the flexed, supine Skeleton C4-38 and a secondary bundle burial (Skeleton C4-38A) was associated with a pedestal plate with the inside rim decorated with triangles (a typological hybrid between Ciruelo and Almendro; PMAE 51-25-20/20821), two Ciruelo bowls (one with a pedestal base, PMAE

51-25-20/20818 and 51-25-20/20831), a curious Nance jar with truncated protuberances on the sides (PMAE 51-25-20/20820A), and a Macano-Acacio cup, as well as three Nance pot stands (PMAE 51-25-20/20817, 51-25-20/20819, and 51-25-20/20820) placed next to the bundle burial. Placed on the Almendro-Ciruelo plate were several small spheres of hardened gum or resin (PMAE 51-25-20/20829), perhaps composing an offering of some sort.



Figure 90
Guábilo Figurative pedestal plate found with Skeleton C4-3. Overall dimensions: 9.5 cm × 20 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20773.

To conclude this section on ceramics, it would be pertinent to address some of the later contexts of the cemetery, specifically those in association with Almendro and Conte Polychrome vessels. The Almendro contexts can be very specific, and also include Laurel deep bowls, certain Ciruelo and Guábilo Figurative vessels, as well as red variants of these types. Its associations include Acacio Modeled-Incised, and eventually other monochrome and appliqué categories that persist, such as Chumico and Melina from Piñuela Plain (3.9 percent of the total ceramic assemblage) and Malagueto.

Cache B4-4 contained a large (40 cm) Almendro urn (PMAE 51-25-20/20642), capped with a Cubitá Red bowl, that held an infant burial placed on a Cubitá Red plate (PMAE 51-25-20/20641). A particularly unusual burial from the Late Cubitá period is Skeleton A6-12, a male between twenty-one to thirty-one years of age (NMNH P381798), placed in a flexed, supine position directly on top of a very large urn with the neck removed, and associated with a fragmentary polychrome vessel, a large Laurel deep bowl (Figure 88), as well as a small red pot (PMAE 51-25-20/20295) placed outside the urn. Cache B5-3, which was placed above the burial of Skeleton B5-11, is one of the best representations of the Late Cubitá substyle, as it contains a pot that develops the “YC” scroll pattern (Figure 89), associated with two Almendro Red pedestal plates (PMAE 51-25-20/20687 and 51-25-20/20688) and a Chumico pot with characteristic saurian figurine appliques on the shoulder (PMAE 51-25-20/20685).

The burials of Skeleton A7-1, Skeleton B2-5 (an adult female; NMNH 381822), and Skeleton B4-11 are

three examples of contexts associated with the distinctive Almendro plates decorated on the reverse (PMAE 51-25-20/20355, 51-25-20/20614, and 51-25-20/20582).⁷ In the first two burials, the plate was placed under the flexed body, and the vessel associated with Skeleton B2-5 is rectangular in shape (PMAE 51-25-20/20614). Skeleton B4-11 was also associated with a Ciruelo bowl (PMAE 51-25-20/20667)⁸ and a grooved stone object interpreted to be a fishing net sinker (PMAE 51-25-20/20655); it is one of the few individuals in the cemetery positioned in a primary extended mode, in this case, supine. Similarly, Skeleton B2-5 was the only burial in a prone (face down) position.

Found approximately 70 cm above Skeleton C4-3 (a lateral, flexed adult) was a ceramic piece representative of the later polychrome categories: a Guábilo Figurative pedestal plate (Figure 90) with some decorative elements that associate it with Almendro variants in general (i.e., the use of triangles on the head and back of a curly-tailed animal). Similar Guábilo Figurative pedestal plates (notably absent from

⁷ The context of this vessel is unconfirmed. The Peabody Museum of Archaeology and Ethnology catalogue lists it as pertaining to “Area B, Trench 1, general dig.” Instead, the catalogue lists 51-25-20/20667 as belonging to this context, but that seems unlikely. Orchard specifies in his notes (Frederick Orchard’s field notebook, 1951 [pages 137–138], SKJML Papers 996-27, 5.8) that the plate found with Skeleton B4-11 is “polychrome on reverse side.”

⁸ See note 7. Orchard lists only one ceramic vessel associated with this skeleton; thus, the context of this vessel is unconfirmed.

Figure 91

Guábilo Figurative vessel showing a stylized representation of a reflected turtle, found in association with an infant burial in Cache D1-1.

Overall dimensions:
7.5 cm × 29.5 cm. Peabody Museum Expedition,
S. K. Lothrop, Director,
1951 © President and
Fellows of Harvard College,
Peabody Museum of
Archaeology and Ethnology,
51-25-20/20891.



Figure 92

Acacio ware bowl with tall pedestal, found with the double burial of Skeletons B5-4 and B5-4A.

Overall dimensions:
12.5 cm × 17 cm. Peabody Museum Expedition,
S. K. Lothrop, Director,
1951 © President and
Fellows of Harvard College,
Peabody Museum of
Archaeology and Ethnology,
51-25-20/20704.



Operations 1 and 3 at Cerro Juan Díaz) also appear in an infant urn burial within Cache D1-1 at Playa Venado, which contained a Guábilo Figurative vessel showing a stylized representation of a reflected turtle (Figure 91) and a Nance vessel (PMAE 51-25-20/20890) that develops an expanded “YC” scroll design very similar to Almendro counterparts.

Cache B4-3 contains an infant urn burial with very consistent stylistic associations to Late Cubitá.

The cache includes a large collection of twelve vessels, including a Guábilo Figurative plate (PMAE 51-25-20/20637) on one side of the urn with an interesting combination of elements. These include similar themes as that of the PMAE 51-25-20/20773 vessel described above: a quadruped animal with a bird’s beak and a splayed tail filled with the typical Almendro design of suspended triangles. Part of an anthropomorphic vessel was also found in this context (PMAE

51-25-20/20636; Lothrop 1942:fig. 122), along with an Almendro spouted jar (PMAE 51-25-20/20633) where “YC” scrolls are densely developed in triangular panels around an effigy probably representing a turtle. Another exceptional vessel within this context is a small jar with a lateral basal spout, potentially representing a crucible (PMAE 51-25-20/20635; Cooke, Isaza, and Griggs, et al. 2003:106–107, figs. 5b–c; Lothrop 1942:fig. 337a).

The double burial of Skeletons B5-4 and B5-4A is one of the best examples of a Conte component at Playa Venado, being the most complete and defined. Skeleton B5-4 consists of a male individual between twenty and fifty years of age (NMNH P381830) buried in a flexed, supine position in association with a bundle burial of a second individual (Skeleton B5-4A). Five ceramic vessels were associated with the burial, including two spouted jars, one red with a fluted body and a ring base (PMAE 51-25-20/20700; Lothrop 1942:figs. 325, 271), the other also red but with panels showing a bird with outstretched wings drawn on a cream background (PMAE 51-25-20/20702; Lothrop 1942:fig. 295). Also contained within this context are two⁹ Acacio ware bowls (PMAE 51-25-20/20703 and 51-25-20/20704) (Figure 92) with tall pedestals, and a small jar with a spout set in one side (PMAE 51-25-20/20701), similar to that described above.

Objects Fashioned Out of Organic Material

Robert Woods Bliss included some objects recovered from Playa Venado that were fashioned from marine-coastal shells in his collection (PC.B.387, Plate 107; PC.B.388, Plate 108; PC.B.389, Plate 103; PC.B.390, Plate 105; PC.B.391, Plate 104; and PC.B.392, Plate 106), thus suggesting that he deemed their craftsmanship to be on a par with that exhibited by the gold and lapidary work from the site. Lothrop remarked that fine shell carvings found in the 1951 Peabody Museum of Archaeology and Ethnology excavations were “special manifestations of Coclé culture” (Bliss 1957:31), and shellwork is undoubtedly a remarkable feature of the Pre-Columbian heritage at Playa Venado. Although it is unknown if shellwork artisans actually lived at Playa Venado, there are indications that shell was worked at

the site. Come what may, the individuals responsible for the ornaments in the mortuary units excelled at manipulating marine shells.

Crafting standards for some artifacts made from vertebrate remains are also noteworthy, but they did not seem to impress Bliss and Lothrop, as they are the least publicized of all the Playa Venado artifact groups. With the exception of a beautiful baton or staff carved from the bone of a manatee (*Trichechus manatus*), most other carved objects in bone and antler are quite small, albeit skillfully made. By sheer numbers, the most abundant culturally modified vertebrate body parts are perforated teeth, and the majority of these belong to sharks and mammals, on which cultural modifications are generally restricted to holes drilled through the roots. Drilled teeth were often used for making multiple adornments, such as necklaces, although some may have been sewn to garments. A textile fragment found affixed to the extremities of a small tumbaga animal found in an unnumbered Playa Venado grave (Sander, Mitchell, and Turner 1958a) vouches for the local use of woven cotton fabric. The animal resembles one from the very early Grave 32 at Sitio Conte (Lothrop 1937:fig. 174c). At least one other miniature raised-tail animal came from Playa Venado; this object was at one time in the collection of Dumbarton Oaks (Bliss 1957:pl. CX, top center).

