

## ***Conduits to the supernatural: Bifurcated snuff tubes in the pre-Columbian Caribbean***

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*UK museum collections hold an important and largely unexplored corpus of Caribbean pre-Columbian cultural heritage, including seminal pieces that can offer new insights into the development of complex rituals in the region. This paper re-establishes the cultural context and significance of a previously undocumented carving related to cohoba drug rituals: an ornate, composite snuff tube carved of cannell coal, recovered from the Lesser Antillean island of St Vincent before 1870, and donated to Oxford's Pitt Rivers Museum in 1900. Both the material (which does not occur in the insular Caribbean) and the carving style suggest that the snuff tube was an import from Venezuela's Lower Orinoco region, where the Barrancoid style emerged in its classic form ca. ~100 BC - AD 500 (Los Barrancos complex). As such, it is the earliest example of drug paraphernalia often assumed to have been used only after ~AD 1000, and isolated to the chiefdom-level societies of the Greater Antilles. This paper contributes a brief review of the St Vincent snuff tube within the context of other stone and wood examples in public collections in efforts to explore their diagnostics, range and, ultimately, the ceremonies in which they were used.*

*Las colecciones museísticas del Reino Unido conservan un importante y a su vez poco conocido corpus de materiales pertenecientes al patrimonio precolombino caribeño, entre los que se incluyen piezas destacadas que pueden ofrecer información sobre el desarrollo de rituales complejos en la región. El presente trabajo analiza el contexto cultural y la relevancia de una talla inédita relacionada con los llamados rituales de la cohoba, ceremonias en que se inhalaba el polvo de semillas con propiedades psicotrópicas. La talla en cuestión decora un inhalador compuesto elaborado sobre hulla de tipo "cannel", que fue hallado en la isla de San Vicente de las Antillas Menores antes de 1870 y posteriormente donado al Museo Pitt Rivers de Oxford en 1900. Tanto la materia prima, no disponible de forma natural en el Caribe insular, como el estilo de la talla sugieren la importación del objeto desde la región venezolana del bajo Orinoco, donde se estima emergió formalmente la cultura Barrancoide aproximadamente entre el 100 a.C. y 500 d.C. (complejo de Los Barrancos). Se trataría, por tanto, del ejemplo más antiguo documentado en la región de objetos relacionados con el uso ritual de drogas, cuya aparición se ha asumido tradicionalmente posterior al 1000 d.C., en un contexto además ajeno al de las sociedades de jefatura establecidas en las Antillas Mayores. El trabajo contextualiza el inhalador de San Vicente comparándolo con ejemplos similares elaborados sobre piedra y madera conservados en colecciones públicas, a fin de explorar sus características, relevancia y, en último término, la naturaleza de las ceremonias en que fueron utilizados.*

*Les musées britanniques possèdent des séries peu étudiées d'objets appartenant au patrimoine culturel précolombien des Caraïbes, y compris des pièces fondamentales qui peuvent ouvrir de nouvelles perspectives sur le développement de rituels complexes dans la région. Cet article précise à nouveau le contexte culturel et l'importance d'un objet sculpté encore non documenté et utilisé à l'occasion des rituels de prise de drogue cohoba : un tube à priser composite sculpté dans une variété de charbon ("cannel coal"), découvert avant 1870 sur l'île de Saint-Vincent dans les Petites Antilles et donné à l'Oxford's Pitt Rivers Museum en 1900. A la fois la matière première (qui n'existe pas dans les Îles caraïbes) et le style de sculpture permettent de suggérer que ce tube à priser a été importé depuis le Bas-Orénoque au Venezuela, où le style barrancoïde sous sa forme classique a émergé entre environ 100 av. J.-C. et 500 apr. J.-C. (complexe de Los Barrancos). De fait, il s'agit de l'exemple le plus précoce d'attirail lié à la prise de drogue qui, jusqu'à présent, est souvent supposé n'avoir été utilisé qu'après 1000 ap. J.-C. et seulement dans les sociétés de type chefferie dans les Grandes Antilles. Cet article met en contexte le tube à priser de Saint-Vincent en le comparant à d'autres exemplaires en pierre ou en bois conservés dans des collections publiques afin d'explorer leurs caractéristiques, leur gamme de formes et, pour finir, les cérémonies dans lesquelles ils ont été utilisés.*



Figure 1. Snuff tube on its inscribed mount, clearly documenting its provenience and recent history. Photograph: Ostapkowicz. Courtesy and copyright of the Pitt Rivers Museum, University of Oxford. 1900.44.1.

