



Communities in **contact**

Essays in archaeology, ethnohistory & ethnography of
the Amerindian circum-Caribbean

edited by
Corinne L. Hofman &
Anne van Duijvenbode



Communities in **contact**

Essays in archaeology, ethnohistory & ethnography of
the Amerindian circum-Caribbean

edited by
Corinne L. Hofman &
Anne van Duijvenbode

ISBN 978-90-8890-063-1

© 2011 Authors

Published by Sidestone Press, Leiden

www.sidestone.com

Sidestone registration number: SSP60550001

Lay-out: P.C. van Woerdekom, Sidestone Press

Cover design: K. Wentink, Sidestone Press

Front Cover Credits

Foreground image: Coral artefact with human face in relief found at the site of Anse à la Gourde, Guadeloupe, AD 1000-1400 (Photo by J. Pauptit).

Background image: Detail of feature layer with postholes cut into the bedrock at the site of El Cabo, Dominican Republic, AD 1000-1500 (Photo by A.V.M. Samson).

Back cover, left to right: Artistic, life-sized interpretation of the archaeological site El Chorro de Maíta, Cuba , AD 1200-1600 (Photo by A. van Duijvenbode). / Wooden stool or duho recovered from the island of Dominica, dated between AD 1315-1427. Catalogue number ECB40669, Economic Botany Collection, Royal Botanic Gardens, Kew, UK (Photo by J. Ostapkowicz). / Clay Figurine found at the Lavoutte site, St. Lucia, AD 1200-1500 (photo by M.L.P. Hoogland).

Front cover, left to right: Map of Guadeloupe published by Champlain in 1859 (Photo by A.J. Bright). / The Trio-Okomoyana village of Amotopo in the midwest of Suriname in 2007 (Photo by J.L.J.A. Mans). / Frontal view of the upper incisors and canines of individual 72B from the site of El Chorro de Maíta, Cuba, AD 1200-1600, showing intentional dental modification (Photo by H.L. Mickleburgh).

Contents

Preface	9
<i>Corinne L. Hofman and Anne van Duijvenbode</i>	
Foreword	11
<i>José R. Oliver</i>	
MOBILITY AND EXCHANGE	
Unravelling the multi-scale networks of mobility and exchange in the pre-colonial circum-Caribbean	15
<i>Corinne L. Hofman and Menno L.P. Hoogland</i>	
The social in the circum-Caribbean	45
Toward a transcontextual order	
<i>Alexander Geurds</i>	
Bringing interaction into higher spheres	61
Social distance in the Late Ceramic Age Greater Antilles as seen through ethnohistorical accounts and the distribution of social valuables	
<i>Angus A.A. Mol</i>	
Early phytocultural processes in the pre-Colonial Antilles	87
A pan-Caribbean survey for an ongoing starch grain research	
<i>Jaime R. Pagán-Jiménez</i>	
The circulation of jadeitite across the Caribbeanscape	117
<i>Reniel Rodríguez Ramos</i>	
‘This relic of antiquity’	137
Fifth to fifteenth century wood carvings from the southern Lesser Antilles	
<i>Joanna Ostapkowicz, Christopher Bronk Ramsey, Alex C. Wiedenhoef, Fiona Brock, Tom Higham, and Samuel M. Wilson</i>	
Much to choose from	171
The use and distribution of siliceous stone in the Lesser Antilles	
<i>Sebastiaan Knippenberg</i>	
Diverse origins, similar diets	187
An integrated isotopic perspective from Anse à la Gourde, Guadeloupe	
<i>Jason E. Laffoon and Bart R. de Vos</i>	
Trio movements and the Amotopoan flux	205
<i>Jimmy L.J.A. Mans</i>	

CULTURE CONTACT

- El Chorro de Maíta** 225
A diverse approach to a context of diversity
*Roberto Valcárcel Rojas, Darlene A. Weston, Hayley L. Mickleburgh, Jason E. Laffoon
and Anne van Duijvenbode*
- Conflicting cosmologies** 253
The exchange of brilliant objects between the Taíno of Hispaniola and the Spanish
Floris W.M. Keehnen
- In sickness and in health** 269
Possibilities for studying the social and cultural implications of treponemal
disease in the Caribbean area
Rachel Schats
- Through the eyes of the chronicler** 281
Adriana I. Churampi Ramírez
- From Cayo to *Kalinago*** 291
Aspects of Island Carib archaeology
Arie Boomert
- “Removed from off the face of the island”** 307
Late pre-Colonial and early Colonial Amerindian society in the Lesser Antilles
Alistair J. Bright
- An ethnohistorical approach of the Carib through written sources** 327
The example of the *Relation* by Jacques Bouton
Bernard Grunberg
- De insulis Karaybicus relationes manuscriptæ** 343
Adrien Le Breton, the last Jesuit missionary in the Carib island of St. Vincent
Benoît Roux
- John Nicholl** 361
An Houre Glasse of Indian Newes (1607)
Eugénie de Zutter
- Pierre Pelleprat** 367
A missionary between the Lesser Antilles and the Continent
Emilie Chatrie
- The first missionaries and the evangelization of black slaves in the Lesser
Antilles in the early years of French colonization (1625-1655)** 379
Eric Roulet

SETTLEMENT AND COMMUNITY

Living islands of the Caribbean 393

A view of relative sea level change from the water's edge

Jago Cooper and Richard Boothroyd

Palaeoecology and human occupation during the Mid-Holocene in Puerto Rico: the case of Angostura 407

Isabel C. Rivera-Collazo

The most beautiful house in the world 421

The archaeology of aesthetics in eastern Hispaniola

Alice V.M. Samson

***Plus d'une Langue* (no more language / more than a language)** 439

Archaeology, history and ethnography in the Guiana highlands

Renzo S. Duin

Ethnoarchaeology of the Amazonian house 455

Pre-Columbian and Jivaro continuity in Ecuador

Stéphen Rostain

Contextualization of Amazonia artefacts 475

Indigenous cosmologies and the Nature/Culture divide

Sonia Duin

EPILOGUE

Scale, hybridity, and perspective in the Caribbean and beyond 491

Michael J. Heckenberger

List of Contributors 505

‘THIS RELIC OF ANTIQUITY’

Fifth to fifteenth century wood carvings from the southern Lesser Antilles

Joanna Ostapkowicz, Christopher Bronk Ramsey, Alex C. Wiedenhoef, Fiona Brock, Tom Higham, and Samuel M. Wilson

The results of AMS dating and wood identification on three carvings recovered from the southern Lesser Antilles (Dominica, Bawitowia and Trinidad) are discussed, placing the objects in the context of events and interactions that spanned the region’s prehistory from the fifth to fifteenth centuries AD. Each hints at a rich legacy – of their passage through the hands of those who invested in them (whether through making, using, trading, collecting or displaying them) in a process that sometimes covers vast geographical and cultural distances. They reflect the social dynamics and fluid interconnections between Caribbean peoples – and between people and objects – that bound the region in a praxis of materiality, mobility and exchange.

Se discuten los resultados de fechamiento por medio de Espectrometría de Masas (E.M.) y la identificación de especies de madera de tres objetos tallados, recuperados en el sur de las Antillas Menores (Dominica, Bawitowia y Trinidad), así colocando dichos objetos en el contexto cronológico de eventos y interacciones conocidos de la prehistoria regional (Siglos V hasta XV). El trabajo expone sobre la importancia de revisar colecciones museográficas, de estudiar no únicamente las historias recientes de recopilación y conservación, sino historias profundas de objetos - contexto original, uso y valor. La procedencia documentada en los registros de adhesión con frecuencia oculta historias ricas de artefactos - su paso por las manos de aquellos que invirtieron en ellos (ya sea a través de su tallado, utilización, comercialización, recopilación o su exhibición) mediante un proceso que a veces cubre extensas distancias culturales y geográficas.

Nous traitons dans cet article des résultats des datations AMS et de l’identification du bois opérées sur trois gravures retrouvées dans les Petites Antilles méridionales (Dominique, Bawitowia et Trinidad), qui permettent de replacer ces objets dans le contexte chronologique des événements et des interactions qui se sont déroulés durant la période préhistorique de la région, du V^e au XV^e siècle. Cet article explore l’importance de revoir les collections de musée, d’étudier non seulement les histoires récentes de collection et de conservation, mais aussi l’historique plus approfondi de l’objet, son contexte d’origine, son usage et sa valeur. La provenance visible dans les registres d’accession masque souvent la richesse du legs des artefactos, leur passage dans les mains de ceux qui ont investi en eux, (soit en les fabriquant, en les utilisant, en les échangeant, en les collectionnant ou en les distribuant) dans un processus qui couvre parfois de vastes distances culturelles et géographiques.



Figure 1 Turtle carving/snuff tube, *Guaiacum* sp., resin inlays, white pigment, AD 1160-1258 (combined resin and wood dates). L: 102 mm; W: 57 mm; H: 33 mm. Catalogue number A34542-0, Department of Anthropology, National Museum of Natural History, Smithsonian Institution, Washington, D.C., US.

In 1878, after scrambling 300 feet up a steep mountain slope on the island of Battowia, off the coast of St Vincent, the historian Frederick Ober discovered a small wooden carving (Figure 1):

...I groped among the loose fragments of stone near the mouth [of a cave], where, one of the men told me, an Indian chair had been found some fifteen years before. Carefully displacing the stone chip-pings, I at last found what seemed to be an image of stone; but scraping with a knife revealed that it was of wood. It was a tortoise, four inches long and two and one-half broad, curiously carved.... This relic of antiquity was undoubtedly taken by the Caribs from their enemies of Haiti, and brought here by the captor, or it may have belonged to a captive Arowak [sic] living among the Caribs
Ober (1880:222; 224)

Ober's last sentence, although written over a century ago and clearly a product of the long-standing Columbian propaganda that polarized the region's cultures along stereotypical extremes of 'war-like Caribs' and 'docile, peaceful Arawaks/Taíno', foreshadowed current investigations into the extent and nature of interaction between the peoples of the Greater and Lesser Antilles (e.g., Hofman *et al.* 2007, 2008; Hofman and Hoogland 2004; Hoogland and Hofman 1993, 1999). To Ober's eyes, the turtle carving was clearly foreign to Battowia – he viewed it as a *zemi* (*cemí*) that was either raided or belonged to a non-local 'captive'. This attribution was based on his knowledge of comparable material recovered

1 These general divisions (Carib/Taíno) gloss over a great deal of cultural diversity – many societies and languages are subsumed within these broad titles. The antagonistic history between the two 'groups' was emphasized by early Spanish colonisers, though much for their own purposes, to justify enslavement and expansion. This has, however, long overshadowed the peaceful interactions that undoubtedly also occurred – from exchange, to political alliances to kin relationships binding different island communities together.