In the following pages, we have divided descriptions of organic artifact types into vertebrate bones and marine shells. Before these sections, however, we refer to Thelma Bull’s “shaman grave” because it stresses the parallel usage of invertebrates and vertebrates in the same sociocultural context at Playa Venado and alerts us to aspects of the human symbiosis with animals, which are difficult to ascertain from uncontextualized objects by themselves. Bull was not academically trained, but she did attempt a meaningful interpretation of a burial unit that she called a “shaman grave.” She published a description and photographs of the materials she found (Bull 1958), and Richard G. Cooke and Nicole E. Smith-Guzmán located some of her “shaman” artifacts in the deposits of the Museo Antropológico Reina Torres de Araúz in 2017.

Thelma Bull’s “Shaman Grave”

Ever since the seminal publications of Furst (1972, 1976) and Reichel-Dolmatoff (1971, 1975, 1988), studies of shamanism, hallucinogens, and transformations have greatly influenced archaeological interpretations of ritual behavior among past and present Indigenous societies in the New World tropics. Shamans were important personages in the past, and remain so in many Indigenous societies today, although their practices have been influenced by exogenous post-contact religions. In the simplest terms, a shaman is

⁹ The Peabody Museum of Archaeology and Ethnology lists another pedestal-base bowl (51-25-20/20712) as pertaining to this grave context; however, Orchard’s field notebook (1951 [pages 139–140], SKJML Papers 996-27, 5.8) only lists two pedestal-base vessels in this context. The association of 51-25-20/20704 is confirmed based on the drawing, but we are unable to ascertain which of the other two vessels (51-25-20/20703 or 51-25-20/20712) was indeed found within this grave.



Figure 93 Objects recovered from Thelma Bull's "shaman grave," which are currently housed in the Museo Antropológico Reina Torres de Araúz: a) pointed *Spondylus* shell bead units; b) sections of the "shaman's" necklace still within the matrix, showing association of shell beads with shark teeth and animal bones (Bull 1958:pl. I, fig. 2); c) restring *Spondylus* shell beads (Bull 1958:pl. II, fig. 11); d) restring bird bone apron and belt with shell bead spacers (Bull 1958:pl. II, fig. 8); e) individual bird bone units used in the apron and belt; f) mother-of-pearl disk of the pearl oyster (*Pinctada mazatlanica*); g) shark teeth (probably from the blacktip shark, *Carcharhinus limbatus*) that formed part of the necklace (Bull 1958:pl. III, fig. 15); h) four stone celts; and i) marine bird bone pouch that held gold beads and yielded an early date of 235–385 cal CE (Bull 1958:pl. I, fig. 5, pl. II, fig. 9, pl. III, fig. 14). Museo Antropológica Reina Torres de Araúz, Panama City, 341 (a and g); O21 (b); O59 (c); 256 (d); O17 (e); O19 (f); O25 (h); and O45 (i). Photographs by Raiza Segundo (a, c, d, g, and i) and Nicole E. Smith-Guzmán (b, e, f, and h).

a person who employs special methods to induce mental states that allow communication with non-human supernatural beings. Transformative behavior customarily pervades archaeological interpretations of shamanism, and among contemporary tropical Indigenous societies, shamans play important roles as curers and use many kinds of practical "magical" aids, such as eye-catching stones (Reichel-Dolmatoff 1960).

The archaeological evidence presented by Bull (1958) only supports a less specific term, such as ritual practitioner. Nevertheless, we will maintain Bull's "shaman" epithet in the following recapitulation of her original description (Bull 1958). The "shaman grave" was located 1.7 m deep in a red clay matrix, just above a sand stratum, in a sector of the burial ground where Bull did not record the presence of the coquina. Bull

inferred from the principal skeleton in the grave that the shaman was an adult male, thirty to forty years old, placed in a supine, semiflexed position. His attire consisted of an "apron" and a "belt-and-pouch." Both items employed cut and polished tubes fashioned from the long bones of birds, seemingly of two different sizes. Bull counted 210 cut bird bones. These were used in conjunction with cut and ground shell beads, as well as one elongated gold bead, some acting as spacers between the bone tubes and others acting as frames for rows of bones (Figure 93d–e). Bull recovered about 2,800 shell beads around the bone tubes and from the earth matrix. Some were discoidal, about 6.5 mm in diameter, with a reddish color suggestive of the thorny oyster (*Spondylus crassissquama*). Others were much smaller, and mostly whitish, with a minimum diameter of about 1.6 mm. Bull's pouch may

have functioned as such, since twenty-six tubular and spherical gold beads were found inside (Bull 1958:pl. II, fig. 10). Slivers of bone detached from one of the bird bones composing the pouch (Figure 93i) were radiocarbon dated in 2017 [Beta-446967, 1740 ± 30 bp, 240–390 CE]. Stable carbon ($\delta^{13}\text{C} = -12.8$ ‰) and nitrogen ($\delta^{15}\text{N} = 14.7$ ‰) isotopes from the bird's bone collagen suggest that the taxon in question consumed a diet high in marine fish.

An artifact composed of diverse materials adorned the neck and chest of the shaman (Bull 1958:pl. II). Bull counted 271 wedge- or claw-shaped shell bead-pendants that tapered to a thin, sharp point, made from the thorny oyster (Figure 93a–c). She also identified three simulated “dog teeth” in shell; thirty-eight shark-tooth pendants, including some pertaining to a blacktip shark (*Carcharhinus limbatus*) (Figure 93g); two “factual” pierced dog teeth; two “factual” monkey teeth; and twelve thorny oyster shells shaped like long-billed crested birds (Bull 1958:pls. II, III). The “factual” dog and monkey teeth have not been verified. The shell birds are reminiscent of the pelican-like examples at Dumbarton Oaks (PC.B.392, Plate 106; cf. PMAE 51-25-20/20240). Completing the animal-derived accoutrements of the shaman's attire was an unperforated mother-of-pearl disk of the pearl oyster (*Pinctada mazatlanica*) about 6.4 cm in diameter (Figure 93f). Found below and beside the burial, but not in direct association with the body, were three uniformly sized tubular mammal bones, approximately 14 cm long and 2.5 cm in diameter (a size that alludes to deer).

Four small stone celts were found resting on the right shoulder of the shaman (Figure 93h). A small

tumbaga disk was placed on the chest. An incomplete black-on-red ceramic bowl was found at the left shoulder. Upon it rested fibrous vegetable remains, lumps of red and yellow clay, ashes, and abundant charcoal, suggesting that an activity involving burning was enacted. There is no known illustration of this sherd. Items from Bull's “shaman grave” still housed in the Museo Antropológico Reina Torres de Araúz are shown in Figure 93.

A RITUAL OBJECT FASHIONED FROM MANATEE BONE

Bone from a manatee (*Trichechus manatus*) was used to fashion a long and deftly carved and inlaid polished object with a gold ring around the middle (Figure 94). It resembles another termite-riddled example from El Hatillo (Finca Calderón, or He-4) in Herrera province on the Azuero Peninsula (Ladd 1964:pl. 1a–c). No sirenian (manatee and dugong) remains have been reported in Pacific coast geological strata, which postdate the closure of the Panama seaway and the demise of Pacific seagrass beds, four to three million years ago (O'Dea et al. 2016; Uhen et al. 2010). Hence, the carved manatee bones found at El Hatillo and Playa Venado should have originated in Caribbean rivers and marine-coastal habitats before being transported across the Central Cordillera to consumers on the Pacific watershed. The anterior ends of two manatee ribs, recovered by Charles McGimsey in late Preceramic middens at the site of Cerro Mangote (Y-458d, 6810 ± 100 bp, 5970–5540 BCE; McGimsey 1958) and identified by James Mead, attest to the antiquity of this cross-cordilleran exchange (Cooke and Jiménez Acosta 2010:38).



Figure 94
Polished and incised staff of manatee (*Trichechus manatus*) bone, with carved crocodilian or saurian head featuring a gold ring and shell inlays. National Museum of the American Indian, 24-0688.



Figure 95 Shell bead ornament with central panel of modified bird bones. Excavation and nonoriginal restringing by Neville and Eva Harte. National Museum of the American Indian, 22-5837.



Figure 96 Shell bead ornament. Excavation and nonoriginal restringing by Neville and Eva Harte. National Museum of the American Indian, 22-5839.

PLAYA VENADO SHELL-AND-BONE APRONS OR GORGETS

Two impressive and ostensibly woven objects made of tiny shell beads with geometrically arranged colors preface Lothrop's (1956) article about Playa Venado jewelry (Figures 95–96). These artifacts were excavated by the Hartes in August 1951, after Lothrop left Panama and was forced to rely on information sent to him by Neville Harte. Lothrop clearly admired the Hartes and was led to believe in their careful restringing of these items in situ. Hence, he accepted their claim that the beads were originally strung on human hair. It is possible, however, that the Hartes' claims were bogus.

The woven gorget shown in Figure 95 includes a central panel of split bird bones arranged horizontally in three vertical columns. Lothrop (1956) remarked that these bones were from the wings of gulls (*Laridae* family). Using archival photographs from the National Museum of the American Indian, these bones, along with more than twenty long, thin bird bone tubes (22-6216), are identified as avian radii. Wing bones of boobies (*Sula* spp.), including radii, were cut and polished at Cerro Juan Díaz, and were also widely employed on ornaments at Sitio Conte (Cooke and Jiménez Acosta 2010:fig. 3.7). The presence of booby, brown pelican (*Pelecanus occidentalis*), and Muscovy duck (*Cairina moschata*) remains at Sitio Conte was noted by Lothrop (1937:16), and it is likely that an ornithologist or anatomist made preliminary identifications of some bird bones, including the gull wing bones.