## Introduction

Among the historic, characteristically cluttered ground floor displays of Oxford's Pitt Rivers Museum, in a case dedicated to 'Animals in Art', is a small, black carving from the Caribbean island of St Vincent. Its inscribed mount provides its known history: "Parrot and monkey in jet. Found in a Cane Plantation, Charlotte Parish, N.E. of I[sland] of St Vincent, West Indies. Pres[ent]ed: by Bishop Michinson [sic], Master of Pembroke College, 1900" (**Figure 1**).<sup>1</sup> It has remained hidden in plain sight for over a century: in a recent review of the museum's Caribbean collections, it was

identified simply as a 'figure' (Hicks and Cooper 2013:45), but this belies an internal structure that gives an entirely different dimension to the object. As a central component of a snuff tube, this carving informs on key rituals of the pre-Columbian Caribbean potentially spanning back some two millennia, its iconography linking the archipelago to the South American mainland (**Figure 2**). This paper explores some of these aspects, placing this unique artefact within the context of what is currently known about drug-related ritual practice and belief in the ancient Caribbean.



**Figure 2.** Composite snuff tube depicting a bird above a monkey, found before ca. 1870 in a 'cane piece or provision ground' in Charlotte Parish, St Vincent. Cannel coal, Barrancoid style, ca 100 BC – AD 500 (date range of Los Barrancos complex, South America). H: 86mm; W: 53mm; D: 67mm. Photos: Ostapkowicz, courtesy and copyright Pitt Rivers Museum, Oxford, 1900.44.1.

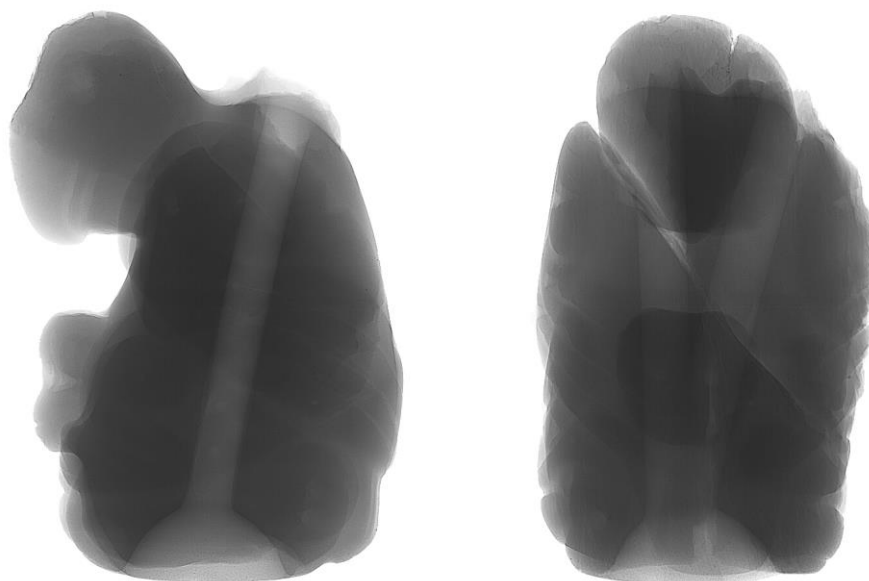
## Function, iconography, chronology and context

The St Vincent carving is the central component of a snuff tube used to inhale hallucinogenic snuffs during ceremonies. Internally, it features two drilled holes that rise in a V-shape through the centre of the carving, terminating in two nostril tubes that emerge from the bird's back (**Figure**

**3**); these would have brought the powdered hallucinogen through the carving directly to the inner nostrils of the participant. Separate tube elements, possibly of bird bone, would have been inserted into the base and possibly the nostril platforms of this drilled figural 'center', ensuring more secure uptake of the powder: this was a composite object.<sup>2</sup>

<sup>1</sup> Archival information indicates that Bishop Mitchinson, who served as Bishop of Barbados and the Windward Islands between 1873 and 1881, was given the carving in ca. 1870 by the Ven. Archdeacon Frederick, then Rector of Charlotte Parish.