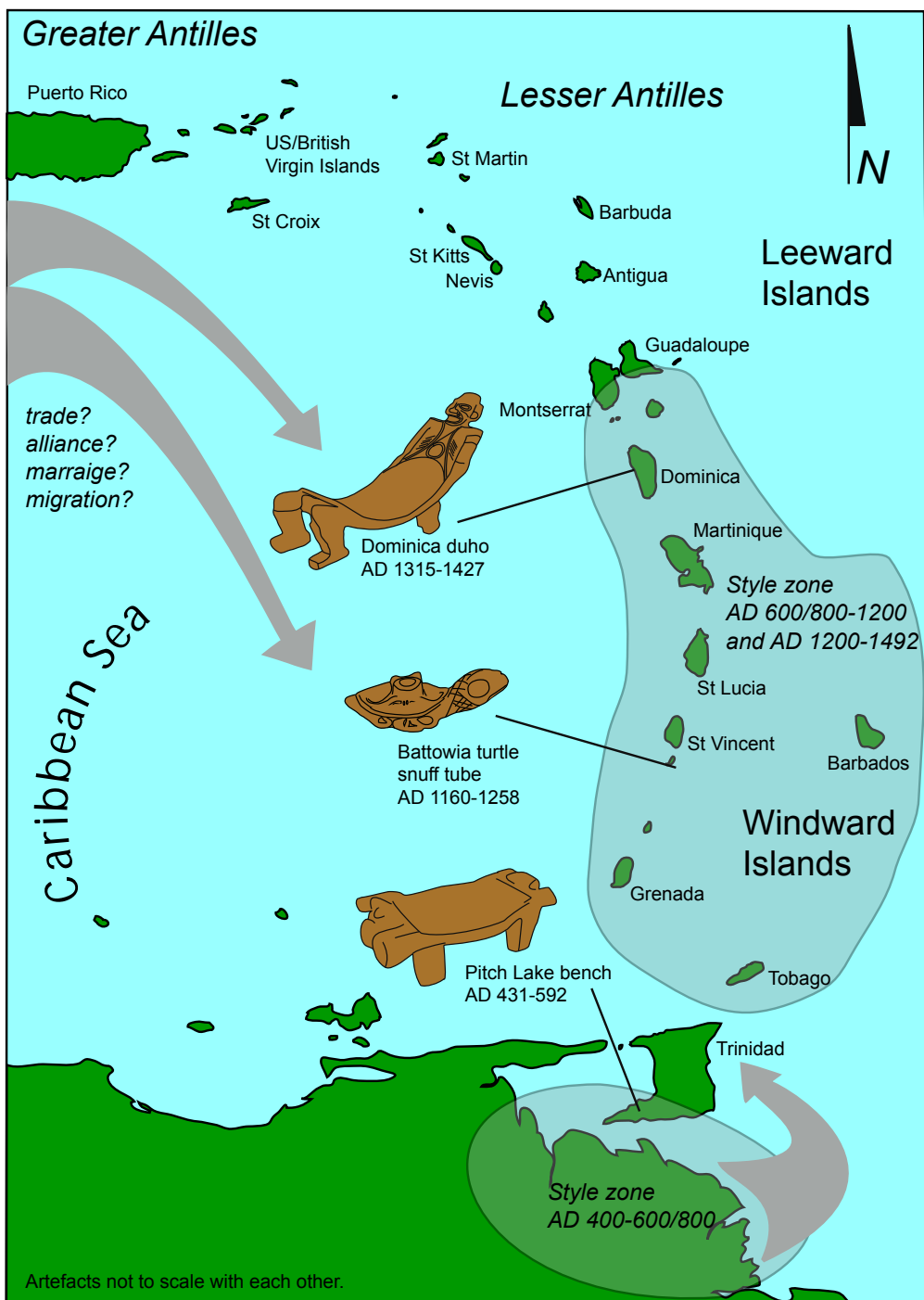


Figure 2 Distribution map showing the Dominica duho, Battowia turtle snuff tube and Pitch Lake zoomorphic bench, and featuring style zones for provenance islands contemporary to the artefact periods (the latter redrawn from Hofman et al. 2007: Fig 6, 8-9). NB: other style zones were present during the periods in question, but are not included here for ease of reference.

from the Greater Antilles, specifically the style of the piece and its apparent association with an ‘Indian chair’ – the latter known to him from *dubos* described in *cronista* accounts and antiquities he had seen from Puerto Rico (Ober 1880:223-224). Yet, at the time, little was known – and to date, is known – about the wood carving styles of the Lesser Antillean region, primarily because so few carvings survived,² hence it is difficult to distinguish what was made locally and what was imported on stylistic attributes alone. How, then, to investigate possible sources – whether local or foreign – for the unusual cache of objects in Battowia, or for the other carvings found in the Lesser Antilles? And how to anchor these chance-finds – void of archaeological context – within circum-Caribbean prehistory so that they can inform on local developments, inter-island connections and/or shared practices within this region?

This paper focuses on three carvings found in the Lesser Antilles: the Battowia turtle, Dominica *duho*, and Pitch Lake (Trinidad) zoomorphic bench (Figure 2; Table 1). It summarizes new AMS radiocarbon and wood identification results, as well as iconographic studies, which together enable assessments of stylistic attribution and chronological placement. Discussion proceeds from a review of the individual pieces to the wider implications for understanding their histories, and through them the histories and interactions of their owners.

Provenance/Institution	Material	OxA	Date BP	Cal AD (68.2%)	Cal AD (95.4%)
Pitch Lake zoomorphic bench, Trinidad Peabody Museum of Anthropology and Archaeology, New Haven 145145	Wood (<i>Andira</i> sp.); 54.11mg; terminus	19174	1538 ± 29	437-489 (35%) 530-570 (33.2%)	AD 431-592 (95.4%)
Turtle snuff tube, Battowia St Vincent National Museum of Natural History, Washington A34542-0	Wood (<i>Guaiaacum</i> sp.); 2.99mg, terminus	X-2345-50	775 ± 50	1219-1277 (68.2%)	AD 1159-1295 (95.4%)
	Resin (results pending) 2.41mg, terminus	21893	862 ± 28	1161-1216 (68.2%)	AD 1050-1083 (9.9%) AD 1124-1137 (2.4%) AD 1151-1254 (83%)
Dominica Duho, Dominica Economic Botany Collections, Kew, London EBC40669	Wood (<i>Guaiaacum</i> sp.), 58.24mg, terminus	17917	556 ± 25	1326-1344 (27.6%) 1394-1416 (40.6%)	AD 1315-1356 (43.5%) AD 1388-1427 (51.9%)

Table 1 AMS radiocarbon and wood ID results for the Pitch Lake zoomorphic bench, Battowia turtle snuff tube and Dominica duho. The Oxford Radiocarbon Accelerator Unit lab numbers (OxA) are provided alongside the sample sizes, the dates BP and calibrations at 68.4% and 95.4%. All dates were calibrated using the IntCal09 dataset (Reimer et al. 2009) and OxCal v4.1.6. The most likely dates are highlighted in bold in the 95.4% confidence column.

2 To the small turtle carving can be added 17 other artefacts - a *duho* recovered from a cave on Dominica in 1860, two small zoomorphic ornaments and a small bowl from Guadeloupe (the latter potentially a historic piece), a figural carving and a possible weaving stick from Barbados, and at least 11 wooden artefacts from Pitch Lake (two stools, four paddles, two weaving sticks, two bowls and a mortar (Bennel 2000:11; Boomert 2000:298-99, 307, 336, 399; Boomert and Harris 1984:34; Petitjean Roget 1995; Fewkes 1922:135). This excludes the house posts recovered at the site of Tutu, St Thomas and Port St Charles (Heywoods), Barbados (Bennel 2000:111-112). In contrast, the wooden corpus from the Greater Antilles numbers at least 300 pieces known in museum and select private collections, and potentially thousands from the waterlogged sites of Los Buchillones, Cuba and Manantial de La Aleta, Dominican Republic (Ostapkowicz 1998; Valcárcel Rojas et al. 2006; Conrad et al. 2001). Undoubtedly, other pieces with provenance to the Lesser Antilles will emerge with time – such as those currently held in private collections.

Project overview and methodologies

The three carvings discussed here form part of the 'Pre-Hispanic Caribbean Sculptural Arts in Wood' project, funded by the Getty Foundation and the British Academy (2007-2010), bringing together 66 wooden artefacts held in widely dispersed museum collections (20 institutions in eight countries). The study focused on older museum specimens selected on the basis of their historical significance, good provenance (to island), wide-ranging distribution (both Greater and Lesser Antilles), and artefact type. This corpus was subjected to AMS ^{14}C dating, wood identification and select stable isotope analysis to establish firm chronologies, determine material resource utilization and suggest or confirm provenance. The wood identification of the Dominica *dubho* was carried out during the course of a previous project supported by the Leverhulme Trust (2004-2006).

As establishing a chronology for each piece was at the core of the project and central to its wider objectives (e.g., exploring stylistic variation within and between islands over time), the ^{14}C samples were critically targeted to ensure a date closest to the felling of the tree, ideally sampling any remaining sapwood. Where this was not present, the carving was oriented relative to its position in the original bole, and the sample extracted from the extreme outer edge to achieve the same goal. This strategy is especially important for slow-growing woods, which can be several centuries old at the pith as opposed to the sapwood. The approach was further fine-tuned by sampling the resin used in inlays, where evident, which should relate to the object's final stages of manufacture or to periodic refurbishment. In total, 90 dates were obtained for the project. The ultimate aim has been to integrate the results into our current knowledge of Caribbean prehistory, which is largely based on ceramic and stone technologies, and enhance our understanding of how wooden material culture contributed to Caribbean lifeways.

Artefact selections: Pitch Lake zoomorphic bench

Trinidad's Pitch Lake, one of the largest natural deposits of asphalt in the world, has yielded a minimum of 11 wooden artefacts, including a zoomorphic bench (Figure 4) (Boomert 2000:298-99, 336, 399; Boomert and Harris 1984:34-37). It was discovered between 1940 and 1950, when the lake was being dredged commercially, and donated to the Peabody Museum of Natural History in 1952 by W. L. Kallman, director of the Trinidad Lake Asphalt Company (Boomert and Harris 1984:34). Large encrustations of pitch still remain on the legs and underside of the stool, while other areas appear to have been cleaned by a sharp implement. This substantial, low bench, carved with a bulbous, zoomorphic head at the front and a blunt, square 'tail' at the back – suggestive of a canid – differs stylistically from the *dubhos* recovered in the rest of the Caribbean islands, including those of the low-backed category to which it has some general parallels. The size, style and iconography has more in keeping with the seats still commonly used in the Orinoco delta and surrounding regions (compare against contemporary zoomorphic examples on figure 3; see discussion).

Samples extracted from the stool for radiocarbon dating yielded the earliest currently known date for a Caribbean seat – AD 431-592 (95.4% confidence) (Figure 5, Table 1). The sample was taken from the outer edge of the left hind leg, as far as possible from the pith area of the carved bole within the limitations of the carving. The wood was previously identified as Mora (*Chlorophora tinctoria*), more commonly known as fustic, in 1953 by



Figure 3 Distribution map of South American zoomorphic stools from the 19th to 20th centuries with general similarities to the prehistoric Trinidad bench (low-back, presence of zoomorphic head, tail, etc.). Stools redrawn from Roth (1924), Saville (1910) and Zerries (1970).

Arthur Koehler of the Department of Forestry, Yale University; however, it has been re-identified here by A. Wiedenhoef as *Andira* sp. (Figure 6), a slow-growing genus, although this in itself could not account for the age of the piece, especially given the sampling strategy. The pitch is a possible factor, and although all sampling was done away from the large areas of pitch still present on the object, it is probable that the residues were deeply absorbed into the wood. Any date from an object with extensive contamination must have some uncertainty associated with it. With this in mind, the chemical pre-treatment was adjusted accordingly, and subjected to a solvent wash prior to the standard chemistry for radiocarbon dating. In addition, a small sample of pitch removed from the bench was subjected to the same solvent wash as the wood sample and dissolved easily in the chloroform, indicating that the pre-treatment was suitable for removing the pitch from the radio-

carbon sample prior to dating. However, although this treatment should have removed any traces of pitch, we must still be cautious with the date until further studies can be made (a thorough investigation of the pitch contamination issue is the focus of a future project). Experiments on porous substrates deliberately contaminated with bitumen show that residual contamination levels are likely to be <0.2% (or <20 14C years). With these caveats in mind, accepting this early date for the stool would place it in the late Cedrosan Saladoid period (AD 300/400 – 600/800), which in fact fits with the date previously proposed by Boomert and Harris (1984:38-39) for the group of artefacts recovered from Pitch Lake.

Battowia turtle snuff tube

Ober's (1880:222, 224) fortuitous discovery yielded not only the remarkable turtle carving (Figure 1) – which he donated to the Smithsonian Institution in 1878 – but also the knowledge that an 'Indian chair' (possibly a *dubo*) was previously recovered from the same cave.³ If the turtle carving is anything to go by, this suggests a cache of at least two, if not more, elaborately carved and possibly functionally related artefacts.

The purpose of this finely worked object has been a matter of some debate. Ober called it a *cemí*, or idol, while Fewkes (1907:196) was more tentative: '[w]hether the image was an idol or an amulet is not clearly determined, but the two ventro-dorsal perforations suggest that it was tied to or suspended from some other object, possibly attached to some part of the human head or body or worn as an amulet'. Lovén (1979:591) concurs, noting that early cronistas mentioned the Carib wearing small wooden figures around their necks. Subsequent researchers have accepted the amulet identification (McGinnis 1997:401). However, the emphasis placed on the two perforations – their central location, together with their size and raised position above the turtle's shell – would suggest a function beyond simple suspension holes, which could have been more easily drilled through the neck or back flippers of the carving (most amulets have holes drilled through the sides, so that the carving is viewed in full from the front). The position of the holes suggests a composite



Figure 4 Pitch Lake zoomorphic bench, *Andira* sp., red pigment (?), AD 431-592. L: 572mm; W: 272mm (max); H: 200mm (max). Catalogue number ANT.145145, Peabody Museum of Natural History, New Haven, United States.

3 See also Hawtayne (1887:198), who mentions the discovery of the chair: 'At Battewia [sic]... there is a large cave in which a wooden seat or stool was discovered, and no doubt other relics might be obtained there'. In his reconnaissance of private collections on the islands in 1912, Jesse W. Fewkes (National Anthropology Archives 4408:59a) noted that 'Mr. Cropper had a *dubo* from Battowia [sic] which he gave to [a] gentleman in England', although he could not trace its specific location further (Fewkes 1914:670).