Philip Dade, another digger associated with the Archaeological Society of Panama, questioned Harte's claim that his bead restringing was precise and reliable. Dade insisted that the design of the two gorgets was imagined, and that even by removing the sand "grain by grain" from the larger shell beads excavated by Bull, no pattern was recoverable (Philip Dade to Frederick J. Dockstader, October 5, 1957, National Museum of the American Indian Archive, box 17, folder 6). Moreover, Dade insinuated that Harte copied patterns on the bead collars used by the Ngäbere in Chiriquí in his reconstruction of the gorgets. Dade was by no means trustworthy (McMullen 2013), but his account ratifies other doubts mentioned throughout this essay about the factual objectivity of the Hartes in their illustrated field notebooks.

STINGRAY OSSIFIED PARTS AND THEIR MULTIPLE SYMBOLIC CONNOTATIONS

Stingrays are a common and taxonomically diverse group of cartilaginous fish all across the Tropical Eastern Pacific (Robertson and Allen 2015). They

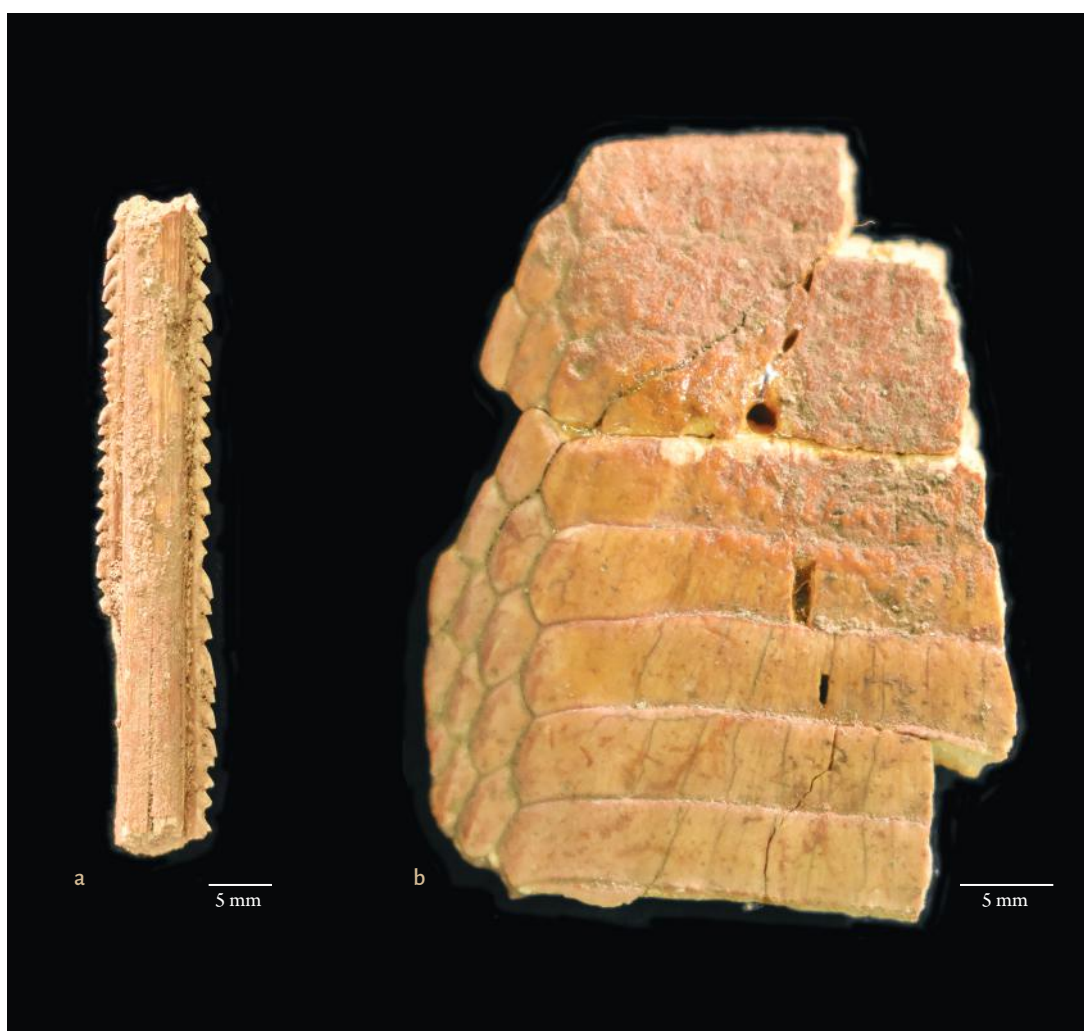


Figure 97 Stingray remains found in association with human skeletons housed at the National Museum of Natural History: a) partial stingray caudal spine found stored with Skeleton A6-13 (NMNH P381799); and b) pharyngeal plate of a probable rough eagle ray (*Myliobatidae* family, cf. *Aetomylaeus asperrimus*) found commingled with a human cranium (NMNH P381817) excavated by Philip Dade near the “fork in the road” and Area B, Trench 5. Photographs by Nicole E. Smith-Guzmán.

have venomous spines in their tails that can administer painful, and even fatal, wounds to humans. In Pacific Panama, a wide range of stingray species, even those of a huge size, move in very shallow water. Field notes made at Playa Venado by the Hartes, the Montgomerys, Lothrop, and Orchard contain references to stingray caudal spines in graves (Figure 97a). A summary of stingray spine distribution in Lothrop’s excavations at Sitio Conte is given by Cooke and Jiménez Acosta (2010:43), who comment that Isthmian archaeological occurrences of stingray spines could refer to bloodletting rituals. They also draw attention to a Sitio Conte feature in which forty-six ceramic incense burners were associated with stingray caudal spines, sawfish (*Pristis* spp.) rostral spikes, bone “arrows,” and twenty-four shells of the genus *Oliva* (Lothrop 1937:290).

A perforated elasmobranch vertebral centrum from Playa Venado (NMAI 22-9405) is inferred via photographic analysis to have belonged to a longtail ray (*Hypanus* [formerly *Dasyatis*] *longus*), with an estimated body mass in excess of reference specimen STRI (Smithsonian Tropical Research Institute) 25-1-2-2, which weighed 58.86 kg fresh and measured 1.36 m (wing breadth) by 2.78 m (total length). This huge ray was caught by a young boy on a small metal fishhook in less than 1 m of turbid estuarine water at El Rompío, Aguadulce, Coclé (Richard G. Cooke, personal observation, March 8, 1991).

The natural ubiquity of stingrays in Eastern Pacific waters, their danger to humans, and their aerial displays may explain the frequency with which lifelike images of rays are represented on polychrome vessels belonging to different stylistic development stages of

Figure 98

Dolphin (*Delphinus* spp.) and shark (*Carcharhinus* spp.) tooth ornament. National Museum of the American Indian, 22-6190.



the Greater Coclé Semiotic Tradition. For example, a humanized spotted eagle ray is the model for a Conte Polychrome effigy jar from Sitio Conte (Lothrop 1942:fig. 221b), and is identified as this species by its ray-like body shape and its white spots on a dark ground. This schooling species swims far up tidal rivers and indulges in spectacular leaps from the water. These unique physical and behavioral features (e.g., a fish that has “wings” and “flies”) may have imbued stingrays with various levels of symbolic significance among Pre-Columbian peoples (cf. Linares 1977).

That stingray bones other than spines occurred in graves at Playa Venado was corroborated by the presence of a tooth plaque from a rough eagle ray (possibly the inshore species, *Aetomylaeus asperimus*) found boxed with a human cranium excavated by Dade somewhere near Lothrop’s Area B, Trench 5 (Figure 97b) (Robertson and Allen 2015). This human cranium exhibited artificial modification of the obelonic type, and its vibrant red color evidences association with red clay.

A STRING OF DOLPHIN AND SHARK TEETH

An unusual artifact at the National Museum of the American Indian (22-6190) comprises thirty-four teeth of the common dolphin (*Delphinus* spp.), as well as six perforated teeth of the tiger shark and the

bull shark (Figure 98). It is only the second record for the Pre-Columbian use of dolphins in Central America. The first record corresponds to the remains of common and bottlenose dolphins (*Tursiops truncatus*) in a deep midden at the Preceramic site of Playa Don Bernardo on Pedro González Island in the Pearl Island archipelago, which dates to 4250–3650 BCE (Cooke et al. 2016). These marine mammals were either butchered while lying stranded on the beach, or corralled and killed as they entered the shallow bay. An animal described as a possible swordfish (*Xiphias gladius*), but exhibiting a distinctly delphinid head outline and tooth row, was illustrated by Labbé (1995:fig. 78) on a Conte Red plate.

MULTIFUNCTIONAL SAWFISH

ROSTRAL SPIKES

Sawfish frequent estuaries, mangrove areas, and rivers. Since sawfish move from salt into fresh water, they are vulnerable to bank-to-bank human netting in rivers, and biologists are worried that the only sawfish present on the Pacific watershed (*Pristis pristis*) is on the verge of extinction (Caldas et al. 2017). Sawfish present little danger to humans, unlike stingrays and sharks. The size, shape, and habits of sawfish understandably drew the attention of Pre-Columbian artisans in pottery images. The serrated rostra are often

lifelike in depictions, although traits of hammerhead sharks are commingled with them (Labbé 1995:fig. 88; Linné 1929:fig. 22). Objects fashioned out of the rostral teeth of sawfish were found in graves at Playa Venado (PMAE 51-25-20/20330, 51-25-20/20471, 51-25-20/20472, and 51-25-20/23644). These bony elements would make practical chisels or gravers. Lothrop (1937:fig. 65) illustrates a natural rostral tooth, and other rostral teeth modified into barbed tools that he describes as projectile points from Sitio Conte.