<sup>2</sup> While several of the other examples discussed in this paper are best defined as the central components of composite snuff tubes, for brevity's sake, these will be referred to as 'composite snuff tubes' or 'composite snuffers' throughout the remaining text.



**Figure 3. 2D X-radiograph of the snuff tube, showing the bifurcated drill holes running through the centre of the carving. Image courtesy Fiona Brock.**

The carving's compact, tactile surface fits the hand comfortably. Recent studies have revealed that it is carved from cannel coal – a material not known to be present in the Caribbean, unlike lignite (Brock et al., 2020). Though not without its challenges, this light, fine-grained material lends itself to carving, and its deep mat black surface can take on a fine polish. The carving joins a small group of rare, black carvings variously identified as being carved of lignite, 'jet', fossilised wood, pyroclastic materials and even hardened asphalt (e.g., Boomert 2016:40; Chanlatte Baik and Narganes Storde 1984; Waldron 2016:37; see discussion regarding material identification in Ostapkowicz 2016; Brock et al., 2020). It depicts a bird, possibly a parrot or macaw, surmounting a crouched monkey with a long, curling tail.

The snuff tube's iconography – a bird over an animal (or indeed, a bird over other 'beings', including turtles and human heads) is not uncommon across the circum-Caribbean during the Early Ceramic period (ca. 500 BC – AD 600/800). These combinations feature heavily in the iconography of Barrancoid traditions in the Lower Orinoco valley as well at Puerto Rico's Punta Candelero and La Hueca/Sorcé sites, in Cedrosan Saladoid and Huecoid, or Huecan Saladoid contexts (ca. 160 BC to AD 540) (Boomert

2001:134; 137). The latter have produced perhaps its most recognised manifestation – the raptorial bird greenstone pendants (**Figure 4**) (Oliver 1999; Chanlatte Baik and Narganes Storde 1984; Boomert 2001:137; 2003; Giovas 2017a). Boomert (2001:137) suggests that these iconic representations are a visual reference to shamanic flight via the ingestion of hallucinogenic substances, linked as they are with large, raptorial birds that have remained powerful shamanic symbols among many South American indigenous groups. Brilliantly coloured birds such as macaws are seen as messengers of the Sun, while the harpy eagle is a major icon of the celestial realm; they are both linked with flight and the numinous (Boomert 2001). While it is difficult to say whether such contemporary interpretations can be stretched onto ancient beliefs of distantly related peoples, it is nonetheless significant that, in the pre-Columbian Caribbean, birds were a common iconographic focus in drug paraphernalia: featuring most frequently on vomiting spatulas, and to a lesser extent *cohoba* stands, such as the bird over turtle carving from Hispaniola, directly  $^{14}\text{C}$  dated to calAD 1189-1274 (Ostapkowicz et al. 2013), or the 'pelican' stand from Aboukir, Jamaica, dating to calAD 1285-1392 (Ostapkowicz et al. 2012) (**Figure 5**).





Figure 4. Raptorial bird pendants clutching animals and stylised human heads in their claws. La Hueca-Sorcé, Vieques, Puerto Rico, jade/jadeite; Left: H: 57mm; n.224. Centre: H: 51mm; n.225; Right: H: 46mm; n.226. Photos: Ostapkowicz; courtesy, Yvonne Narganes Storde, Centro de Investigaciones Arqueológicas, Universidad de Puerto Rico.



Figure 5. Drug paraphernalia featuring bird iconography. a. Bird over turtle *cohoba* stand, Hispaniola, *Carapa* sp., AD 1189-1274. H: 660mm; W: 310mm (max); D: 260mm. British Museum, Am, MI.168 b. Pelican *cohoba* stand, Jamaica, *Guaiacum* sp., AD 1285-1392. H: 633mm; W: 215mm D: 205mm. National Art Gallery, Jamaica, acc. no. 1994-037, object ID 1994-162. c. Vomiting spatula with bird finial, Puerto Rico, shell. H: 104mm; W: 27mm; D: 13mm. American Museum of Natural History, 25.0/2917A. Photos: Ostapkowicz; courtesy, museums listed.