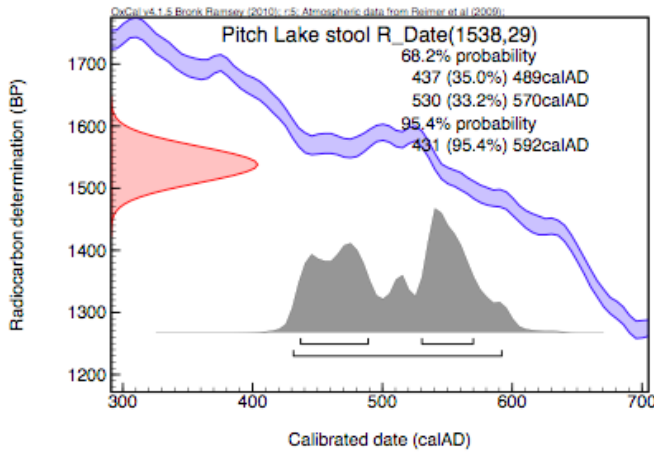


Figure 5 Graphed calibration date (1538 ± 29) for the Pitch Lake zoomorphic bench.

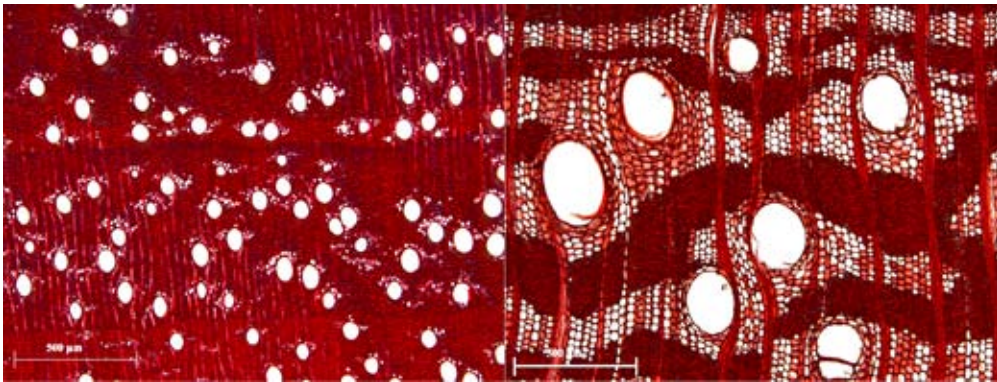


Figure 6 Transverse section of *Guaiacum sanctum* (left) and *Andira retusa* (right). Though wood identification is not definitive at the species level, the species presented here depict some of the characteristic cellular features seen in samples from the three Lesser Antillean artefacts. Images: A. Wiedenhoef.

snuff tube, used in the Greater Antilles for the inhalation of *cohoba* (a hallucinogenic drug, possibly involving *Anadenanthera peregrina*) – a practice described by the early *cronistas* (Colón 1992:151, 157; Las Casas 1967:II 174; see Newsom and Wing 2004:143 on issues surrounding the genus identification). Further, the distance between the two holes naturally fits the nostrils, the raised position of the holes enabling the placement of the carving sufficiently away from the mouth for ease of use. This likely involved the use of short tubes, bringing the narcotic substance directly into the inner nostrils (Ostapkowicz 1998:130). If the turtle is indeed a composite snuff tube, its presence in the same cave together with a *duho* could suggest that core elements of the standard Greater Antillean ‘*cohoba* kit’ were present – which in turn raises the question of whether they were understood, and potentially utilised, as such in the Lesser Antilles, and if so, by whom (locals or immigrants/emis-saries from the northern islands? – see discussion).

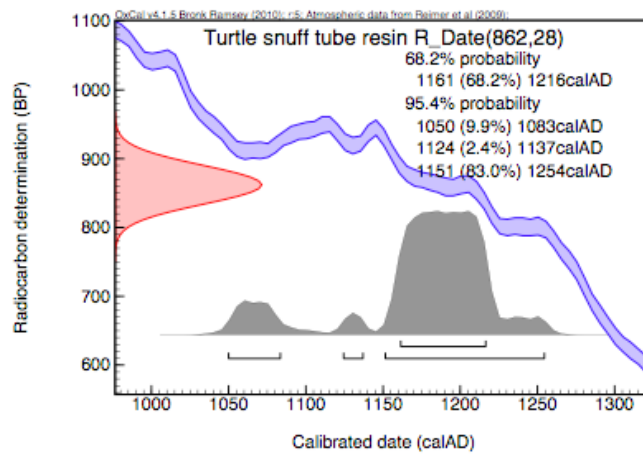
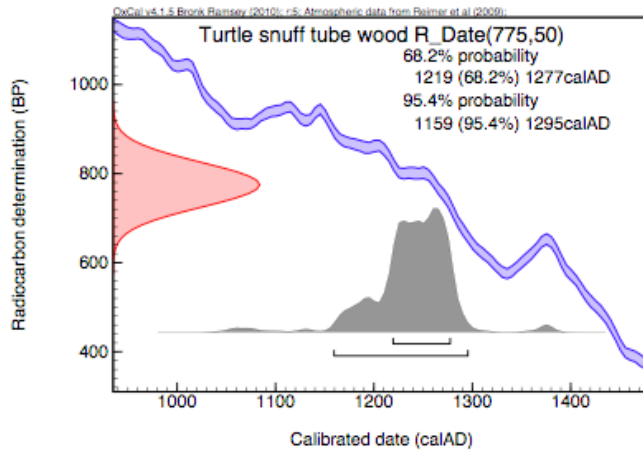


Figure 7 Graphs showing calibrated results for Turtle snuff tube wood (775 ± 50 BP) and resin (862 ± 28 BP) samples.

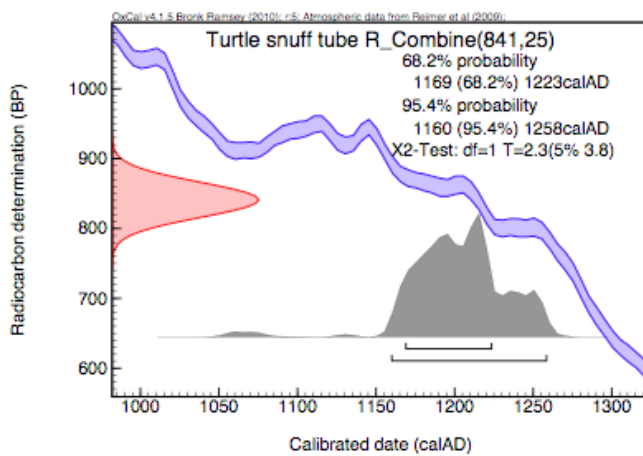


Figure 8 Graph showing combined results from resin and wood dates for the Turtle Snuff Tube, at AD 1160-1258 (95.4%). T=2.3 (5% 3.8).

Two small samples were extracted from the snuff tube for AMS ¹⁴C dating: the wood from the outer-most tip of the right front flipper and the resin from a recessed area in the same location. The samples were necessarily very small due to the size of the object and its importance. Although there was sufficient quantity of resin, the wood sample was minute (2.79 mg yielded just 0.44 mg after pre-treatment) and - despite an acceptable yield of 50% C on combustion - had a low AMS target current which gave a higher standard error than usual. In addition, resin is difficult to prepare and treat for dating as it is soluble in many of the chemical pre-treatments that are routinely used; instead, where it remains in good condition, its outer surface can be removed, so that only the inner material is submitted for dating. This was our approach with the resin sample removed from the turtle carving (2.41mg): the outer surface was physically separated from the target material and no chemical treatments were applied. This would give an added level of uncertainty on the results, although both cross reference well, and are almost certainly accurate within their wider ranges. The wood sample, identified here as *Guaiacum* sp. (Figure 6), yielded a calibrated date of AD 1159-1295 (95.4% confidence), while the resin returned a result of AD 1050-1254 (95.4% confidence)(Figure 7; Table 1). Within the latter range, the highest probability is AD 1151-1254 (83%), which overlaps very well with the wood date. The two results can be combined to AD 1160-1258 (Figure 8)($\chi^2 = df=1, T=2.3$ (5% 3.8)). This suggests that the piece was likely carved and inlaid in a single process. Importantly, the date does not inform on its subsequent use history: although carved by the mid-thirteenth century, it may well have been a curated object, a valued heirloom passed down the generations or circulated through exchange networks over the course of its history. The date places its manufacture and use in the Chican Ostionoid period in the Greater Antilles, on the one hand, and the Suazan Troumassoid period and Cayo complex in the Windward Islands, on the other – all roughly contemporaneous at AD 1200 (Petersen *et al.* 2004:28; Rouse 1992:129-131; Boomert 2000:261).

Dominica *duho*

The Dominica *duho* (Figure 9) entered the Economic Botany Collection at Kew Gardens, London in 1860. That year, John Imray (b. 1811, d. 1880), a doctor and botanist working in Dominica between 1850 and 1870, wrote to Sir. William Hooker, then Director of Kew Gardens, giving a brief account of the *duho*:

I send the carved image, or stool, or whatever it may be. I think I mentioned that it was found by a negro boy in a cave among the woods of Dominica. There were some objects of the same description which unfortunately I was unable to procure. The image is I think of Charaib [sic] workmanship. It is evidently very old. From its weight it is made from some hard wood of this country. I almost think Coubaril [sic] (Imray to Hooker, 9 January 1860, letter on file at Kew, KLDC8823)

Of interest here is the clear reference to the *duho* being found on the island, and the presence of other carved objects ‘of the same description’, possibly suggesting other *duhos*, in the cave. Although non-committal on the function of the carving, Imray does refer to it as a stool, an identification echoed by Sir Augustus Wollaston Franks, eminent curator of Antiquities and Ethnography in the British Museum between 1866-1896, who described the *duho* in one of his private note books (British Museum collections, LS16, ff.1). But at some later point in the object’s history, it came to be identified as a metate, and the following label was attached on the underside, above the two hind legs: ‘Metatl [sic] or trough



Figure 9 *Dominica duho*, *Guaiacum* sp., AD 1315-1427. L: 395mm, W: 154mm, H: 207mm. Catalogue number EBC40669, Economic Botany Collection, Royal Botanic Gardens, Kew, UK.

made of the wood of *Hymenaea Courbaril* L. [sic] Used for rubbing down flour for making cakes. Used by Caribs: of unknown antiquity. Found in a Carib Cave in Dominica'. Its actual function was thus obscured until 2001, when a researcher visited the collections specifically to look at material from Dominica (Honeychurch 2001).

The carving is, in fact, a rare example of the anthropomorphic high-back *duho* style: it joins only seven others known from the entire Caribbean (Ostapkowicz 1998: 188-191; 228-267). Anthropomorphic *duhos* feature a head at the upper end of the high back, with the rest of the body conforming to the shape of the four legged seat: the chest, usually including skeletal imagery, and arms are carved on the upper surface of the backrest, with the legs morphing into the stool's front legs and male genitalia depicted at the front base. The treatment of the design elements within the chest area and the top and back of the head tends to be unique to each piece, although there are strong parallels in the motifs featured within this group. In the *Dominica duho*, the treatment of the central triangular design panel is complex, intriguingly featuring four appendages, each with four digits (suggestive of a creature) and flanked on either side by a series of six parallel lines, depicting the ribs. This stylized treatment is in contrast to the arms, which appear more natural, the flesh bulging around the tightly bound arm bands and creased at the elbows. The head, too, is contoured, with high cheekbones, a fleshy nose, wide open mouth and angled eyes. The combination of a corporeal body with skeletal imagery is a recurring theme in Chican Ostionoid (AD 1200-1500) art, and is paralleled in several other anthropomorphic high-backs, the majority of which are provenanced to the Dominican Republic, suggesting that it may have been a stylistic centre for this type of *duho*. The *Dominica duho* is comparable to the Dominican Republic examples in other ways: this group consistently features large, projecting front feet with protruding ankle bones and large eyes and mouths that tend to

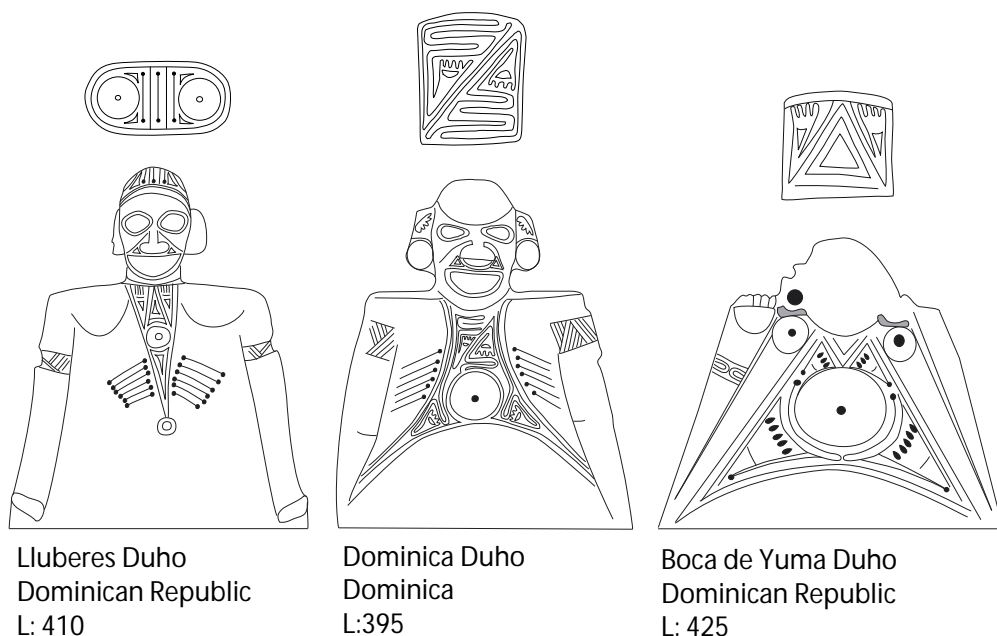


Figure 10 Dominica duho (centre) and two examples of anthropomorphic high-backs from the Dominican Republic (both in private collections), showing head panels and upper body designs. Duhos not to scale. For further details about the two Dominican Republic duhos see Ostapkowicz 1998:245-249.