DOG TEETH AS ORNAMENTS

Two strings of dog teeth were found at Playa Venado. One rethreaded example with 104 perforated canines was collected by Karl Curtis during the amateur excavations at Playa Venado (Figure 99). Through photographic analysis, the great majority were attributed to domestic dog canines. The other is a string of forty-eight mammalian canine teeth found inside a burial urn at Playa Venado (Sander, Mitchell, and Turner 1958a, 1958b). The amateur excavators claimed that all of the teeth belonged to dogs, but scrutiny of the illustration suggests that raccoon (*Procyon lotor*), gray fox (*Urocyon cinereoargenteus*), and opossum (*Didelphis* sp.) teeth were also included.

Examples of teeth of the domestic dog (*Canis lupus familiaris*), often in prodigious quantities, are amply documented across Greater Coclé, where dogs were not considered to have been human food, unlike farther north in Mesoamerica (Cooke and Jiménez Acosta 2010; Sharpe et al. 2018). Hundreds of dog teeth—incisors, premolars, molars, and canines—were used in necklaces, as well as on shirts and aprons at the elite mortuary sites of Sitio Conte and El Caño. Molars were split into segments (Erickson and Fenton 2012; Lothrop 1937:figs. 105, 129a–f; Mayo Torné and Carles 2015:77; Mayo Torné et al. 2016:40). It, therefore, seems likely that dogs were not only used practically for guarding and hunting (Cooke and Jiménez Acosta 2010) but that their teeth were used intentionally for cognitive ornamentation.

FOSSIL SHARK TEETH

One tooth (6.5 cm long) of a giant extinct fossil shark (*Carcharocles megalodon*) was found at Playa Venado (NMAI 22-6218). It was modified by cutting off the root in a straight line at the junction with the dentin and notching the two corners. The megalodon tooth may have originated from the Miocene Gatún Formation, which outcrops around the shore of man-made Lake Gatún on the Caribbean watershed. The most fossiliferous part of the formation is about 50 km north of Playa Venado. Several megalodon teeth were interpreted as ceremonial objects



at Sitio Conte (Lothrop 1937:197), including some within the context of Cache 26, whose contents infer synchrony with the later El Caño graves (ca. 680–1020 CE) (Lothrop 1937:43; Mayo Torné and Mayo Torné 2013).

DEER BONE AND ANTLER

Most, and perhaps all, of the ornaments fashioned at Playa Venado from large terrestrial mammal bones were likely to have been created from the bones of the white-tailed deer (*Odocoileus virginianus*), the archetypal cervid species of the wooded anthropogenic savannas of southern Central America (Cooke, Jiménez Acosta, and Ranere 2008; Cooke et al. 2007). Cut and polished deer long bones are widespread at domestic and funerary sites in Greater Coclé (Cooke 2004b:fig. 8b; Cooke and Jiménez Acosta 2010:fig. 3.6; Ichon 1980:fig. 90i–l; Lothrop 1937:figs. 28, 103, 104b, 196). Several groups of cut deer long bones (probably used together in a single artifact) were reported at Playa Venado (NMAI 22-6221; PMAE 51-25-20/20771). The newly cut

Figure 99
Necklace of domestic dog (*Canis lupus familiaris*) canines. National Museum of Natural History, A436054-o. Photograph by Nicole E. Smith-Guzmán.

Figure 100
Worked white-tailed deer
(*Odocoileus virginianus*)
radius found with Skeleton
B5-3A. National Museum of
Natural History, A435192.
Photograph by Nicole E.
Smith-Guzmán.



bones (usually humeri) would probably have rattled when worn together, especially during dances. A worked white-tailed deer radius (Figure 100), modified at both extremities, was found with Lothrop's Skeleton B5-3A, a male of thirty-five to fifty years, whose cranium showed signs of healed injuries and artificial cranial modification (NMNH P381829). In the same grave context, Lothrop found the thorny oyster shell sea turtle effigy nose ornament currently in the collection of Dumbarton Oaks (PC.B.391, Plate 104). The lower legs of this individual appear to have been excavated separately by Orchard (cf. Skeleton B5-6), who noted spindle whorls and numerous beads in association.

The Playa Venado sample includes trapezoidal and subrectangular plaques with perforations that may have functioned as toggles for closing garments (Figure 101a–c; cf. PMAE 51-25-20/23641, 51-25-20/23643, and 51-25-20/23650). These artifacts are recorded at Cerro Juan Díaz (Cooke 2004b:fig. 8k) and La Cañaza (Ichon 1980:fig. 87m, i, 90a). Unperforated trapezoidal bone plaques may have functioned as inlays (Figure 101d; cf. PMAE 51-25-20/3640).

A curved and polished artifact from Playa Venado (Figure 102a) was masterfully fashioned from the proximal (burr) end of the large tine of the antler of a white-tailed deer. Similar artifacts fashioned from materials reported as whale and felid teeth were found capped with hammered gold (Lothrop 1937:fig. 129g; Mayo Torné and Carles 2015:pl. 66), and the flattening in this case would certainly



Figure 101 Small mammal bone plaques worked into trapezoidal and subrectangular shapes, both with drilled perforations suggesting their use as toggles for closing garments, and unperforated versions suggesting use as inlays. They were probably made from white-tailed deer (*Odocoileus virginianus*) long bone fragments. National Museum of the American Indian, 22-9418, 22-6199, and 22-6200 (a–c) and 22-6198 (d).



a



b

Figure 102 Carved objects of deer antler excavated by Philip Dade at Playa Venado: a) a curved, polished, and drilled object fashioned from a large deer tine; and b) a deer vertebra carved in the form of a simian with the tail of an unidentified creature. National Museum of the American Indian, 22-6195 (a) and 22-6184 (b).

facilitate capping. Another deer bone object, carved in the form of a composite biomorph with the body of a simian and the tail of another animal (Figure 102b) may have been used to cap some form of perishable rod-like artifact.

Two more deer antler objects, both carved in the form of birds (PMAE 51-25-20/20781 and 51-25-20/20663), were found with Lothrop's Skeleton B4-4 (Figure 103) and Skeleton C4-8. The former is the adult male (NMNH P381824) adorned with the large shell collar described in the catalogue entry for PC.B.387 (Plate 107). The latter, estimated by Orchard to be an adult male, contained many other assorted accoutrements, including a shark tooth, cylindrical bone beads, a bone whistle, small shell

beads, and various stone "arrow heads" and celts (Frederick Orchard's field notebook, 1951 [pages 89–90], SKJML Papers 996-27, 5.8). The similarity of objects contained in this context to those found with Bull's shaman suggests this may be another ritual specialist. Another probable deer bone object at Playa Venado (NMAI 22-6205) may have functioned as a spout for a container made from a gourd (*Crescentia* or *Lagenaria*) (Cooke and Jiménez Acosta 2010:fig. 3.6e). Yet another is a long bone cylinder with a lateral orifice and a small raised appendage for suspension (PMAE 51-25-20/23652); this object was possibly a little box worn around the neck (Cooke and Jiménez Acosta 2010:fig. 3.6d). The human features of a small sculpture wrought in mammal bone (Figure 104)



Figure 103

Deer antler carved in the form of a bird, found with adult male Skeleton B4-4. Overall dimensions: 7.2 cm × 7 cm × 2.3 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/20781.

recall the carving style of anthropomorphic columns at El Caño (Mayo Torné et al. 2013) and was possibly used as a staff head.

MARINE SHELL ARTIFACTS

The most publicized example of a skillfully sculpted thorny oyster shell at Playa Venado is the realistic sea turtle that is possibly a nose ornament (PC.B.391, Plate 104) found with Lothrop's Skeleton B5-3A. Two similar shell sea turtles were apparently found by Montgomery in his Grave M.10-6. One has a head belonging to another biomorph (Figure 105), while the other is naturalistic and lacks appendages to the head (Figure 106). Dumbarton Oaks possesses a small pelican-like figure (PC.B.392, Plate 106), which was found on the chest of a five- to seven-year-old child buried in a flexed position (Skeleton A8-16; NMNH P381816). Similar small carved figures were placed in Bull's shaman's grave (Bliss 1957:pl. 267; Bull 1958:pl. 1, 3, 6). Other ornaments carved from the thorny oyster from Playa Venado are shown in Figure 107.

A frog or toad shell ornament (PC.B.390, Plate 105) found with Lothrop's Skeleton A6-19 bears witness to the artisan's mastery in crafting detailed zoomorphic figures from shell—in this case, a giant cockle (*Larkinia* [formerly *Anadara*] *grandis*). Lothrop estimated that the skeleton belonged to an adolescent of approximately seventeen years (Samuel Lothrop's field notebook, 1951 [pages 77–78], SKJML Papers 996-27, 5.3); however, the human remains sent to the National Museum of Natural History pertain to a four- to five-year-old child (NMNH P381802).