The highly sculptural qualities of the St Vincent carving, featuring co-joined creatures ('alter egos') together with 'feather' motifs and lines ending in punctates, strongly suggest a 'classic' Barrancoid carving, most likely imported from the Lower Orinoco river valley (Boomert, pers comm 2020; Boomert 2003a:160).<sup>3</sup> Barrancoid material culture is considered among the most accomplished artistic traditions of the insular Caribbean, with complex multi-figure compositions and elaborate incised decorations.<sup>4</sup> Extending back to roughly ~800-1000 BC in the Lower Orinoco river region of Venezuela, it emerged in its 'classic' form at its type-site, Los Barrancos, spanning ca. 100 BC-AD 500 (Boomert, pers comm 2020). In the Lesser Antilles, Barrancoid material culture (and influence) appeared between ca. AD 300 and AD 600/800<sup>5</sup> (Boomert 2000; Rouse 1992:85; Rouse and Cruxent 1963:81-90; Reid 2009:29-32), coeval with the presence of the Cedrosan Saladoid groups on the islands. The 'Barrancoids'<sup>6</sup> are understood to have been masters of long-distance trade, establishing connections on Trinidad and Tobago, with indirect influence stretching potentially as far as the southern Leewards (Boomert 2000; Rouse 1992:85; 87; Hofman et al 2007:252). Ceremonial exchange of various stone exotics (e.g., 'greenstone' celts, diorite beads and frog-shaped

amulets) – including dark materials such as lignite or cannel coal – bound the Lower Orinoco region to the Caribbean, particularly Trinidad during the Early Ceramic period (Boomert 2003a:163; Boomert 2016:40; Hofman et al 2007:249). Ritual objects and utilitarian goods were frequently exchanged simultaneously, potentially accompanied by the exchange of myths, stories and ritual knowledge (Hofman et al 2007:244; 259). The Windward Islands (Tobago to Dominica) benefitted with these intensive connections with South America, and the circulation of precious raw materials as well as exchange wares is considered a deliberate strategy to effect regional integration (Hofman et al 2007:244; 247). According to Boomert (2003a:163), no definite Barrancoid artefacts have been recovered north of Trinidad and Tobago; the St Vincent snuff tube is therefore unique in being the only such artefact so far north from its Lower Orinoco homeland (Boomert, pers comm 2018).

Based on style, the snuff tube can be conservatively dated to the span of the classic Los Barrancos horizon – 100 BC to AD 500. Assuming it was traded into the region during the expansion of Barrancoid influence in the Lesser Antilles, it can be dated to after AD 300. In either case, it is the earliest example of such complex drug paraphernalia within the insular Caribbean.

<sup>3</sup> As far as currently known, there are no known sources of cannel coal in the Caribbean (Brock et al 2020) – this, together with the highly distinctive Barrancoid style of the carving, suggests that this is an import.

<sup>4</sup> The definition of the Barrancoid style is based, like much of Caribbean archaeology, on ceramics. This highly distinctive style is characterised by "decorative motifs compris[ing] primarily broad-line incised, curvilinear designs and lines ending in dots... and complicated modelled-incised biomorphic head lugs. The heavy symbolic loading of these *adornos* is shown by, for instance, the presence of many examples of so-called Other Self (alter ego) motifs, showing raptorial birds, most likely king vultures, surmounting humans.... These represent the images of helper spirits through the agency of which, during drug-induced trances, shamans are able to fly to the Sky World in order to contact helper spirits for

curing purposes. Other Los Barrancos pottery head lugs show highly stylized birds, perhaps pelicans, next to bats, reptilians and felines, all undoubtedly representing particular spirits of nature." (Boomert 2003:160; see also Boomert 2001:119-120).

<sup>5</sup> As the sequence of Barrancoid influence in the region remains poorly understood, there is some uncertainty over the dates, with some suggesting that the Barrancoid influence faded soon after ~AD 600 (Reid 2009:29-32; Saunders 2005:27-8).

<sup>6</sup> Barrancoid is a distinctive pottery series, which is also assumed to reflect distinctive prehistoric cultures – a system established by Irving Rouse in the 1960s, and still in use by Caribbeanists, though with an increasingly critical awareness of the variability of expression within societies (e.g., Keegan and Hofman 2017:21).