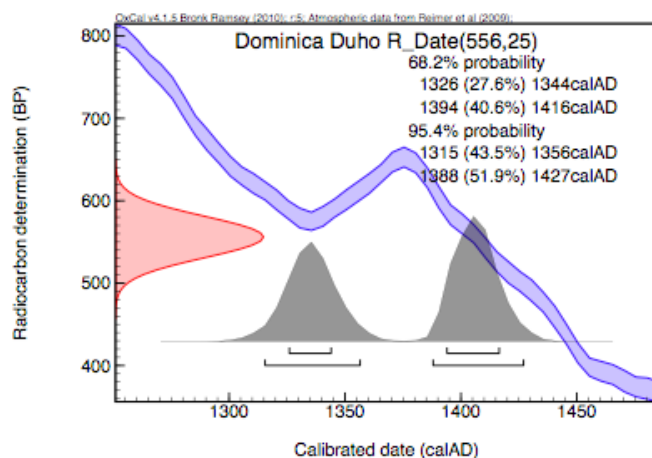


Figure 11 Graph showing the calibrated results for the Dominica duho (556 ± 25 BP).

be shallowly carved, as if inlay was not required, or if included, was only an extremely thin sliver of shell or *guanin*. There are, for example, strong parallels between the Dominica and Lluberes (DR) *duhos*, on the one hand, in the complex treatment of the chest panel designs, depiction of the ribs and the triangular cut-outs around the base of the noses, and the Boca de Yuma (DR) *duho*, on the other, in the treatment of the head, each featuring interconnected appendages showing four digits (Figure 10). Stable isotope analysis may be

able to suggest a provenance for the wood, potentially linking the *duho* with greater certainty to an island, where it can be cross-referenced with contemporary styles – this awaits further study.

The wood had already been identified by the time the *duho* entered Kew's collections – the transcript of entry on 23 January 1860 notes 'Carved Image of the wood of Hymenaea Courbaril [sic]' (Julia Steel, personal communication 2007). Imray had a deep interest in the local botany and in all likelihood the attribution was made by him, as per his letter to Hooker. However, the wood **has been identified as *Guaiacum* sp.** (Figure 6) in the course of the present research.

The outer left edge of the *duho* was sampled for radiocarbon dating, and the result indicates that the selected timber was felled, and likely carved, in AD 1315-1427 (95.4%)(Figure 11). The dates coincide with the last phase of the Suazan Troumassoid period (ca. AD 1200-1500) in the Lesser Antilles, but given the *duhos* stylistic links to the anthropomorphic examples from the Dominican Republic, it is quite likely a Taíno (Chican Ostionoid – ca. AD 1200-1500) import from the Greater Antilles.

Discussion

Each of the artefacts contributes brief vignettes into the chronologies and lifeways on Trinidad, Battowia and Dominica – as well as further afield. Collectively, they potentially span the fifth to fifteenth centuries - a period of considerable flux within the Lesser Antilles: from the ancestral Saladoids, whose migrations from South America brought unique material culture (including miniature trigoliths, drug-related paraphernalia and low stools), to their descendants who rose to power and affluence in the Greater Antilles, developing these material components in new, vibrant and sophisticated ways. Just as migration and exchange brought these objects, in their nascent form, north into the Greater Antilles after ca. 400 BC, so too did these factors (among others) help to redistribute them, in their more developed form, back into the Lesser Antilles after AD 1100. Through them the social networks underpinning the circulation of valued objects can be explored, including interactions between the Greater and Lesser Antilles, and between the latter and the South American mainland.

Their chronological placement enables insight into the historical transitions that were occurring on the islands at the time that they were made – from shifts in stylistic development to the movement of peoples and/or objects, and the social/political manoeuvring that may have accompanied the latter. At a basic level, the contrast between the two stools charts the transition away from the strong South American influences dominant prior to ~AD 600 (seen in the Trinidad bench) to the uniquely local, northern Caribbean stylistic developments seen after ~AD 1100 (e.g., the Dominica *duho*). Both stools provide a vantage point on the social context and use of stools within the Caribbean region during a period of growing cultural complexity. The snuff tube provides insights into the circulation of *coboba* related material – and, potentially, the ideas and practices that surrounded it – far from its 'heartland' (Greater Antilles). Tightening the focus enables a more fine-grained picture of these transitions: the *duho* and snuff tube, so diagnostic of Greater Antillean (Chican Ostionoid) iconography and functional categories (*coboba*-related paraphernalia; elite high-backed chairs), circulated in the Windwards and Dominica at a time of potentially antagonistic relationships between the two regions after about AD 1300 (Wilson 2007:149; Oliver 2009:167). As late as the sixteenth century there were reports of frequent

Carib attacks on Puerto Rico and neighbouring islands (Wilson 2007:163-164). If warfare and/or raiding did escalate over this period, then the presence of such objects might reflect plunder or attempts at reconciliation and alliance after hostilities. Yet the placement of the *duho* and snuff tube in caves suggests a degree of understanding and connection to these ‘exotics’ that belies a complete severing with northern custom – which raids imply – while at the same time underscoring their local significance. Other scenarios are also possible: Hofman *et al.* (2007:262) posit that Lesser Antillean groups were middlemen in the trade of *guanin* and other elite objects between the mainland and the Taíno of the Greater Antilles, and this may go some way to explain the presence of high-status exotics on the islands. There is also the possibility of treasured objects accompanying Taíno migrants travelling south, and this could have been for a myriad of reasons – from marriage exchange, formally linking the long-distance groups to each other, and so facilitating trade and alliances, to refugees during the sixteenth century exodus from the Greater Antilles into allied Lesser Antillean communities in efforts to escape the devastation of wars, slavery and diseases that crippled Hispaniola and Puerto Rico after European contact (Oliver 2009:168; Hofman *et al.* 2008:28). The emerging possibilities are indeed complex – and a fitting reflection of the multifaceted realities of pre-colonial island life.

Dogs, seats and links to South America pre-AD 600

Assuming that the radiocarbon date is broadly correct, the earliest piece – the Pitch Lake zoomorphic bench (AD 431-592) – falls towards the end of the Saladoid period (ca. 400 BC – AD 600), a time of considerable South American influence in Trinidad, and much of the Caribbean. Between 400 BC and AD 400, a strong stylistic uniformity stretched from north-eastern South America north to Puerto Rico (Allaire 1997:23; Boomert 2003:153; Hofman and Hoogland 2004:49), suggesting “...a common ancestry of intensive and frequent interaction between local groups, both with each other and with the mainland” (de Waal 2006:74). Rouse (1992:84) called this a unifying network of circulating ideas and beliefs diffusing from South America via the circum-Caribbean. By AD 300-500, Barrancoid stylistic influences swept up into the Caribbean region from South America, marking a period of “...unusual dynamism” and establishing a network of trade and communication within the vast area stretching from Trinidad and Tobago to the Orinoco Delta (Boomert 2000:250). On Trinidad, Barrancoid migrants may have intermarried into the long-term Saladoid communities by AD 350 (Boomert 2003; Reid 2009:32)⁴; a gradual merging of these traditions is evident in the Erin complex (post AD 500) that spanned the southern part of the island – in the vicinity of Pitch Lake – and was marked by a ‘profound’ Barrancoid stylistic influence on the Saladoid (Boomert 2000:239; Allaire 2003:206). This overlaps well with the Pitch Lake bench date: the closest site (Pitch Lake 2) has yielded Saladoid/Barrancoid ceramics, dating to the Palo Seco period (ca. AD 300-650) (Boomert and Harris 1984:41) and the two ceramic lugs recovered from Pitch Lake itself show very strong Barrancoid influence from roughly the same period (Boomert and Harris 1984:39).⁵

4 No evidence for independent Barrancoid settlements have been found on Trinidad (Boomert 2003:161)

5 It is of course impossible to argue for an association between the two ceramic lugs and the wooden material recovered from the lake given the constant movement of the pitch (Boomert and Harris 1984:39), but it does provide some background to contemporary deposits in the lake.

Within this context of South American influence, and the regular influx of people and objects from the mainland into Trinidad (and the Lesser Antilles) at this time, it is not surprising that the bench shows strong parallels to mainland stools.

The stool's features differ from those of Greater Antillean *dubos* (Ostapkowicz 1998), the handful of other *dubos* recovered from the Lesser Antilles, as well as from the ethnographic descriptions of stools used by the later Carib/*Kalinago* (Breton 1998:8; Rochefort 1666:293; Labat 1992:162). In contrast, it has stronger stylistic parallels to examples still in use in north-eastern South America – where large, low, zoomorphic benches are common (e.g., Zerries 1970; Saville 1910; see figure 3). Stools have a long (pre-)history of use among many mainland cultures, as attested by the surviving stone and ceramic examples – among the earliest dating to ca. 2400 BC (e.g., Marcos and Garcia de Manrique 1988:43; McEwan 2001:179) – with later ceramic sculptures showing figures seated on stools (e.g., Rouse and Cruxent 1963:Plate 25-26). They remain among the most diagnostic features of South American material culture. In some origin stories, culture heroes thought the world into being centred on their stools (Roe 1995:52). As such, stools form ‘...part of a core suite of objects that accompany the creation of human beings from spiritual origins... an essential means of access to the hidden sources of life’ (McEwan 2001:181). Given the stool's ubiquitous nature and chronological depth, it is quite likely that earlier examples entered the Caribbean as indispensable, carefully curated personal items or were manufactured on the established South American stylistic prototypes: their styles would continue to develop in subsequent years within the insular Caribbean region, reaching an artistic zenith with the Greater Antillean *dubo*. Although the zoomorphic bench was most likely manufactured in Trinidad, there is a remote possibility that it may have been an import from South America, especially given the mainland's proximity to the island, the strong trade links during this period, and the waves of South American migrants who used the island as a gateway to the rest of the Caribbean archipelago. The distribution of *Andira* sp. covers both the Caribbean and South America, so wood identification alone cannot contribute to the possible sourcing of the piece, although stable isotopes may be able to provide some insight (these are pending).

Although the bench's basic form suggests South America (see Roth 1924:275), the iconography, featuring a bulbous head with prognathic muzzle, erect, triangular ears, a short tail and a powerful body, is inconclusive as to possible provenance, especially as it lacks two-dimensional designs – though at a very basic level it perhaps suggests a dog or a jaguar (Boomert 2000:298). In this ambiguity, the stool visually encapsulates one of the key transitions made by the early South American migrants – from the faunally rich South American tropical setting, where the jaguar dominated myths and legends, to the more restricted island setting where the largest land animal was the domesticated dog. Some (Rodríguez 1992; Roe 1995) have argued for an explicit link between the two animals, with the dog taking the role of the jaguar on the islands – a ‘mythic substitute’. Focusing specifically on the archaeology of the Caribbean reveals deeply rooted and widespread concepts related to the domesticated dog, especially as regards their special treatment, and their depiction in important paraphernalia. Several Saladoid sites from Martinique to as far north as Puerto Rico have yielded dog burials, including 16 at the Morel site, Guadeloupe, where some were buried in squatting positions, as were humans (possibly suggesting symbolic parallels), while others had shell ornaments placed on their bodies (Hofman and Hoogland 2004:49; Rodríguez 1997:85; Mattioni and Bullen 1974). The crania of some of the dogs

were removed, which may again suggest parallels to the custom of removing human crania from burials (Hofman and Hoogland 2004:49). At the same time, dogs feature prominently in the iconography, appearing in ceramic lugs (Mattioni and Bullen 1974:163-164) and large, free-standing ceramic effigies (Roe 1995). A potentially quite early wooden amulet, again from Morel, tentatively attributed to 400-300 BC, appears to feature a dog (Petitjean Roget 1995; Delpuech 2001:57). By the Ostionoid period, the snarling features, prognathic muzzle and triangular ears that characterise Caribbean canine imagery appear in a wide variety of objects, from stone trigoliths, to delicate, shell pendants and pictographs and petroglyphs (Jiménez Vázquez and Fernández-Milera 2002:83-84; McGinnis 1997; Morban Laucer 1977:3). Dog bones were decorated with designs and canine teeth were used as pendants (Walker 1985; Tanodi in Alegría 1980:435). Seven *duhos*, four of which are low-backs, appear to feature canine imagery (Ostapkowicz 1998:495-496) – from the Bahamas, Hispaniola, Puerto Rico and Jamaica. In this context, the Pitch Lake carving – bearing the earliest currently known date for a bench featuring zoomorphic (potentially canine) imagery – may be considered an antecedent.