Three shell gorgets from Playa Venado are composed of carefully cut, long pendants, which, viewed in profile, reminded Mayo Torné of a walking stick, hence the term *cuenta de bastón* (Mayo Torné 2004; Mayo Torné and Cooke 2005b). One such gorget (PC.B.387, Plate 107), found around the neck of a flexed, supine adult male (Skeleton B4-4; NMNH P381824), is found in the Dumbarton Oaks Collection (Figure 108). As detailed in the human remains section, a bone sample from this skeleton was radiocarbon dated in 2018 [Beta-507049, 1570±30 bp, 420–560 CE]. Additional objects buried with this individual include a small ceramic vessel on top of an incense burner, a carved deer proximal phalanx



Figure 104 Anthropomorphic figure carved in mammal bone, found with infant Skeleton C4-24. Overall dimensions: 5.2 cm × 2.7 cm × 1.8 cm. Peabody Museum Expedition, S. K. Lothrop, Director, 1951 © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 51-25-20/23629.



Figure 105

Spondylus shell ornament carved in the form of a sea turtle with the head of an unidentified creature with mouth and head appendages. Found by Lt. Col. Lee E. Montgomery in association with Skeleton 6 from his Grave M.10. Total width: 7.9 cm. Wirt D. Walker Fund, 1969.794, The Art Institute Chicago.



Figure 106

Spondylus shell ornament carved in the form of a naturalistic sea turtle. Found by Lt. Col. Lee E. Montgomery in association with Skeleton 6 from his Grave M.10. Total width: 7.3 cm. Wirt D. Walker Fund, 1969.795, The Art Institute Chicago.



Figure 107

Spondylus ornaments excavated by Neville and Eva Harte. National Museum of the American Indian, 24-0674, 24-0675, 24-0676, and 24-0678.



Figure 108

Large gorget necklace (PC.B.387, Plate 107) made from fifty-four elongated Pacific giant conch (*Titanostrombus*) pendants, found around the neck of an adult male (Skeleton B4-4). Pre-Columbian Collection files, Dumbarton Oaks Research Library and Collection.



Figure 109

Large Pacific giant conch shell (*Titanostrombus*) found stored with the remains of an adult female (Skeleton C4-23). A section has been excised for bead-pendant manufacture. National Museum of Natural History, P381844. Photograph by Nicole E. Smith-Guzmán.



placed on the side of the head, and a carved deer antler in the shape of a bird. Mayo Torné described the manufacture of the walking stick pendants at Cerro Juan Díaz, reconstructing the stages from workshop debris. Only Cubitá pottery was deposited in the workshop. A large, mined Pacific giant conch shell (*Titanostrombus galeatus*; Figure 109) was found

stored with the human remains of Lothrop's Skeleton C4-23 (NMNH P381844) at the National Museum of Natural History. Skeleton C4-23 was a young to middle adult female with an artificially modified cranium, who was buried with an Almendro Polychrome effigy vessel (PMAE 51-25-20/20798), a Cubitá Red bowl cover (PMAE 51-25-20/20795), and a fluted pedestal bowl (PMAE 51-25-20/20794). The deposit of the giant conch shell in this burial suggests that walking stick ornaments were locally manufactured at Playa Venado. Two other gorgets of nearly identical style were also found at Playa Venado (Figures 110–111), but there is no information on the contexts in which these gorgets were found.

A similar necklace to PC.B.387, probably made of thorny oyster, was found at Panama Viejo, placed around the neck of a woman (aged thirty-five to forty-five years) who was interred on a bed of nine male human skulls (Mendizábal Archibold 2004) and dated by a sample of dentin [Beta-160239, 740 ± 40 bp, 1220–1380 CE; Cooke 2004b:fig. 6a–b; Mendizábal Archibold 2004:fig. 5.14, table 5.7]. Individual thorny oyster walking stick beads were reported at El Hatillo (He-4), in Herrera province, where they were associated with Macaracas-style pottery (Ladd 1964:150–151, pl. 18p, r, t). Two necklaces of cast gold “walking stick beads,” which have the same shape as the shell ones, were found by Philip Dade somewhere in the Azuero Peninsula (NMAI 24-2465) and by Julia Mayo Torné at El Caño (Fundación El Caño, Panama, registration no. 2499).



Figure 110
Shell gorget necklace of purported Playa Venado provenience. Overall dimensions: 17.8 cm × 4.8 cm. The Metropolitan Museum of Art, New York, The Michael C. Rockefeller Memorial Collection, Gift of Mr. and Mrs. Raymond Wielgus, 1960 (1978.412.52).



Figure 111
Shell gorget necklace excavated by Philip Dade and of purported Playa Venado provenience. National Museum of the American Indian, 23-1450.



Figure 112 Pearl oyster shell ornaments excavated by Neville and Eva Harte (a–c) and Philip Dade (d): a) animal form pendant or ornament; b) three pendants incised with the “YC” scroll design often seen in painted pottery; c) half shell incised with a lop-eared mammal encircled by a “YC” frieze; and d) elongated artifact with a beautifully crafted abstract fish head. National Museum of the American Indian, 22-5270, 22-5271, 22-8573, and 22-9411.

Eastern Pacific giant conchs were probably the source material for sculpted crocodilian pendants at Playa Venado, including the stylized example illustrated in PC.B.389 (Plate 103) and the curved and engraved piece apparently found by Harte (Grave H.48-2). Conch shell is also inferred for white shell zoomorphic figurines reported at Cerro Juan Díaz (Cooke and Sánchez Herrera 1997:fig. 6d; Sánchez Herrera and Cooke 1997:fig. 7d), in the Tonosí Valley (Ichon 1980:fig. 89), and at La Tranquilla (Colón) on the Atlantic watershed, where the raw material may be queen conch (*Lobatus gigas*), which was heavily collected along the Caribbean (Mitchell 1964:fig. 6).

Olive shells (*Oliva* spp.) were polished and then cut circumferentially below the apex. They were used to make necklaces that would have rattled, for example, during dances. Fresh olive shells have beautiful, brightly colored patterns, but color loss diminishes malacologists’ ability to identify species within the genus *Oliva*. A necklace comprising 157 perforated olive shells (PC.B.388, Plate 108) was found at Playa Venado around the neck of a young adult male buried in a flexed, supine position (Lothrop’s

Skeleton C4-2; NMNH P381839), along with two pierced clam shells at the neck and eight long bone tubes in pairs around the pelvis, likely pertaining to a belt. Two shells found inside a clay vessel (NMAI 22-6019) represent a very large specimen of *Oliva polpasta* (Félix Rodríguez, personal communication, 2016).

The quality of engraved artifacts that used the shells of the pearl oyster (*Pinctada mazatlanica*) at Playa Venado is outstanding. A selection of these, found by Harte and Dade, now in the National Museum of the American Indian, is shown in Figure 112. The “YC” scroll and other iconographic motifs of the Greater Coclé Semiotic Tradition stand out. Pearl oysters thrive on reefs with or without corals and on reef flats, and can be common in rocky intertidal zones. Since this habitat was ubiquitous near Playa Venado, it would not have been necessary to make long-distance trips to acquire the raw materials. Prolonged exploitation of reef and marine flat shells during Playa Venado’s major occupation, however, may have reduced stocks of the mature individuals required for crafting the largest and most elaborate

artifacts. In this case, trips to more distant localities (such as the Pearl Islands, Taboga, Taboguilla, and Otoque Island in Panama Bay) or exchange with the communities living on them may have become necessary. Collecting large thorny oysters required special skills. Thorny oysters habitually cement themselves to rocks; this practice would have made prying them off the substrate a difficult task and would have favored collectors experienced at diving in fairly deep waters. Ornaments made of large pearl oyster, thorny oyster, and a dense white shell, probably giant conch (*Titanostrombus* spp.), which all bear resemblance to ornaments from Playa Venado, were found at La Tranquilla on the Atlantic watershed (Mitchell 1964). Since there are considerable differences in marine isotopic signals on the Caribbean and on the upwelling-influenced Central Pacific, it would be theoretically possible to differentiate Atlantic and Pacific source materials in future analyses.

Playa Venado's total shellwork sample exhibits parallels with modeled shell from funerary contexts in central Pacific Panama dated to 300–900 CE; the sample constitutes another clear example of the homogeneity of material culture at sites bordering the central and western Gulf of Panama during this period. Major representative grave sites are located in the Tonosí Valley of southern Azuero at La Cañaza (Ichon 1980:figs. 86g–n, 87b, e, j, m, 88, 89), at El Indio (Ichon 1980:figs. 87a, c–d, f–i, k–l, n–s, pl. 15) on the eastern shore of Azuero at Cerro Juan Díaz (Cooke and Sánchez Herrera 1997:figs. 5d–f, 6c–d, 8), and on the Caribbean watershed at La Tranquilla (Mitchell 1964:figs. 6–9, 11–12).

Graves Containing Gold Artifacts

Playa Venado has produced a good deal of goldwork, but it occurs in only a minority of graves, usually with one or two items per burial. Most of these objects were excavated by members of the Archaeological Society of Panama. Consequently, the quality of documentation is variable, and some items recorded in the archives are now untraceable. Grave lots were broken up and dispersed, often making it impossible to date individual gold items by direct association with pottery from the site itself, though Lothrop realized that some categories of Playa Venado goldwork also occurred in the earliest graves at Sitio Conte ("Archaeological Finds at Venado Beach, Canal Zone, Panama" [page 61], SKJML papers 996-27, 6.5). The entire corpus of metalwork from Playa Venado can be placed stylistically within the Openwork, International, and Conte Groups (Bray, Cooke, and Redwood, this volume; Cooke and Bray 1985), which are contemporary with the early and late

Cubitá and Early Conte ceramics at the site. Only the items in the Dumbarton Oaks Collection (PC.B.372, Plate 102; and PC.B.382, Plate 101) have been examined by professional metallurgists; other objects, loosely described as "gold" in this essay, may well be made of tumbaga (gold-copper alloy), with or without enriched surfaces.