While simpler forms of drug equipment were thought to be in use pre-AD 800 – such as single bone tubes and nostril bowls, the latter potentially used in the ingestion of a liquid form of hallucinogen (Oliver 2009:14; Kaye 2018; Fitzpatrick et al 2009) – the St Vincent bird/monkey carving is a rare example of the elaboration of such drug equipment earlier than expected. The only directly dated composite snuff tube, from neighbouring Bhattowia, The Grenadines – some 15km south of St Vincent – is stylistically different and dates at least five centuries later, to calAD 1160-1258 (see **Figure 10b**).<sup>7</sup> Two other composite snuff tubes have been recovered from archaeological sites further north along the archipelago: one, carved in bone in the shape of a shark, was a surface find at Sandy Hill, Anguilla, a large village site dating to AD 900-1500 (Crock and Carder 2011:579; Figure 6; Douglas 1991:579; Figure 5). The other, a manatee bone tube in the form of a fish with the holes positioned through its mouth and gills, was recovered from a burial dated to AD 1300-1350 at the site of Kelbey's Ridge 2, Saba (Hofman and Hoogland 2016:68-69). The burial was that of an adult male associated with the cremated remains of two children. These three comparative examples largely support the established idea that the chronological range for complex snuff tubes – including shell and wood examples from Hispaniola<sup>8</sup> – span ~AD 1000-1500 (Kaye 1999b:211; Oliver 2009:14). Within this context, the St Vincent snuff tube offers further insight into the use of this rare class of artefact earlier than initially thought.

While snuff tubes are identified as *sine qua non* evidence of the ingestion of hallucinogenic substances, their considerable variety – ranging from simple bird-bone tubes to nostril bowls to elaborately carved Y- and V-shaped

inhalators – is ascribed to the ingestion of one drug, *cohoba*, a highly psychoactive snuff documented on 16<sup>th</sup> century Hispaniola (today's Haiti and Dominican Republic), and thought to derive from *Anadenanthera peregrina* (e.g., Pagán-Jiménez and Carlson 2014:104; Oliver 2009:13; Kaye 1999a-b; 2001). However, various psychoactive substances were in use in the region (including tobacco, *Nicotiana* sp., and evening primrose – *Oenothera* sp.), likely taken in various ways (e.g., as liquids), requiring different paraphernalia (Arrom 1999:22; Newsom 2010:108-110; 174; Curet and Torres 2010:275; Boomert 2001; Kaye 2001). And while there is growing interest in the study of hallucinogenic snuffs in the pre-Columbian Caribbean region in order to better understand the use of psychoactive plants, ceremony and power relations (see, for example, Pagán-Jiménez and Carlson 2014; Kaye 2018), a return to the surviving snuff tubes is necessary to engage the tangible components that facilitated the ingestion of drugs as part of a diverse practice stretching back hundreds, if not thousands of years.

### *Cohoba and tobacco*

The primary plant component of the drug *cohoba* – *Anadenanthera peregrina* – was introduced into the Caribbean from South America (Pagán-Jiménez and Carlson 2014:103), though exactly when is not currently known. Like tobacco (*Nicotiana* sp.), it was probably in use by the Early Ceramic period (ca 500 BC – AD 600/800), though it may, together with other psychoactive substances, have a deeper prehistory in the Caribbean, stretching to the Archaic (e.g., introduced via the Ortoiroid groups, ca. 1000-300 BC; Oliver 2009:14). While there is no evidence as yet to support this possibility in the Caribbean, the use of *Anadenanthera* sp. in

<sup>7</sup> Until quite recently this carving was considered an amulet (see discussion in Ostapkowicz 1998:130; Ostapkowicz et al 2011:143-144), which goes to the point of how obscure this category of artefact is, even in well documented museum collections. A fresh review is needed to bring to light other examples.

<sup>8</sup> Unfortunately, the other examples do not come from known archaeological contexts – such as the acrobatic anthropomorph recovered from the heavily looted site of La Cucama, Dominican Republic, where an estimated 80% of the site was destroyed by *campesinos* who went on to sell their pieces to collectors (Ortega 2005:73).

South America extends back to at least ca. 2100 BC at Inca Cueva, Puna de Jujuy, Argentina (Fernández Distel 1980; Samorini 2014:25). A growing elaboration of drug-related paraphernalia appears from ca. 1200 BC, spanning much of western South America (Torres et al 1991:645; 646; Wassén 1967:256), including iconographically rich snuff tubes and trays from sites dating to ca AD 300-1200 in southwest Bolivia and northern Chile's Atacama desert, the largest concentration of snuff implements from pre-Columbian America (Torres et al 1991; Albarracín-Jordan et al. 2014). On the northeastern side of the continent, in environments less favourable to organic preservation, rare surviving examples hint at an equally rich material culture, featuring snuff paraphernalia in the form of birds, jaguars, anthropomorphic figures and combinations thereof – though they remain poorly understood in terms of chronology, geographical/cultural span and iconography (Furst 1974:74; Wassén 1967; Zerries 1965) (**Figure 6**). Some (Schultes and Hofmann 1992:116; Schultes 1972:26) have suggested that the *cohoba* ritual