The Battowia snuff tube: turtles, cohoba and 'migrating' objects and meanings in the insular Caribbean post-AD 1000

If the Pitch Lake bench offers a glimpse of the potential circulation of objects and/or ideas between the South American mainland and the Lesser Antilles during the Saladoid period, the Battowia snuff tube hints at the interconnections that linked the Caribbean islands to each other post-AD 1000. By AD 1200, Chican Ostionoid material culture was filtering into the Lesser Antilles – including large trigoliths, *duhos* and snuff tubes (Rouse 1992:130) – alongside heterogeneous ceramic styles (Boca Chica, Esperanza and Atajadizo/Ostionan/Caimito) that can be provenanced to specific Greater Antillean regions, suggesting different exchange networks (Hofman and Hoogland 2004:15). Not all such materials were imports: some are thought to have been made locally, suggesting that people were adapting complex Greater Antillean styles into their own repertoires (Allaire 1996:44; Allaire 1990 in Rouse 1992:130 for Martinique; Hatt 1924:35; 39 for Virgin Islands; Hofman and Hoogland 2004:51). In contrast, the local Suazan Troumassoid ceramics were basic – Petersen *et al.* (2004:29) note that the period was marked by ‘among the least finished and crudest Amerindian pottery in the entire West Indies’. Within this context, the snuff tube’s complex carving would indicate an import, with its two-dimensional designs strongly suggestive of a northern – possibly Hispaniolan – source. However, little is known about woodcarving in the Lesser Antilles at this time, and it is problematic to infer that the ‘crude’ work seen in the ceramics applies to other materials. It is hoped that a future stable isotope study will be able to provide information about the wood’s source.⁶

There is a dichotomy between the Greater and Lesser Antilles with regard to the scale and complexity of drug-related paraphernalia. Whereas an elaborate set of interdependent *cohoba* objects – vomiting spatulas, snuff tubes, ‘canopied’ stands – appear to have reached an apogee during the Chican Ostionoid period in the Greater Antilles (ca. AD 1200-1500), if not earlier, these objects are rarely encountered in the Lesser Antilles, and

6 The distribution of *Guaiaacum* spans much of the Caribbean, and into Venezuela – and is known specifically from St Vincent (Royal Kew Gardens 1893:241), so the provenance of the piece cannot be determined through wood ID alone.

are often viewed as imports, or imitations, when they are (e.g., Hofman *et al.* 2007:258). McGinnis (1997:227), for example, documented 207 *coboba*-related artefacts from the entire Caribbean region,⁷ of which only seven were provenanced to the Lesser Antilles in her study. In contrast, the Lesser Antilles yield a wider distribution of so-called inhaling bowls – 31 ceramic examples are known from eight Windward and two Leeward islands, with 29 from Vieques and Puerto Rico (Fitzpatrick *et al.* 2009:598, 600; Kaye 2001:200). Fitzpatrick *et al.* (2009:599) suggest that the inhaling bowls have the longest temporal range of any drug-related artefact in the Antilles, spanning 500/400 BC to European contact, but the majority of these bowls with a clear archaeological context date to the Saladoid period, as do three bowls recovered from Carriacou, dated prior to AD 400 via thermoluminescence (Fitzpatrick *et al.* 2009:602, 605). However, one of the Carriacou bowls was found in deposits dating to AD 1000-1200, and the other two pre-date the first settlement of Carriacou at ca. AD 400, suggesting perhaps that the bowls were heirlooms passed down the generations (Fitzpatrick *et al.* 2009:604, 605). If such bowls were indeed utilized well into the late pre-colonial period, as is also suggested by examples from Vieques (Narganes Storde in Kaye 1999) and St Lucia (Peter Harris in Fitzpatrick *et al.* 2009:599), then their use would be contemporary with the *coboba* material seen in the Greater Antilles, and may suggest a material culture associated with an alternative drug – perhaps for the ingestion of special liquids such as pouring tobacco or pepper juice into the nostrils (Boomert 2003:153; Rodríguez 1997:86).⁸ The deposit of these two seemingly separate artefact categories is also quite distinct: *coboba* material tends to be carefully placed in caves, while bowls are found in middens, frequently broken (Fitzpatrick *et al.* 2009:598). Interestingly, the early *cronista* references do not mention the use of inhalation bowls (Kaye 1999:59), in stark contrast to the prominent description of *coboba* paraphernalia. As the distribution of the inhalation bowls stretches predominantly from Puerto Rico south to Trinidad, possibly suggesting a different drug ritual occurring in the Lesser Antilles, it begs the question of what *coboba* paraphernalia was doing in circulation as far south as Battowia. Did such objects actually maintain their ceremonial function in the south, or did they take on a different meaning?

Although we cannot discount the fact that hallucinogens could have been taken with relatively simple equipment – such as bird-bone snuff tubes (Oliver 2009:14) – based on the few artefacts that have been found *in situ*, the appearance of specific and diagnostic *coboba*-related paraphernalia in the Lesser Antilles appears to be a relatively late phenomenon, coinciding with the elaboration of the material culture in the Greater Antilles. Perhaps not surprisingly, the distribution of vomiting spatulas and snuff tubes appears predominantly in the Leewards, islands closer to the stylistic ‘hubs’ of Puerto Rico and Hispaniola, and occurs after -AD 900 (Figure 12)(Douglas 1991:579; Drewett 2000:

7 Including vomiting spatulas, snuff tubes, *dubos* and drug tables, but excluding 308 pestles – the latter would bring the grand total of ‘ceremonial artefacts’ in McGinnis’ tally to 515, and which would raise the total for the Lesser Antilles – if included – to 29. We have excluded pestles here as they are not clearly linked to *coboba*/drug taking in the ethnohistoric literature – although it is acknowledged that, due to their ornate nature, they may have served some ceremonial functions.

8 The differences between *coboba* snuff tubes and inhaling bowls are significant, suggesting that they were receptacles/conduits for different materials. Inhalation bowls are consistently small, relatively deep vessels with the perforations high on the side of the bowl, often close to the rim, suggesting that the contents were in liquid form (see, for example, Ortega and Pina 1972). Snuff tubes, as described by the *cronistas* and as is clear from the long tubes of the surviving examples, were used for powders: *coboba* – as we understand it from the *cronista* documents – is a powder, not a liquid.

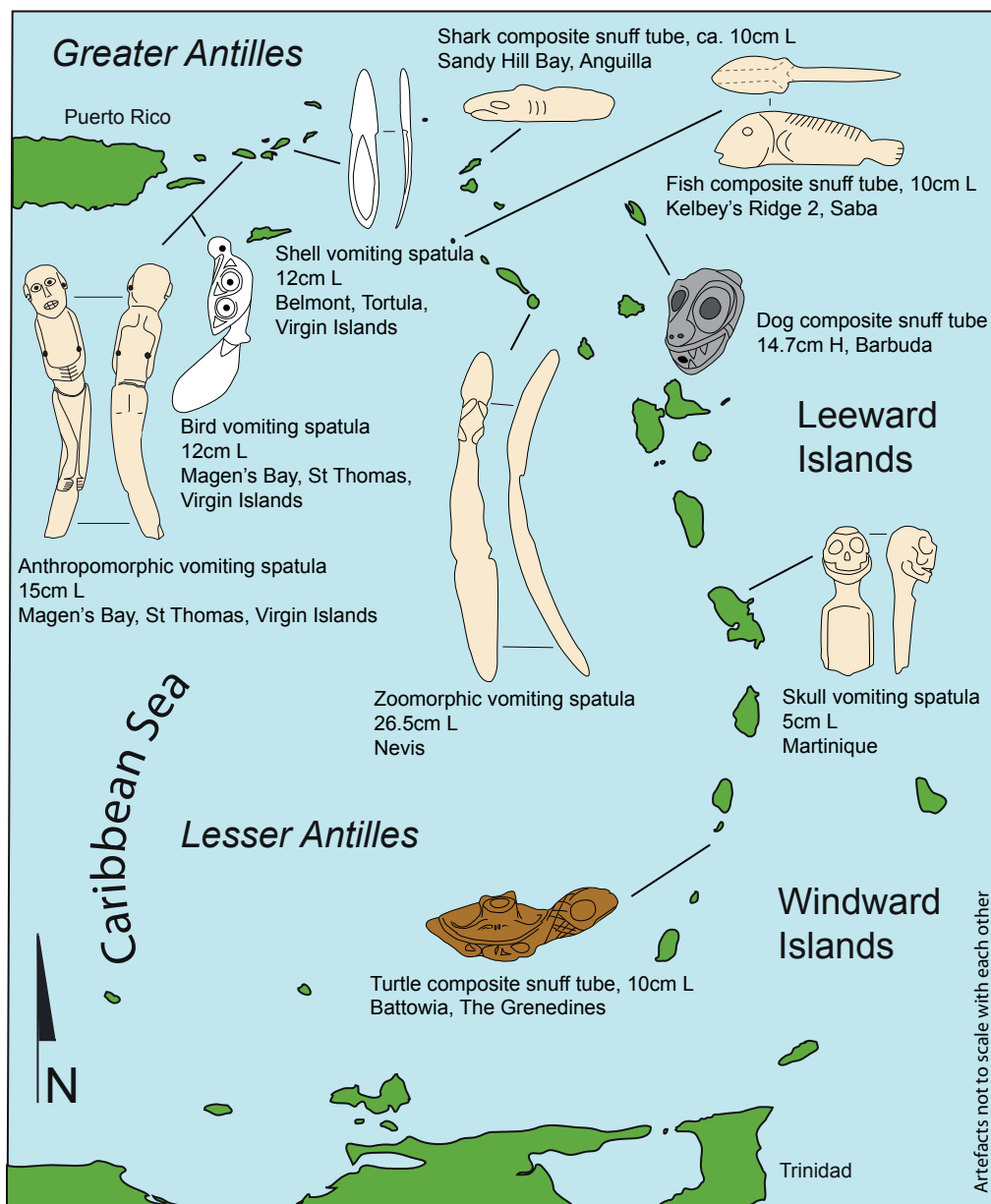


fig 67; Hatt 1924:35, Fig 9a; Hofman and Hoogland 2004:51; Hoogland and Hofman 1993:174-5, 177, 1999:108). The rarity of these objects suggests that their exchange was not intensive, but rather intermittent (Wilson 2007:151) – they were scarce and prized valuables that likely had significance well beyond their functional (and mnemonic) links to the *coboba* ceremony.