Gold Objects from the Peabody Museum of Archaeology and Ethnology Excavations

In his correspondence, Lothrop expresses concern for the lack of fine quality gold artifacts to offer Robert Woods Bliss. In fact, his field notebook lists only three graves with gold items: Skeleton A7-2B, a three-year-old child buried in a flexed position, in a pit cut into the coquina, who was accompanied by six ceramic vessels, a row of white "scallop," and a crocodilian of gilded copper (probably surface-enriched tumbaga) resting against the skull; Skeleton A7-6, an adolescent of fifteen to twenty-one years (NMNH P381813), partially disturbed and partially flexed, surrounded by pottery including two incense burners, five large swollen fig shells (*Ficus ventricosa*), a stone chisel, scattered shell beads, and a single gold nose ring; and Skeletons A7-8A and A7-8B, a flexed adolescent male of sixteen or seventeen years associated with an infant of five to twelve months (NMNH P381814 and P381815), the latter contained within a large Cubitá-style Macano Punctate Incised urn. The infant (Skeleton A7-8B), which Lothrop considered to be the "principal personage" in the grave, had a double frog pendant of thin gold at the neck. The cranium of the infant was markedly shaped into the obelionic-type artificial cranial modification, and a severe periosteal reaction affected the right tibia, suggesting systemic infection at the time of death. Additionally, Orchard excavated a disturbed, multiple burial (Skeletons A6-26A and A6-26B) with a cylindrical gold bead underneath fragments of a skull.

Goldwork with Nonadults

One of the salient cultural features of the Playa Venado burial ground is the association of children with gold artifacts. A prime example of a child burial is the one excavated by Neville Harte and published by Lothrop (1956). Most of the finds were sold to Alfred Stendahl, then passed from him to various museums in the United States (see Murro, this volume). Lothrop's article is much quoted and appears to be authoritative; however, when his details are checked against the primary sources, the whole thing falls apart. In Lothrop's account, the child was, according to Harte's untrained and unverifiable estimate, about three years old, and was laid out, flexed, on the left side, in a shallow trough cut into the coquina,



Figure 113
Cast gold seahorse
ornament. Overall
dimensions:
7.1 cm × 5.6 cm.
Gilcrease Museum,
Tulsa, 5645.208.

underneath layers of red and yellow clay. A large pottery urn at the child's feet contained mollusks, animal bones, and a gray powder (probably ash). On the child's head was the cast gold chimera pendant (PC.B.372, Plate 102; Lothrop 1956:fig. 5); on the chest were three embossed plaques of sheet gold, each with two pairs of holes (Lothrop 1956:fig. 2). One of these plaques (PC.B.382, Plate 101) has a design of a humanoid figure with a seahorse beside each knee. The two seahorses are joined tail-to-tail by a zigzag band. The other two plaques, with simple, nonfigurative ornament, are now in the National Museum of the American Indian (22-5842 and 22-5843).

It is not clear how Lothrop arrived at his identification of the plaques. Harte never gave descriptions of the gold "plates" he found in several different graves, and the accession information at the National Museum of the American Indian suggests that Lothrop may have become confused, as are we. In the catalogue of the National Museum of the American Indian, plaque 22-5842 (Lothrop 1956:fig. 2, left) is described as being found with a necklace of white disk beads and human teeth (NMAI 22-5843). Plaque 22-5840 (Lothrop 1956:fig. 2, right) is reported to have been found in situ with a necklace of pearls and disk beads (NMAI 22-5841) as well as a beaded gorget (see Figure 96; Lothrop 1956:fig. 1). The record does not say whether or not the two finds came from the same grave,¹⁰ and

this is not the gorget that Lothrop attributes to the child burial.

In Lothrop's own description, there were two finely woven "gorgets" (possibly aprons, as discussed in the previous section) beside the child's hips, one made of tiny orange and white shell beads, the other incorporating tubular beads made from bird bones (see Figure 95) (Lothrop 1956:fig. 1). Lothrop seems to have misinterpreted Harte's photograph, as the "two gorgets" are actually restrung as a single composite object. Harte always refers to "apron" in the singular, and it is catalogued as such in the National Museum of the American Indian. Lothrop also reports that a necklace of circular shell beads and tubular gold beads lay on the child's chest, and that "flanking the knees of the child in the grave was a pair of small animals with curling tails, fat bellies, and long snouts" that he identified as seahorses. He continues: "The sea horses are linked by a band fringed with symbolic crocodile scales. This is presumably a belt" (Lothrop 1956:36).

Lothrop indicates that his information came from Harte, but Harte's only extant letter on the subject, dated September 10, 1951, is rambling and confusing (SKJML Papers 996-27, 6.22). Harte describes his excavation of the Openwork "monster" and a "string of pearls," but gives no precise context. The following weekend, he relates finding three gold pectorals, forty beads, and eight tubes. The "whole assembly was found under a slab of clay. When I removed the slab the apron & beads were in perfect position BUT no burial? Just a [1.5-foot] layer of gray-black soil 14" wide and 20" long in which the apron was found. Not one piece of pottery was found."

Harte's field notebook helps to clarify the situation, as he notes that his Grave 98 contained a child burial with an Openwork "monster" and three "plates," perhaps corresponding to Lothrop's embossed plaques, though this is far from certain. Harte's Grave 100, excavated in the same area a week later, had no human remains, but underneath a clay cap was a bead apron (identifiable from his sketch as Lothrop's 1956:fig. 1, lower), a necklace of gold tubes and colored disk beads, and three more gold plaques. Just such a necklace and three undecorated gold plaques are in the National Museum of the American Indian (all numbered 22-5838), and the accession card confirms that these were found with the bead apron (see Figure 95). Lothrop, who had a copy of Harte's

¹⁰ An annotated photograph by Harte (sent to Warwick Bray in a letter dated May 19, 1984) attributes the second plaque to his Grave 26. In Bray's photocopy of Harte's notebook, Grave 26 does indeed contain a beaded apron

and three "plates." In the version of the notebook on file at the National Museum of the American Indian, these items do not appear, but an apron and three plates are included in Grave 100. Lothrop's problems may have begun with Harte, whose recording is proven to be unreliable.

notebook since 1952, appears to have become confused, and has conflated the contents of two separate graves into a single lot.

There are also problems with the seahorses identified by Lothrop. There is no mention of seahorses or belts anywhere in Harte's records, but Lothrop's description of the artifacts flanking the knees of the buried child—a pair of seahorses joined together by a scaly band—exactly matches the secondary decoration on the plaque at Dumbarton Oaks. In this case, it seems that Lothrop simply made a careless mistake. The cast gold seahorse he illustrates (Figure 113) (Lothrop 1956:fig. 4) was included in the article only for comparative purposes; it has nothing to do with the burial. In a draft of his unpublished manuscript report on Playa Venado ("Archaeological Finds at Venado Beach, Canal Zone, Panama" [page 13], SKJML Papers 996-27, 6.6), he attributes it to "Morrill collection, photograph by Harry A. Dunn." It is now in the Gilcrease Museum, Tulsa, with other items from the collection of Fred Morrill.

In another grave (H.99B), a ten-year-old child was buried with four frogs at the forehead and a pile of eight different marine shells close to the skull. These are probably the conjoined cast gold frogs illustrated by Pérez de Barradas (1966:texto, pl. VI), although Harte, who was often careless in his recording, attributes this object to grave H.96 in his photographic archive.

Goldwork Excavated by Lt. Col. Lee E. Montgomery

While Harte was excavating Grave H.98, Lt. Col. Montgomery was working in his own trench a few meters away. Two of the Openwork gold frogs that he excavated were published by Lothrop (1956:figs. 6–7) and fuller details are contained in his field notebook, housed in the Metropolitan Museum of Art. Grave M.9 was described as belonging to a "casique" [*sic*]. It comprised an upper level with two clay vessels thought to have originally contained food remains, and a lower level approximately 0.6 m below the urns. The lower level, which formed the chamber of the principal



Figure 114 Cast gold ornaments found by Lt. Col. Lee E. Montgomery at Playa Venado, near Area B, Trench 4: a) frog pendant (overall dimensions: 7 cm × 9.5 cm × 4.8 cm); b) frog pendant (overall dimensions: 5.7 cm × 3.8 cm × 2.8 cm); c) Openwork clip (overall dimensions: 1.3 cm × 2.5 cm); and d) Openwork clip (overall dimensions: 1.6 cm × 2.5 cm). The Metropolitan Museum of Art, New York, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979 (1979.206.1350 [a], 1979.206.1351 [b], 1979.206.1352 [c], and 1979.206.1353 [d]).