The ways in which these objects were circulated would impact on whether any associated symbolism was also transferred – if by exchange perhaps some of the original meaning may have been adopted as well, as appears to have been the case for important *cemís*

Figure 12 (left page) Distribution of *cohoba* related material culture in the Lesser Antilles, after ~AD 900. Selected artefacts (clockwise, left to right): Anthropomorphic bone vomiting spatula (National Museum of the American Indian, 061374) and shell bird vomiting spatula (National Museum of Denmark, 0.1.161), both St Thomas; Shell vomiting spatula, Tortula (Virgin Islands Folk Museum; Drewett pers. com. 2010; Drewett 2000:Fig. 67) shark-shaped manatee bifurcated snuff tube (Douglas 1991:579, Fig. 5); composite manatee bone snuff tube in the shape of a fish, Saba (Faculty of Archaeology, Leiden University; Hofman pers. com. 2010); composite steatite snuff tube in the shape of a dog's head, Barbuda (Jay I. Kislak Foundation, Library of Congress, PC 0106; Olsen 1974: fig 30); Zoomorphic bone vomiting spatula reportedly found on Nevis (Wilson pers. com. 2010); Skull vomiting spatula, Martinique (Musee Quai Branly, 71.1939.41.190; Delpuech pers. com. 2010); Turtle composite snuff tube (National Museum of Natural History, A34542-0).

exchanged in the Greater Antilles (Oliver 2009). With specific reference to the turtle snuff tube - given the economic importance of the turtle across the Caribbean, the imagery would certainly have been widely understood - but whether specific information about the object's meaning (its provenance and any accrued history) was transferred is difficult to determine. For example, it is clear from the fifteenth century myths recorded by Ramón Pané in Hispaniola's Magua *cacicazgo* that the turtle had a deep local symbolism linked to the cultural origins of *cohoba* - and, indeed, humanity: the culture hero Deminán was hit on his back with *guanguayo* - a substance filled with *cohoba* - which gestated in his body, growing larger and transforming into a female turtle (showing clear parallels to pregnancy). After she was cut from his body (birth), Deminán and his brothers had sexual congress with her, and from her body the first humans emerged into the world, who themselves ingested *cohoba*. In the composite Battowia snuff tube - possibly sourced from Hispaniola - the turtle body becomes the central conduit through which the drug passes, and through which communication with the numinous is achieved, potentially evoking a circular *cohoba*/turtle/human/numinous symbolism. Intriguingly, the snuff tubes emerge from the back of the turtle, mimicking the position of the *guanguayo* on Deminán's back and eluding to the origin of the female ancestress - again in a layering of possible meaning. It is possible that these links may have been understood by Hispaniolan communities, and, as is prevalent in myths, may have had a deeply rooted connection that went back generations. But as fitting as this symbolism is, it is difficult to know whether the Magua myth reflected a wider, pan-Caribbean belief system, and had a more 'universal' symbolism that was understood by cultures in the Lesser Antilles: given the cultural diversity of the region, this is unlikely (but see Boomert 2000:460; 473). Looking to neighbouring islands, an ornate ceramic inhaling bowl in the shape of a turtle recovered from Vieques and dating to pre-AD 425, offers some comparison - both in the sense that it depicts a turtle and is likely a drug-related object (Chanlatte Baik 1984:30-31; Fitzpatrick *et al.* 2009:Fig 3c) - as does a naturalistic example from Barbados (Fitzpatrick *et al.* 2009:Figure 3f). Saladoid turtle *adornos* and effigy bowls are fairly common, spanning the region from Trinidad to Puerto Rico (Boomert 2000:473). Turning to St Vincent specifically, the pervasiveness of turtle imagery during the Saladoid period (Moravetz 2007:80) alongside the prevalence of drug-related material culture at this time (Rodriguez 1997) may offer tenuous support. Moravetz (2005:56-57) notes that more than half of all Saladoid *adornos* from St Vincent exhibit turtle iconography, and posits that these may have been symbolically linked to Saladoid origin myths and beliefs in an afterlife, among other aspects. As the Saladoid migrations swept through the Lesser into the Greater Antilles, it may be that there is some significance to the depiction

of the turtle that was maintained and developed over the centuries based on this shared ancestry, with a resonance that spanned space and time.

In terms of timescale, the turtle snuff tube suggests a post-AD 1150 phase of interaction between the Greater Antilles and the Windwards. Interestingly, this may coincide with a period of growing unrest: Wilson (2007:149; 2006) has suggested that a buffer zone developed after AD 1300 in the Leeward islands due to the antagonism between these two regions. If the turtle snuff tube was exported shortly after it was made, then this provides the first firm date for elaborate cohoba-related paraphernalia as far as the Windward islands, and shortly before the unrest may have flared up. Alternatively, the carving may have been used in the Greater Antilles for decades, if not centuries, prior to it ‘migrating’ south, whether as war plunder or through peace treaty (see also Oliver 2009:167 for comparable argument for *guiazas* and large trigoliths), or various other possibilities (marriage, alliance, etc.). And who was using this object? Was its use adopted by the new owner – perhaps a Carib/*Kalinago*? Or, if it had a deeper history in the region, was it associated with cultures that preceded the emergence of Carib? These issues were raised over a century ago by Fewkes (1907:197) when he discussed the turtle carving, noting “...this object may be associated with Carib people, who were the last native people to inhabit the Lesser Antilles, but it may have been made by an antecedent race which these people replaced”. Although recent research has emphasized that the picture may not be so clear cut (i.e., the ‘Carib’ may well be descendants of earlier prehistoric island populations – Allaire 1997:181), it touches on the point of who was using these objects, how they came to be acquired, and what was understood about them, and their use. This underscores the composite nature of these objects – how their accrued histories may have spanned not only generations, but also vast distances, turbulent times and different meanings.

Caches, Taíno duhos and Carib benches: the local context of meaning

The Battowia snuff tube, together with the Dominica *duho*, suggest that the practice of caching important objects in caves was not a phenomenon isolated to the Greater Antilles – where the majority of *cohoba* material has been recovered in caves. Other caches of large, complex objects are known from the Lesser Antilles – such as a group of ‘cotton idols in human form’ found in a cave on Martinique (Du Tertre 1667:369-370). The local Carib/*Kalinago* understood these to be the “Gods of the *Ygneris*, whom they massacred”, and refused to remove them from the cave despite the keen interest of the Europeans to have them as curios (they were eventually taken in secret and shipped to Europe – Du Tertre 1667:369-370; Ostapkowicz and Newsom in prep). The fact that the Carib were respectful of these objects is intriguing here: indeed, it is understood that the Carib used such cotton figures as ‘oracles’ (Du Tertre 1667:369; Rochefort 1666:280), perhaps a vestige of ceremonies conducted by the preceding Suazan Troumassoid cultures, among whom the Carib may have settled (as opposed to ‘massacred’)(Allaire 1997:181; Hoff 1995:46). Alternatively, the long standing links between the southern archipelago and the South American mainland post-AD 1000 – with exchange, interaction and movement between the two regions – suggests a degree of cultural synthesis from which a new cultural identity – the Carib – may have emerged (Wilson 2007:148; Allaire 1997:181), one that integrated established island cultural practices. Equally, these could be remnants of practices that went back centuries – perhaps to the Saladoid migrations, and were local developments that gestated over time: the clear parallels to the use of cotton *cemí* oracles on the Greater

Antilles (Martyr D'Anghera 1970:167) is suggestive of the latter. This hints at the difficulties in trying to trace the meaning of objects through the passage of time, and through different cultural 'hands' and contexts. It also underscores the fact that there were certain object categories that had a far reaching import and widely understood ceremonial value, and that despite the distances they travelled, their meaning transcended cultural and linguistic boundaries. Such was likely the case with the Dominica *dubo*.

The Dominica *dubo* – a chair likely sourced from Hispaniola – was, in essence, not an item so 'foreign' to the cultures of the Lesser Antilles: given the presence of stools in the southern islands by at least AD 400 (discussed above), it is quite likely that stools were familiar household objects in the region. Certainly, by the seventeenth century, when detailed ethnographies of the Carib of St Vincent, Martinique, Dominica and Guadeloupe were written, these were common items, and their use appears to parallel, to a degree, the use of *dubos* in the Greater Antilles, and stools in the wider South America region. For example, Adrien le Breton (b. 1662, d. 1736) worked as a missionary in St Vincent between 1693 and 1702 (Divonne in Breton 1998), and wrote of some of the customs he witnessed, noting the importance of seats when visitors first arrived at the village:

They have nothing more at heart than to give a perfect welcome to the newly arrived. One or two individuals are chosen by the elders in each village... to fulfil the task of guiding the guests from their canoe to the place destined for their reception. When the latter have arrived, their guide arranges the seats properly and signals to them that they should rest, tired as they are after their journey (Breton 1998:7)

The wooden seats brought out for their reception are described as being one or two feet long and

... about six fingers thick and wide.... The upper part is also curved on both sides towards the center and the lower part, divided into four and hollowed out, either for stability (the four feet) or to be more easily transported from one place to another, through lightening this mass of wood. This is certainly what is said among the Karajibes and turns out to be their typical seat. So that indeed for this reason you would say they were lying on the ground rather than sitting. (Breton 1998:8)

Once the guests are seated, they take their refreshment and are formally greeted (Breton 1998:25). This seems an important protocol, as it was in the Greater Antilles when visiting Spanish were invited to sit on gold-encrusted *dubos* brought out specifically for their comfort (Las Casas 1951:I 287). It also appears as common hospitality among many South American cultures.

Another parallel to Greater Antillean stools is noted by Charles de Rochefort (1666:293), who briefly discussed how the 'Caribbians' had "...little Stools or Chairs made all of a piece, of a red or yellow Wood, and as smooth as Marble". Such stools – or *halahau* (de Rochefort 1666:unnumbered dictionary) – were interred in burials: "Theymake their Graves... about four or five foot deep, and round like a Tun: and at the bottom of it, they set a little stool, on which the Relations and Friends of the deceased place the body sitting, leaving it in the same posture as they put it in immediately after the death of the party". Such a burial is also described by Oviedo (1992:119) as an honour paid to an important cacique in the Dominican Republic, and also parallels South American practice (e.g., Lothrop 1970:Figure 31; Saville 1910:II 110; Lovén 1979:133). Indeed, many of these aspects may have their foundation in mainland etiquette and custom.

If there were certain parallels between the Greater and Lesser Antilles in the use of chairs, what of the styles? How did the Dominica *dubo* – which shows strong parallels to other anthropomorphic high-backs from the Dominican Republic (Figure 10) – conform to the chair styles in the Lesser Antilles? Turning to the ethnographies, no references are made to stools carved in anthropomorphic or zoomorphic shapes – unlike the Greater Antilles. Nor is there reference to inlay, or indeed, much in the way of detailed carving – again, unlike the *cronista* documentation from Hispaniola and Cuba, and the extant corpus of ca. 150 *dubos* known from the entire Caribbean (Ostapkowicz 1998). An undecorated, high-backed seat was found in Pitch Lake (Boomert 2000:297-300), so the category was present in the region, although its chronological placement – and whether local or an import – must await more detailed study. Judging by the brief ethnographic descriptions, perhaps a more common category – at least in the colonial period – appears to be the low-backed seat of relatively simple construction (e.g., Breton 1998:8, noted above). The Jesuit priest Jean Baptiste Labat (b. 1663, d. 1738), who worked in the French Antilles between 1694 and 1705 (Hulme and Whitehead 1992:155) mentions the use of “...a small stool, made of a single piece of wood, fashioned a little like a chocolate bicorn hat” in Dominica (Hulme and Whitehead 1992:162). These hats, semicircular or triangular in shape with the brim pinned up to the crown at both front and back, do not readily lend themselves to a clear understanding of the stool’s form (i.e., was the long base used as the sitting surface or the stool’s base/feet? – both styles are known from South America?).

An illustration in Sieur de la Borde’s 1674 *Relation des Caraïbes sauvages des Isles Antilles de l’Amérique* may provide a glimpse of what these stools looked like: a concave, rectangular seating surface and co-joined legs (Figure 13). It is identified in the volume as a *matoutou* – a low table – although its general shape is suggestive of a seat: the elongated lower base and smaller seating surface do fit Breton’s description of a stool, with the upper part “...curved on both sides towards the center”. De la Borde (1674:18) clearly notes that the *matoutou* is made of “Bresil [sic] wood, or of one piece of bois de letre [“letter wood”, *Brosimum guianense*], serving as a table and *sometimes used as a seat*, fifteen inches in length and four to five inches wide and six inches high” (emphasis ours) but that *matoutou* is also the term for a table made of “reeds one or two feet square and half a foot high” (De la Borde 1674:13). His description clearly distinguishes between these objects, from the material they were made from to their size and shape, but his use of one term for both confuses the issue: other writers noted that the ‘Carib’ term for a stool was *halaheu* (Rochefort 1666:unnumbered).⁹ The shape and style of the ‘table/stool’ in the accompanying illustration is reminiscent of chairs found among several South American lowland (especially Guyana) groups (Figure 14; Gillin 1963:833), while contrasting with the typical mainland Carib basketry tables (Roth 1924:316), and the basketry tables noted by the other early ethnographers among the Island Carib.¹⁰ The anonymous artist whose work appears in de la Borde was commissioned by the editor, and he apparently took care “...to reside a long time amongst them, and understand their language extremely well” (Hulme and Whitehead 1992:139). If we

9 Rochefort (1666:298) is clear to separate the two terms, only using *matoutou* for the table: “...they commonly eat sitting on low stools, and every one hath his little table by himself, which they call *Moutoutou*...”.

10 Labat (1931:77), for example, notes that the table from which the Carib/*Kalinago* ate their meals “...is a basket with a flat bottom and no cover. Four sticks in the corners project some four or five inches and are the legs of the table when the basket is turned upside down. The basket is so closely woven it will hold water.” Similarly, Rochefort (1666:293; see also 306) notes that “there are also some among them who have little Tables, which have four wooden Pillars, and those cover’d with the leaves of that kind of Palm which is called *Latanier*”.

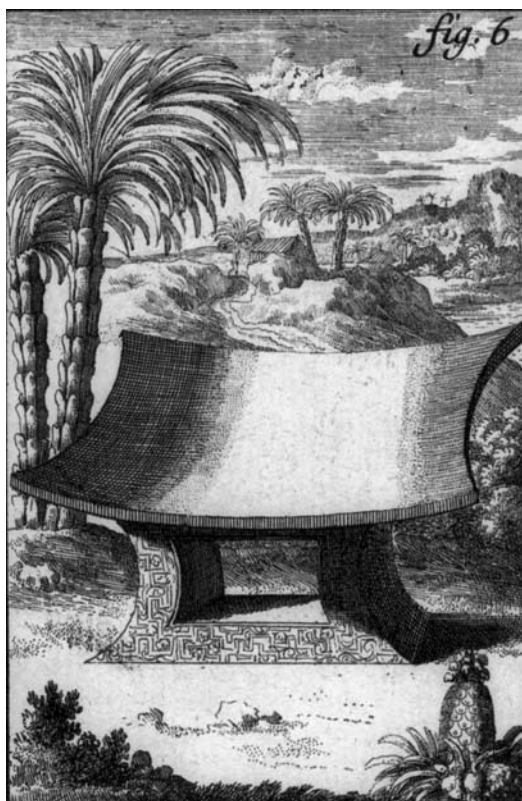


Figure 13 Illustration from Sieur de la Borde's (1674) *Relation des Caraïbes sauvages des Isles Antilles de l'Amérique*, showing a wooden 'matoutou' (table) – but likely a seat. In *Recueil de divers voyages faits en Afrique et en l'Amérique, qui n'ont point esté encore publiez*, Paris. Courtesy, The Bodleian Libraries, University of Oxford, AA 41 Art, p. 20, figure 6.

can confirm that the artist was actually working in the Lesser Antilles (and not a neighbouring South American mainland group), then there are some grounds to argue that the image represents a local style. Further, given the degree of interconnections between the southern archipelago and South America post-AD 1200 (Hofman *et al.* 2007:256-258), this style may have been relatively common, with a long (pre)history of use.

It is clear from these references that stools were also important components of Carib material culture, and vital to social conventions of hospitality. Whereas in the Greater Antilles elaborate *dubos* appear as elite accoutrements reserved for occasions of socio-political ceremony and/or sacred rituals in which drugs were imbibed to fuel communication with the numinous, simpler Lesser Antillean stools appear to have functioned predominantly in the day to day sphere, as a resting place during meals and events. This has closer parallels to the use of most South American stools. Further, although the ethnographic studies (Breton, Rochefort, Labat) were done well into the historic period – a time of rapid change and acculturation – they are still likely to echo older cultural practices. In this context, although the elaborate *dubo* may have differed stylistically from local examples, it likely conformed to local protocols of use as well as linked the sitter to chiefdoms far to the north, underscoring their involvement in long-distance interactions (see also Helms 1988). One possible



Figure 14 Distribution map of South American low-backed stools from the 19th to 20th centuries with general similarities to the Carib/Kalinago stool (?) illustrated in Sieur de la Borde's (1674) *Relation des Caraïbes sauvages des Isles Antilles de l'Amérique*. Stools redrawn from Roth (1924), Saville (1910) and Zerries (1970).

scenario for its presence on the island is an elite gift exchange: comparable exchanges, such as the 14 *dubos* Anacaona presented to Bartolome Colon in 1496/97 (Las Casas 1951:1447), suggest that the *dubo* may have been a politically binding gift between allies.

What further hinders our understanding of the importance of these seats in the region is the fact that to date, only five examples – including the Dominica *dubo* and Pitch Lake zoomorphic bench – have been attributed to the whole of the Lesser Antilles (Boomer 2002; Fewkes 1922:89; Honeychurch 2001; Lovén 1979:130; McGinnis 1997a: Table 14a-

c; Newson 1976:59; Ostapkowicz 1998:189),¹¹ a surprisingly low number given the seventeenth and eighteenth century references suggesting that stools were fairly common in the region (Rochefort 1666:293; Labat in Hulme and Whitehead 1992:159), and their likely importance pre-colonially. Perhaps the fact that they were everyday objects meant that they were not secreted away in caves, and hence few survived. The relative simplicity of the two recovered from Pitch Lake, Trinidad (including a high-back) is notable in comparison to the more elaborate examples from the Greater Antilles – although some of this may be due to their chronological separation (this should not be taken to imply that simpler objects are earlier in time). Late seventeenth century ethnographic accounts, although fairly terse in their descriptions of the ‘little stools’, do suggest that they were ‘polished like marble’. Until a more detailed review of the extant pieces is undertaken – including a thorough investigation of any early museum pieces with uncertain provenance – there is little further that can be posited on the variety and distinctive stylistic traits of seats in this region.

Concluding remarks

As much as people are in a constant state of flux, so... artefacts, as material cultures, are also ever changing, with the ability to reinforce, reinvent and renegotiate social relationships between people...
(Hurcombe 2007:103)

It should not be surprising that this small corpus of just three objects can provide such a complex picture of human agency, weaving together issues of long distance links and local and regional meanings (whether based on the materials used to make them, the meanings ascribed to them when exchanged, their roles and meanings during use or the significance of their deposition). Each embodies its own unique history, linked to individuals who safeguarded them over the duration of their ‘life’ – from the hands that created them to those that finally deposited them in a cave or ‘lake’. They have great potential for insight into a myriad of interconnections – not only across the distances some may have travelled – but across functional categories: they appear to have performed on a number of levels, potentially spanning everything from the socio-political through to the economic and esoteric, and indeed may have meant different things to different people when they were exchanged. The Dominica *duho*, for example, may have performed in a political ‘event’ where visiting dignitaries would be formally welcomed, or a drug imbibing ceremony, or indeed, a humble domestic context: the object transcended these realms as a multifunctional, and hence multivocal, creation, with different layers of meaning – whether it be in its original setting (Dominican Republic) or its subsequent context (Dominica). Stools appear to have had a wide variety of settings and uses throughout the circum-Caribbean, their meaning dependent in some respects on social etiquette or political manoeuvring. Even an object intimately involved in the ingestion of narcotics, and so linked with communication with numinous sources – such as the Battowia snuff tube – likely had a significance beyond its very specific function when exchanged, possibly linking the new owner to allies or family on the larger islands to the north, and thereby reflecting their status while building a fresh legacy of connections. It is difficult to ascertain whether the meanings of these objects, and

11 These are: a zoomorphic low back and a simple, small high back stool from Pitch Lake, Trinidad, the anthropomorphic stone Guesde *Duho* – which may or may not be from Guadeloupe – the Dominica *duho* and a reference to a *duho* being recovered from Battowia, and eventually making its way into a private collection in England (Fewkes NAA 4408:59a).

their associated genealogies, were relayed when they were traded, but the fact that some may have been exchanged suggests an undercurrent of shared concepts and/or syncretism. Equally, they may well have served the same owner throughout the duration of their use-lives, 'migrating' with them to new territories and allies. Here, their histories would have been known and recounted, while acquiring a new significance in a new context.

All three reflect a complex period within the Lesser Antilles, from the Saladoid migrants who ushered in objects and practices that became standard, to a degree, across much of the archipelago (trigoliths, drug paraphernalia, etc.), to a dynamic pre-colonial period of inter-island connections that brought people together across local and regional boundaries. Through the AMS dating of the pieces, these objects have been interwoven back into the histories and chronologies of the regions where they were found (but not necessarily made), so that we can begin to explore their significance – not least to the links that their exchange may have created. The more our understanding of the archaeology of these islands expands – to isolate periods of conflict, peace, migration, interaction or trade – the more these objects are able to reflect connections between people. Equally, the more we learn about these objects, the more their 'residues of meaning' can inform on people's needs, capabilities and aspirations (Hurcombe 2007:3).

Acknowledgements

The research was made possible by grants from the Getty Foundation, the British Academy and the Leverhulme Trust, with administrative support from National Museums Liverpool. The following individuals and institutions have all been very helpful in allowing access to relevant collections and providing collection information: Mark Nesbitt, Julia Steel, and Hew Prendergast, Kew Economic Botany Collection, London, UK; Daniel Rogers, Greta Hansen and Felicia Pickering, the National Museum of Natural History, Washington, US; Roger Colten and Maureen DaRos, Peabody Museum of Natural History, New Haven, US. André Delpuech, Peter Drewett and Corinne Hofman kindly supplied information about cohoba-related paraphernalia from the Lesser Antilles, Graham Usher assisted with the wood identification of the Dominica duho (running an independent assessment), and Rick Schulting contributed constructive comments on a previous version of this paper. We are grateful to the staff at the Oxford Radiocarbon Accelerator Unit for their careful work with the samples.

Unless otherwise noted, all photographs and illustrations are by J. Ostapkowicz.

References

Alegria, R.E.

1980 Etnografía Taina y los Conquistadores. In *Proceedings of the 8th International Congress for the Study of pre-Columbian Cultures of the Lesser Antilles*, St Kitts 1978:430-446.

Allaire, L.

1980 On the Historicity of Carib Migrations in the Lesser Antilles. *Society of American Archaeology* 45(2):238-245.

1996 Visions of Cannibals: Distant Islands and Distant Lands in Taíno World Image. In *The Lesser Antilles in the Age of European Expansion*, edited by R. Paquette and S.L. Engerman, pp.33-49. University Press of Florida, Gainesville.

1997 The Lesser Antilles before Columbus. In *The Indigenous People of the Caribbean*, edited by S.M. Wilson, pp. 20-28. University Press of Florida, Gainesville.

2003 Agricultural societies in the Caribbean: The Lesser Antilles. In *General History of the Caribbean: Volume I: Autochthonous Societies*, edited by J. Sued-Badillo, pp 195-227. UNESCO Publishing, London.

Bennell, M.

2000 Wood artefacts. In *Prehistoric Settlements in the Caribbean: Fieldwork in Barbados, Tortola and the Cayman Islands*, edited by P.L. Drewett. Archetype Publications for the Barbados Museum and Historical Society, St Michael, Barbados.

Boomert, A.

2000 *Trinidad, Tobago and the Lower Orinoco Interaction Sphere: An Archaeological/ethnohistorical study*. PhD dissertation, Leiden University. Cairi Publications, Alkmaar.

2003 Agricultural societies in the continental Caribbean. In *General History of the Caribbean: Volume I: Autochthonous Societies*, edited by J. Sued-Badillo, pp. 134-194. UNESCO Publishing, Paris.

Boomert, A., and P. O'Brien Harris

1984 The Pitch Lake in Archaeology. *Naturalist* 5(11):34-47.

Chanlatte Baik, L.A.

1984 *Arqueología de Vieques*, Catalogo Arquelogia de Vieques, Segunda Edicion, Centro de Investigaciones Arquelogicas, Universidad de Puerto Rico, Rio Piedras.

Colón, F.

1992 *The Life of the Admiral Christopher Columbus by his Son Ferdinand*, translated by Benjamin Keen. Rutgers University Press, New Brunswick, New Jersey.

Conrad, G.W., J.W. Foster, and C.D. Beeker

2001 Organic artifacts from the Manantial de la Aleta, Dominican Republic: Preliminary Observations and Interpretations. *Journal of Caribbean Archaeology* 2:1-20.

De la Borde, S.

1674 Relation des Caraïbes sauvages des Isles Antilles de l'Amérique. In *Recueil de divers voyages faits en Afrique et en l'Amérique*, edited by H. Justel, pp. 1-40. Paris.

de Waal, M.

2006 *Pre-Columbian social organisation and interaction interpreted through the study of settlement patterns. An archaeological case-study of the Pointe des Châteaux, La Désirade and Les Îles de la Petite Terre micro-region, Guadeloupe, F.W.I.* PhD dissertation, Leiden University, Leiden.

Delpuech, A.

2001 *Guadeloupe amérindienne*. Guides archéologiques de la France, Monum, Éditions du Patrimoine, Paris.

Drewett, P.L.

2000 *Prehistoric Settlements in the Caribbean: Fieldwork in Barbados, Tortula and the Cayman Islands*, Archetype Publications for the Barbados Museum and Historical Society, St. Michael, Barbados.

Douglas, N.

1991 Recent Amerindian Finds on Anguilla. *Proceedings of the 13th International Congress for Caribbean Archaeology*, Curacao, pp. 576-588.

Du Tertre, J.B.

1667 *Histoire Générale des Antilles Habitées par les François, Tome II : Contenant L'Histoire Naturelle*. Thomas Lolly, Paris.

Fewkes, J.W.

1907 *The Aborigines of Porto Rico and Neighboring Islands*. 25th Annual Report of the Bureau of American Ethnology for 1903-4, Smithsonian Institution, Washington D.C.

1912 ms. 4408:59a Notebook. Trips to Lesser Antilles. Ms. on file at the National Anthropology Archives, Smithsonian Institution, Washington D.C.

1914 Relations of Aboriginal Culture and Environment in the Lesser Antilles. *Bulletin of the American Geographical Society* 46(9):662-678.