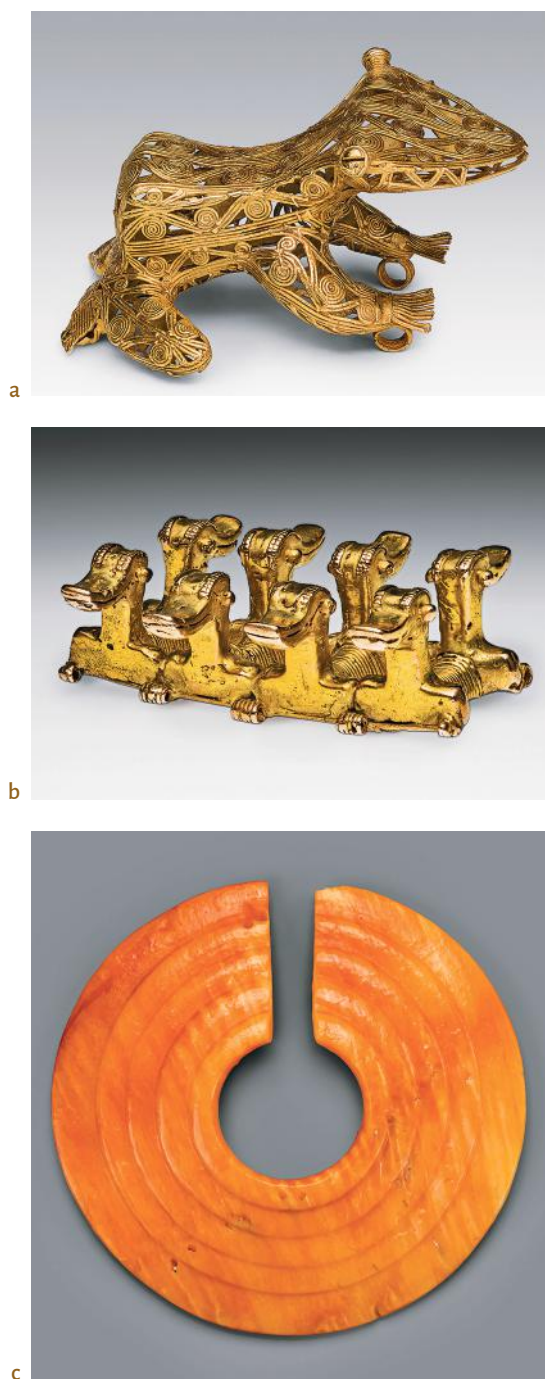


Figure 115

Ornaments excavated by Lt. Col. Lee E. Montgomery from Playa Venado: a) gold frog pendant (L. 18.26 cm); b) gold pendant of four conjoined animals with a head on each end (L. 8.3 cm); and c) concentric *Spondylus* shell clip (Diam. 5.1 cm). Wirt D. Walker Fund, 1969.792 and 1969.793 (a and b), and Gift of Lt. Col. Lee E. Montgomery, 1971.774 (c), The Art Institute of Chicago.

occupant, consisted of an assumed adult skeleton buried in a flexed lateral position resting on the coquina and covered with reddish clay. Offerings included a cast gold frog (probably one of the Openwork examples in Figures 114–115) on the forehead, a gold clip beside the nose, a string of forty-four gold beads near the left shoulder, and fifty-five pearls lying near the ribs. Several hundred small beads, generally described as “red and white coral” by Montgomery, but more likely to be colored and white sections of thorny oyster, probably wound around the legs and/or ankles.

Grave M.10 was another “casique” grave. Six of the seven human occupants (M.10-1–M.10-6) were

in primary flexed mode in two sectors of the grave, at different depths. Five were accompanied by gold items. A small cast gold frog lay near the head of individual M.10-1, a flexed adult. Another small gold frog lay beside M.10-2 in a similar anatomical position. From Montgomery’s notes, it is not always possible to match the individual frogs from Grave M.9 and M.10 with objects in museum collections. M.10-3 had a conical gold clip (probably one of the two shown in Figure 114) and a brown pedestal dish. Several hundred shell beads (presumably of thorny oyster) were found in a “devil’s hole” between M.10-1 and M.10-3. Skeleton M.10-5 stands out as the only one in this group to be covered with a thick layer of bicolored clay and to be placed in a supine, flexed position in the western section of the grave. It possessed three gold objects, but no other offerings. The gold artifacts comprised an unusually large Openwork frog on the forehead (60.3 g), a cast Openwork clip alongside the nose, and a cast gold pendant (Figure 115b) by the left shoulder. Montgomery describes this pendant as “eight gold alligators,” but, as Harte’s correspondence confirms, he is clearly referring to the four conjoined duck-billed creatures with a head at each end. It is likely that a food offering and a broken clay incense burner belonged with M.10-5. To its north lay a lateral flexed individual (M.10-6), accompanied by two carved thorny oyster ornaments: one shaped like a sea turtle (*Chelonioidea*; see Figure 106), and the other, a circular, ridged item that may have been a nose clip (Figure 115c). M.10-7 comprised a pottery urn containing an individual with a hammered disk, 13 cm in diameter, and a large frog pendant (Figure 114a). Hundreds of whitish shell beads and a pottery incense burner were placed inside the urn. No offerings accompanied the sixth flexed individual (M.10-4).

Possible Artisan Burials with Gold Artifacts

The presence of tools or partially finished artifacts may indicate the burial of an artisan. The mortuary offerings of the extended adult in Harte’s Grave H.63 have the hallmarks of a shellworker’s kit: a gold chisel, a shell nose ring, a worked and a partially worked orange shell (probably thorny oyster),



Figure 116
Gold ornaments excavated by Fred Morrill from Playa Venado: a) Openwork “tusk” (overall dimensions: 9.65 cm × 2.7 cm); b) Openwork “tusk” (overall dimensions: 9.9 cm × 2.7 cm); c) large biconic beads (overall individual bead dimensions: 2.55 cm × 1.2 cm); d) crocodile pendant (overall dimensions: 6.05 cm × 1.7 cm); and e) pendant with a body shape similar to that of an anteater (*Myrmecophagidae*) (overall dimensions: 6.65 cm × 4.53 cm). Gilcrease Museum, Tulsa, 5645.220 (a), 5645.221 (b), 5645.1 (c), 5645.29 (d), and 5645.45 (e).

and two greenish translucent pebbles. Other possible artisans buried at Playa Venado are Individuals 19 and 20 of Grave H.86, who together possessed several gold beads as well as objects that perhaps belonged to an apron or breast adornment: nine pendants made from the long bones of birds, a disk of orange shell (probably thorny oyster), a partially incised disk of mother-of-pearl, a section cut from a large shell, and three rounded pellets of a reddish color whose texture and hardness were reminiscent of tar or wax.

Fred Morrill's Grave and Harry Dunn's Grave

Information is lacking on the form of these graves and their human remains, and the inventories of finds may be incomplete. On September 15, 1984, Leo Biese, a serious-minded avocational archaeologist, sent Bray information and photographs of material excavated by Fred Morrill in a single rich grave at Playa Venado. The gold ornaments (Figure 116)

consisted of two Openwork “tusks,” eighteen large biconic beads and other simpler forms, an “anteater” with spirals on the upper legs, and a crocodilian pendant of a form made also in shell (see PC.B.389, Plate 103). The anteater pendant can be matched in the Tairona, Sinú, and Urabá regions of Caribbean Colombia (Bray, Cooke, and Redwood, this volume), and crocodilian pendants are characteristic of the International Group of metalwork on the Isthmus, associated with both Cubitá and Conte pottery. The grave also contained a fragmentary circular or horseshoe-shaped object of carved shell, and a polychrome urn with a design of monkeys in partial relief. In a November 25, 1950, letter to Lothrop, Karl Curtis commented that the two “tusks,” made of twenty-two carat gold, were offered to Bliss for \$1,200, but that he refused to pay the asking price (Letters from Karl Curtis to Samuel Lothrop, 1938–1951, SKL Papers 996-20, 8.5). The gold collection was instead bought by Alfred Stendahl (Von Winning 1968:pls.

586, 588), and from him passed to the Gilcrease Museum in Tulsa. What may be a similar tusk pendant, with false-filigree panels, is reported from an area north of Playa Venado, near Empire, in the former Canal Zone (“Archaeological Finds at Venado Beach, Canal Zone, Panama” [page 64], SKJML Papers 996-27, 6.5).

On November 5, 1950, Curtis described the contents of a single grave opened by members of the Archaeological Society of Panama and photographed by Harry Dunn. This material is now untraceable. But, according to Curtis, the grave contained a 5.8 m string of polished greenstone beads of unknown type; a fine, thin tripod metate; a gold seahorse approximately 7.6 cm high; a gold pectoral with an embossed design; four conjoined frogs on a bar; and other unspecified pendants (Letters from Karl Curtis to Samuel Lothrop, 1938–1951, SKL Papers 996-20, 8.5). Lothrop compares the seahorse to one from Coclé province (Lothrop 1937:fig. 152), and the design on the embossed plaque to similar ones on Greater Coclé pottery (“Archaeological Site Venado Beach, Canal Zone,” SKL Papers 996-20, 2.4).

Gold Found at Playa Venado Without Reliable Context

Most of the undocumented goldwork from Playa Venado consists of unspectacular items (beads, nose-pieces, plain disks, and metal sheathing for objects made of stone or whale tooth), but some of the cast objects are of high quality. For example, the National Museum of the American Indian has a hollow cast ring surmounted by four tiny frogs (Figure 117) (Roosevelt 1979:fig. 26). Dumbarton Oaks has a gold pendant (PC.B.373, Plate 148) in the form of three conjoined quadrupeds with raised tails, which have been implausibly identified by Lothrop as capuchin monkeys (*Cebus* spp.) in the catalogue of the Bliss collection (Bliss 1957:pl. CX) and in his unpublished manuscript on Playa Venado (“Archaeological Finds at Venado Beach, Canal Zone, Panama” [page 72], SKJML Papers 996-27, 6.5). With an accession date of 1949, this pendant may have been one of the first gold items to come out of Playa Venado.¹¹

Figure 118 illustrates items from Neville Harte’s excavations that, for unknown reasons, were not mentioned in either version of his field notebook. Our

11 No provenience is given in the original sale documentation on file at Dumbarton Oaks. Bliss bought the pendant from Alfred Stendahl on March 14, 1949, several months before the first mention of the site in print on August 5, 1949. If Lothrop’s provenience information is correct, then there may have been some early and unrecorded digging at the site.



Figure 117 Hollow cast ring surmounted by four frogs. Diam. 2.5 cm. National Museum of the American Indian, 24-0650.

information comes from his photographic archive, and from a single published photograph (Pérez de Barradas 1966:texto, pl. VI), which illustrates thirteen gold objects from Playa Venado, including the Dumbarton Oaks chimera pendant (PC.B.372, Plate 102) and the objects in Figure 118. Sometimes individual grave numbers are marked on Harte’s photographs, but often they are not, although the attribution to Playa Venado is secure. The finest specimens were bought by Alfred Stendahl, then distributed to museums and collectors in the United States.

In a somewhat confused letter to Lothrop, Harte describes his excavation of a gold “aligator” [*sic*] with four gold “flag pendants” on its back at a depth of 4.27 m (Figure 118a); a string of gold beads and tubes; a gold “shark” (Figure 118b); and a gold plaque (7.7 cm in diameter) (Letter from Neville Harte to Samuel Lothrop, September 10, 1951, SKJML Papers 996-27, 6.22). Harte notes that he found the items later published by Lothrop (1956) the following weekend. In Harte’s photograph collection, the “shark” and the crocodilian are labeled “Grave 98, Section 21.” The exact association among all of these objects is far from clear, however, and in an April 10, 1984, letter to Bray, he maintained that the “shark” and the crocodilian were not found in the same grave. Richard G. Cooke identifies the “shark” as a sea catfish (Ariidae). Its cranial morphology, in fact, recalls that of a particularly broad-headed species within a Tropical Eastern Pacific genus of sea catfish, *Notarius kessleri*, which is abundant in shallow estuarine waters in Central Panama (Cooke and Jiménez Acosta 2010). The remains of the casting core recently returned a radio-carbon date [Beta-465876, 1570±30 bp, 420–560 CE].

The remaining items in the Pérez de Barradas (1966) photograph have now disappeared; however, they consisted of three metal chisels, a small animal



a



c



b



d

Figure 118

Gold objects excavated by Neville Harte: a) crocodile pendant with four dangles (L. 7.62 cm); b) marine catfish pendant (overall dimensions: 2.4 cm × 8.3 cm × 3.3 cm); c) composite creature pendant (H. 9.21 cm); and d) four frogs on a bar pendant (L. 9.05 cm). Minneapolis Institute of Art, The Christina N. and Swan J. Turnblad Memorial Fund, 53.2.2 (a), 53.2.1 (c), and 53.2.3 (d); and the Natural History Museum of Los Angeles County, F.A.682.67-7 (b).

Figure 119

Gold objects reported to be from Playa Venado; current location unknown. Drawings by Alejandra Paton, based on slides sent to Warwick Bray by Leo Biese in 1984. Scale unknown.



with a raised tail, a Darién pendant (Bray, Cooke, and Redwood, this volume), two socketed bells (one of them with a bird modeled on the tube), and a human figure with a spiked headdress, which may be the “effigy” from Harte’s Grave H.38.

The final items (Figure 119) are drawn from slides sent to Bray by Leo Biese in 1984. They are reported to be from Playa Venado, but we have no corroborative detail about the excavators or the associations. The design on the plaque, with its two beaky quadrupeds, belongs within the Greater Coclé Semiotic Tradition (Cooke and Sánchez Herrera 1997) and can be matched on two plaques in the Museum of Fine Arts, Boston (1972.940 and 1972.941). The human figure with the two flasks (Lothrop 1937:fig. 147b) was illustrated on the cover of a book by Philip Dade (1972b). Dade, who was notoriously evasive about proveniences, claims that it was found somewhere south of Penonomé, but Biese was certain that it came from Playa Venado (Warwick Bray, personal communication, September 1984).

Conclusion

Although the reanalysis and recontextualization of the materials and remains from Playa Venado is far from finished, our retrospective archaeological analysis has revealed the following trends. Most importantly, Playa Venado’s material cultural heritage epitomizes the growing body of archaeological evidence pointing to the complexity and

fluidity of cultural interaction spheres within the Gulf of Panama. No longer can definitive dividing lines between Greater Chiriquí, Greater Coclé, and Greater Darién be drawn within the Isthmo-Columbian area. Rather, these divisions must be thought of as fluctuating areas across space and time. Cultural developments in Panama east of the El Valle volcano (i.e., the Greater Darién culture area) point to changes in the distribution of material culture from 500 BCE to Spanish contact (Martín et al. 2016; Sánchez Herrera 2000). A period of local pottery manufacture in this region was interrupted around 500 CE by the introduction of styles and iconography associated with the Greater Coclé culture to the west. Moreover, social and commercial relations also changed at this time, ostensibly in response to the influence of exchange in sumptuary goods of gold and fine shellwork on exchange relations and social interactions (Cooke, Sánchez Herrera, and Udagawa 2000; Sánchez Herrera and Cooke 2000). Around 1000 CE, however, pottery styles east of El Valle changed once more to correspond closely with the early sixteenth-century distribution of communities which spoke a “Cueva” language (Cooke 2011; Cooke and Sánchez Herrera 1997, 2004b). Arguably, this was not a vernacular spoken by a particular group, but rather a language form preferred by several communities speaking multiple linguistic varieties in order to facilitate trade, in the manner of the Chibchan Huétar language in Costa Rica (Constenla 2012; Cooke 2016; Romoli 1987).

Playa Venado represents the largest known mortuary site outside of the area traditionally conceived as the central region of Pre-Columbian Panama to contain ample “Greater Coclé” material culture. Based on the ceramic analysis, the cemetery’s major use occurred between 500 and 850 CE. The slightly earlier radiocarbon dates associated with two artifacts and human remains in primary burials at the site suggest a slightly earlier minimum date of cemetery use (ca. 250 CE), for which the ceramic component is scarce in observable samples. Although originally thought to be a site of ritual violence (see Lothrop 1954), the paucity of trauma on the human remains from Playa Venado, as well as the similarity of its burials to the style and content of other non-elite mortuary sites along the coast of Parita Bay and the southern Azuero Peninsula, compels an alternative explanation of its use for nonviolent mortuary traditions, including ancestor veneration rituals. Shared mortuary contexts between primary burials of adults and urn burials of children may suggest a cultural belief that the youngest members of society must be accompanied by older family members in the afterlife. Playa Venado was not an elite site; nevertheless, many of its inhabitants were interred with finely crafted sumptuary items of shell and gold. From the detailed notes of the Peabody Museum of Archaeology and Ethnology excavations at the site, it seems that many of these items, particularly those objects in the form of animals, accompanied the remains of young children, perhaps representing spirit guardians of the young or symbols of their particular lineage.

This essay has also brought to light some of the darker aspects of the recent history of the site following its discovery in 1949; principally, its ransacking by amateur archaeologists at the encouragement and sponsorship of art dealers abroad. The huge impact of Lothrop’s well-illustrated *Sitio Conte* monographs made private collectors and museums in the United States and Europe avid for “Coclé-style” artifacts. The market value of many of the Playa Venado funerary

goods containing stylistic affinities with those from *Sitio Conte* appears to have been the principal motivation for more and more people to work at the site. Whether Samuel K. Lothrop became involved at Playa Venado for purely academic purposes is unclear. Nevertheless, the conditional sponsorship of Lothrop’s excavation by Robert Woods Bliss in exchange for Lothrop gifting any spectacular objects to his collection clearly demonstrates that the lust for Pre-Columbian art objects during the mid-twentieth century reached the highest levels of professional archaeology. Yet it is largely due to the careful documentation, organization, and curation of excavated materials by Lothrop that this multidisciplinary reappraisal of Playa Venado was possible.

Acknowledgments

We thank the following individuals for their invaluable assistance in the research and preparation that went into this project, and without whom this publication would not have been possible: Colin McEwan, Bryan Cockrell, Kelly McKenna, Jeffrey Quilter, Katherine Meyer, Cynthia Mackey, Meredith Vasta, David Hunt, David Rosenthal, Ann McMullen, Nathan Sowry, James Doyle, Chris Coleman, Diana Cox, Jeffrey Frost, Alejandra Paton, Orlando Hernández, Lily Mendoza, Ashley Sharpe, Raiza Segundo, Alexandra Lara, Aaron O’Dea, Félix Rodríguez, Roxana Pino, Aureliano Valencia, Ilean Isel Isaza Aizpurúa, and Hannah Sánchez.

The 2017–2018 excavations at Playa Venado directed by Anthony Ranere were assisted by the following students and colleagues: Ashley Sharpe, Rebecca Mendelsohn, Aureliano Valencia, Abner Alberda, Yadixa del Valle, Yusseff Castillo, Aleks Cvetkovic, Ayla Allen, Emma Latham, Julie Pourtois, Kathleen Noble, Lily Reisinger, Luis Cardenas-Osorios, Michelle Greenfield, Rabia Khan, Sonia Howlett, Autumn Rose, Olivia Richardson, Lilly Quach, Sage Palmedo, J. J. Onyeukwu, Daniel Jose Navarrete, and Edgar Caballero.