1922 A Prehistoric Island Culture Area of America: A Report on Prehistoric Objects from the West Indies in the Museum of the American Indian (Heye Foundation) in 1914. *Thirty-fourth Annual Report of the Bureau of American Ethnology* 34:48-271.

Fitzpatrick, S.M., Q. Kaye, J. Feathers, J.A. Pavia, and K.M. Marsaglia

2009 Evidence for inter-island transport of heirlooms: luminescence dating and petrographic analysis of ceramic inhaling bowls from Carriacou, West Indies. *Journal of Archaeological Science* 36:596-606.

Gillin, J.

1963 Tribes of the Guianas. In *Handbook of South American Indians: Vol 3: The Tropical Forest Tribes*, edited by J.H. Steward. Cooper Square Publishers, Inc., New York.

Hatt, G.

1924 Archaeology of the Virgin Islands. *Proceedings of the XXIth International Congress of Americanists* 1:29-42.

Hawtayne, G.H.

1887 Remarks on the Caribs. *The Journal of the Anthropological Institute of Great Britain and Ireland* 16:196-198.

Helms, M.

1988 *Ulysses' sail: an ethnographic Odyssey of power, knowledge, and geographical distance*. Princeton University Press, Princeton.

Hoff, B.J.

1995 Language contact, war, and Amerindian historical tradition: The special case of the Island Carib. In *Wolves from the Sea: Readings in the Anthropology of the Native Caribbean*, edited by N.L. Whitehead. KITLV Press, Leiden.

Hofman, C.L., A.J. Bright, M.L.P. Hoogland, and W.F. Keegan

2008 Attractive Ideas, Desirable Goods: Examining the Late Ceramic Age Relationships between Greater and Lesser Antillean Societies. *Journal of Island and Coastal Archaeology* 3(1):17-34.

Hofman, C.L., A.J. Bright, A. Boomert, and S. Knippenberg

2007 Island Rhythms: The Web of Social Relationships and Interaction Networks in the Lesser Antillean Archipelago between 400 B.C. and A.D. 1492. *Latin American Antiquity* 18 (3):243-268.

Hofman, C.L., and M.L.P. Hoogland

2004 Social Dynamics and Change in the Northern Lesser Antilles. In *Late Ceramic Age Societies in the Eastern Caribbean*, edited by A. Delpuech and C.L. Hofman. BAR International Series 1273. Archaeopress, Oxford.

Honeychurch, L.

1997 Crossroads in the Caribbean: a site of encounter and exchange on Dominica. *World Archaeology* 28(3):291-304.

2001 Ceremonial Seat Found, <http://www.lennoxhoneychurch.com/article.cfm?id=362>

Hoogland, M.L.P., and C.L. Hofman

1993 Kelbey's Ridge 2: A 14th Century Taíno settlement on Saba, Netherlands Antilles. *Analecta Praehistorica Leidensia* 26:163-81.

1999 Expansion of the Taíno cacicazgos towards the Lesser Antilles. *Journal de la Société des Américanistes* 85:93-113.

Hulme, P., and N.L. Whitehead

1992 *Wild Majesty: Encounters with Caribs from Columbus to the Present Day: An Anthropology*. Clarendon Press, Oxford.

Hurcombe, L.M.

2007 *Archaeological Artefacts as Material Culture*. Routledge, London.

Jiménez Vázquez, O., and J.M. Fernández-Milera

2002 Cánidos precolombinos de Las Antillas: mitos y verdades. *Gabinete de Arqueología*, 2(2):78-87.

Kaye, Q.

2001 The paraphernalia associated with intoxicant use by prehistoric Caribbean islanders, with particular reference to spouted ceramic bowls. *Proceedings of the 18th International Congress for Caribbean Archaeology* Grenada, pp.199-213.

1999 Intoxicant use in the prehistoric Caribbean with particular reference to spouted ceramic inhaling bowls. *Papers from the Institute of Archaeology* 10:55-73.

Koehler, A.

1953 *Letter to M.K. Starr, 12 June 1953*. On file at the Peabody Museum of Natural History, New Haven.

Labat, J.-B.

1992 A Sojourn on Dominica. In *Wild Majesty: Encounters with Caribs from Columbus to the Present Day: An Anthology*, edited by P. Hulme and N.L. Whitehead, pp. 155-168. Clarendon Press, Oxford.

Las Casas, B. de

1951 *Historia de las Indias*. Biblioteca Americana (Mexico), Serie de Cronistas de Mexico, nos. 15-17, edited by Augustin Milares Carlo and Lewis Hanke, Fondo de Cultura Económica, Mexico.

1967 *Apologética Historia Sumaria*. Universidad Nacional Autónoma de México, Instituto de Investigaciones Históricas, México.

Le Breton, A.

1998 *Historic Account of Saint Vincent the Indian Youroumajn, the island of the Karajabes*, by Rev. Fr. Adrien Le Breton S.J. (1662-1736). Edited and published by The Mayreau Environmental Development Organization, Kingstown, St. Vincent and the Grenadines.

Lothrop, S.K.

1970 *Cocle: An Archaeological Study of Central Panama*. Memoirs, Vol. VII, Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass.

Lovén, S.

1979 *Origins of the Tainan Culture, West Indies*. 2nd edition. AMS Press, New York.

Marcos, J.G., and M. de Manrique

1988 De la dualidad fertilidad-virilidad a lo explícitamente femenino o masculino: la Relación de las figurinas con los cambios en la organización social Valdivia, Real-Alto, Ecuador. In *The Role of Gender in Precolumbian Art and Architecture*, edited by V.E. Miller, pp 35-51. University Press of America, Lanham.

Martyr D'Anghera, P.

1970 *De Orbe Novo: The Eight Decades of Peter Martyr D'Anghera*. Translated by Francis Augustus MacNutt, 2 volumes, Burt Franklin, New York.

Mattioni, M., and R.P. Bullen

1974 Precolumbian Dogs in the Lesser and Greater Antilles. In *Proceedings of the 5th International Congress for the Study of Pre-Columbian Cultures in the Lesser Antilles*, Antigua, pp. 162-165.

McEwan, C.

2001 Seats of Power: Axiality and Access to Invisible Worlds. In *Unknown Amazon: Culture in Nature in Ancient Brazil*, edited by C. McEwan, C. Barreto and E. Neves, pp. 176-197. British Museum Press, London.

McGinnis, S.A.M.

1997 *Ideographic expression in the Precolumbian Caribbean*. PhD dissertation, University of Texas, Austin.

Moravetz, I.

2005 *Imaging Adornos: Classification and Iconography of Saladooid Adornos from St. Vincent, West Indies*. BAR International Series 1445. Archaeopress, Oxford.

Morbán Laucer, F.

1977 Cree existieron dos tipos de perros prehispanicos. *El Caribe* 3(3).

Newsom, L.A., and E.S. Wing

2004 *On Land and Sea: Native American Uses of Biological Resources in the West Indies*. University of Alabama Press, Tuscaloosa.

Ober, F.

1880 *Camps of the Caribbees: The Adventures of a Naturalist in the Lesser Antilles*. Lee and Shepard, Publishers, Boston.

Olsen, F.

1974 *On the Trail of The Arawaks*. Oklahoma University Press, Norman.

Oliver, J.R.

2009 *Caciques and Cemi Idols: The Web Spun by Taíno Rulers Between Hispaniola and Puerto Rico*. University of Alabama Press, Tuscaloosa.

Ostapkowicz, J.

1998 *Taíno wooden sculpture: Duhos, Rulership and the Visual Arts in the 12th-16th Century Caribbean*. PhD dissertation, University of East Anglia, Norwich.

Ostapkowicz, J., and L.A. Newsom

In preparation. 'Gods... adorned with the embroiderer's needle': a cotton reliquary from Hispaniola. Manuscript.

Ortega, E., and P. Pina

1972 Un vaso inhalador de la colección del Museo Nacional, República Dominicana. *Boletín del Museo del Hombre Dominicano* 2:18-22.

Oviedo, G.F. de

1992[1526] *Historia General y Natural de Las Indias*, volumes 1-5. Juan Pérez de Tudela Bueso, editor, Biblioteca de Autores Españoles, Ediciones Atlas, Madrid

Petersen, J.B., C.L. Hofman, and L.A. Curet

2004 Time and Culture: Chronology and Taxonomy in the Eastern Caribbean and the Guianas. In *Late Ceramic Age Societies in the Eastern Caribbean*, edited by A. Delpuech and C.L. Hofman. BAR International Series 1273. Archaeopress, Oxford.

Petitjean Roget, H.

1995 Note Sur Deux Amulettes de Bois Trouvées à Morel, Guadeloupe. *Proceedings of the 15th International Congress for Caribbean Archaeology*, San Juan, pp. 417-22.

Reid, B.

2009 *Myths and Realities of Caribbean History*. University of Alabama Press, Tuscaloosa.

Reimer, P.J., M.G.L. Baillie, E. Bard, A. Bayliss, J.W. Beck, P.G. Blackwell, C. Bronk Ramsey, C.E. Buck, G.S. Burr, R.L. Edwards, M. Friedrich, P.M. Grootes, T.P. Guilderson, I. Hajdas, T.J. Heaton, A.G. Hogg, K.A. Hughen, K.F. Kaiser, B. Kromer, F.G. McCormac, S.W. Manning, R.W. Reimer, D.A. Richards, J.R. Southon, S. Talamo, C.S.M. Turney, J. van der Plicht, and C.E. Weyhenm

2007 IntCal09 and Marine09 radiocarbon age calibration curves, 0-50,000 years cal BP. *Radiocarbon* 51(4):1111-1150.

Rochefort, C. de

1666 *The History of the Caribby-Islands, Viz. Barbados, St. Christopher, St. Vincents, Martinico, Dominicano, Barbouthos, Monserrat, Mevis, Antego, &c in two books. The first containing the natural; the second the moral history of those islands.* J. Davis, translator, J.M. for Thomas Dring and John Starkey, London.

Rodríguez, M.

1997 Religious Beliefs of the Saladoid People. In *The Indigenous People of the Caribbean*, edited by S.M. Wilson, pp 80-87. University Press of Florida, Gainesville.

Roe, P.

1995 *Arts of the Amazon*. Thames and Hudson, London.

Roth, W.E.

1924 An Introductory Study of the Arts, Crafts, and Customs of the Guiana Indians. *Thirty-eighth Annual Report of the Bureau of American Ethnology, 1916-1917*, Smithsonian Institution, Washington D.C.

Rouse, I.

1963 The Carib. In *Handbook of South American Indians, Volume 4: The Circum-Caribbean Tribes*, edited by J.H. Steward, pp. 547-565. Cooper Square Publishers, Inc., New York.

1992 *The Tainos: Rise and Decline of the People Who Greeted Columbus*. Yale University Press, New Haven.

Rouse, I., and J.M. Cruxent

1963 *Venezuelan Archaeology*. Yale University Press, New Haven.

Royal Kew Gardens

1893 Flora of St Vincent and Adjacent Islets. *Bulletin of Miscellaneous Information (Royal Gardens, Kew)* 81:231-296.

Saville, M.H.

1910 The Antiquities of Manabi, Ecuador: Final Report. *Heye Foundation Contributions to South American Archaeology*, Vol 2, New York.

Valcárcel Rojas, R., J. Cooper, J. Calvera Rosés, O. Brito Martínez, and M. Labrada

2006 Postes en el Mar. Excavación de una estructura constructiva aborigen en Los Buchillones. *El Caribe Arqueológico* 9:76-88.

Walker, J.

1985 A Preliminary Report on the Lithics and Osteological Remains from the 1980, 1981 and 1982 Field Seasons at Hacienda Grande (12PSj7-5). *Proceedings of the 10th International Congress for the Study of Precolumbian Cultures of the Lesser Antilles*, Martinique, pp. 181-224.

Wilson, S.M.

2007 *The Archaeology of the Caribbean*. Cambridge University Press, Cambridge.

Zerries, O.

1970 Bancos zoomorfos y asientos de los espíritus en la América del Sur. *Suplemento Antropológico* 5(1-2):289-314.



Communities in **contact**

Communities in Contact represents the outcome of the Fourth International Leiden in the Caribbean symposium entitled *From Prehistory to Ethnography in the circum-Caribbean*. The contributions included in this volume cover a wide range of topics from a variety of disciplines – archaeology, bioarchaeology, ethnohistory, and ethnography – revolving around the themes of mobility and exchange, culture contact, and settlement and community. The application of innovative approaches and the multi-dimensional character of these essays have provided exiting new perspectives on the indigenous communities of the circum-Caribbean and Amazonian regions throughout prehistory until the present.

Sidestone Press

Bestelnummer: SSP60550001



693135177

ISBN: 978-90-8890-063-1



9 789088 900631 >