originated in the Orinoco region while others propose northern Amazonia (see discussion in Torres et al 1991:644-645; Wassén 1965:77-78; 1967:275-76). There is extensive use of *A. peregrina* snuff (known locally as *yopo*) in the Llanos grasslands of the Orinoco drainage, and it would appear that its use was widespread in northeastern South America – the Orinoco Basin, southern Guyana, and Brazil's Rio Branco and Madeira regions (Torres et al 1991:646; Schultes 1987:58; Schultes 1972:28). Many South American cultures made use of hallucinogenic substances, often employing a distinctive material culture (snuff tubes, trays, drug platforms), ranging from simple functional forms to those elaborately carved and inlaid with shell, semi-precious stones and gold. Some have proposed that the stronger the hallucinogen – such as *Anadenanthera* sp. as opposed to *Nicotiana* sp. – the more elaborate the iconography and the greater care and craftsmanship that went into the manufacture of related paraphernalia, linked to the greater 'spirit power' of the more potent drugs (Wilbert 1987:64).



**Figure 6.** Drug-related paraphernalia attributed to the Rio Trombetas region of Brazil, featuring jaguar and raptor iconography. *Left:* Stone bowl depicting a jaguar surmounting an anthropomorphic figure; the excavated bowl area is carved into the jaguar's back. H: 183mm; National Museums of World Culture, Göteborg 25.12.1. *Centre:* bird and jaguar snuffer finial carved in wood, H: 108mm; Reiss-Engelhorn-Museen, Mannheim, V.Am 1987. *Right:* bird snuff tube, wood, H: 101mm; Reiss-Engelhorn-Museen, Mannheim, V.Am 1894. Photos: Ostapkowicz, courtesy museums listed.



In the Caribbean, *Anadenanthera* sp., has thus far only been identified in post-AD 500 contexts: at the civic-ceremonial site of Tibes, Puerto Rico, for example, it is present as a fuel wood,<sup>9</sup> and its seeds may have been used for the powdered drug (Newsom 2010:109; Newsom and Wing 2004:156-7). Direct evidence for the use of the seeds (the primary source of the drug powder) has been found at the site of Playa Blanca 6 (CE-11), Puerto Rico, where starch grain analysis of residues on a small coral milling stone from an archaeological context dated to AD 1150-1250 were identified as *Anadenanthera* sp. (Pagán-Jiménez and Carlson 2014). The small domestic midden context in which the milling stone was found suggested to the researchers that the narcotic powder was not part of the *cohoba* ritual as documented by the *cronistas* (i.e., imbibed by high-status individuals using elaborate material culture), but potentially as an everyday stimulant (ibid: 114).

There has been much debate concerning the composition of *cohoba* in the Caribbean, though most researchers now identify the primary component as *Anadenanthera* sp., rather than a tobacco-based snuff (e.g., see discussion in Uhle 1898; Safford 1916; Wassén and Holmstedt 1963:27-32; Wilbert 1987; Pagán-Jiménez and Carlson 2014:105-107). A number of factors have complicated identification, including the imprecision of the *cronista* descriptions,<sup>10</sup> the overlapping geographical distribution of the relevant plant species, and the possibility of *cohoba* being a blend of substances, including powdered tobacco (Wilbert 1987:50). According to the earliest accounts, *cohoba* powder was “made... from certain very dry and well-ground herbs that were like cinnamon or ground henna in color” (Las Casas [1559], in Arrom 1999:62). It is generally assumed, based on South

American ethnographic analogies, that *cohoba* was made by combining the powdered seeds of the cojobana or cohobilla tree with crushed shell or lime, and potentially other stimulants (Newsom and Wing 2004:4; Oliver 2009:14). While it is possible that tobacco may have been mixed with *Anadenanthera* sp. (e.g., Wassén 1964:102), tobacco itself does not induce the strong effects noted in the early accounts – including stupor, loss of consciousness, disorientation and hallucination. The effect is immediate:

“...when the [caciques] consult the [cemís] about issues of war, about harvests, about health, they enter the house dedicated to the [cemí] and there inhale through their nostrils the *cohoba*, for thus they call the intoxicating herb... [they]... suddenly begin to rave, and at once they say they begin to see that the house is moving, turning things upside down, and that men are walking backwards. Such is the efficacy of that ground powder of the *cohoba* that it immediately takes the sense away from him who takes it. Scarcely does the madness leave him when he puts his head down, grasping his legs with his arms, and staying stupified awhile in this state, he lifts his head like a somnambulant, and raising his eyes to heaven...and opening his mouth, he raves that the [cemí] has counselled him during that time, and as if possessed by frenzy he explains... that the [cemí] has predicted to him either victory or ruin if they go to battle with the enemy, hunger or abundance, plague or health....”

Martyr d’Anghera, 1511  
(in Arrom 1999:52)

<sup>9</sup> Newsom (2010:109) has proposed that the psychoactive compound, bufotenin, may also be present in the tree’s other tissues, such as bark and wood – so perhaps even the smoke from burning wood may have imparted a similar essence to the snuff. There are various alkaloids present in the bark of *A. peregrina* (de Smet 1985:77), and indeed, the bark of other

comparable narcotic substances – such as *Virola* sp., - are added by Brazilian shamans to tobacco for smoking (de Smet 1985:97).

<sup>10</sup> For example, Fernandez de Oviedo [1992:I:116], writing in the early to mid 16<sup>th</sup> century, conflated tobacco *smoking* with the much more powerful *cohoba snuff*.

The drug facilitated the entrance to an altered state and was one of the sanctioned means of communication with the *cemís* (spirits and ancestors), thereby providing guidance for the course of people's lives. Writing in 1498, Pané (in Arrom 1992:21) relates that *behiques* (shamans) "... take a certain powder called *cohoba* inhaling it through the nose, [which] inebriates them in such fashion that they do not know what they are doing; and thus they say many senseless things, affirming therein that they are speaking with the [*cemís*]." At other times, the *behique* would consume *cohoba* in order to better engage the spirit or ancestor and identify its name and powers. For example, when *cemí* manifested itself within a tree – by moving its roots and speaking – a *behique* would prepare *cohoba* for it, and to ask its guidance on how it wanted to be made:

"Then that tree or [*cemí*], turned into an idol or devil, answers him, telling him the manner in which he wants it to be done. And he cuts it and fashions it in the manner he has been ordered; he constructs its house with land, and many times during the year he prepares *cohoba* for it....And they prepare this *cohoba* not only for the [*cemís*] of stone and wood, but also for the bodies of the dead..."

(in Arrom 1992:25)

### Snuff tubes: conduits to the supernatural

By the time of European contact, *cohoba* paraphernalia provided some of the most prominent and aesthetic cultural manifestations within the Caribbean's Greater Antilles. A rich range of carvings were associated with the eponymous ceremony, many elaborately carved with anthropomorphic and zoomorphic figures: stands featuring a platform emerging from the figure's head or back (for the placement of the drug; see **Figure 5a-b**); *duhos* (ceremonial chairs) carved in dark, dense

woods and inlaid with gold and shell were the foundation upon which to meditate during trance; delicately carved vomiting spatulas (see **Figure 5c**), some exceptional examples reaching nearly 50cm in length, were used to purge the participant prior to the ingestion of the drug; and snuff tubes – the conduits for the drug, both in single and bifurcated versions (Ostapkowicz 1998; see Ostapkowicz et al 2012 for the radiocarbon dates of a selection of *cohoba* paraphernalia, most falling AD 1000-1500).<sup>11</sup> These artefacts were documented in such detail during the first few decades of European encounter that it is likely they were observed in use; such may well be the case with snuff tubes, which were described by Christopher Columbus (from 1492), Ramon Pané (on Hispaniola, ca. 1493-1498), Bartolome de Las Casas (ca. 1502-1533) and Fernandez de Oviedo (in Santo Domingo, ca. 1532-1546).

During his second voyage (1493-1496), Columbus noted the use of snuff tubes in a ceremony held in

"...a house apart from the town in which there is nothing except some carved wooden images that they call *cemíes*; these houses are used only for the service of the *cemíes*, by means of a certain ceremony and prayer, as done in our churches. In these houses there is a well-made table, round like a wooden dish, in which is kept a powder that they place on the head of the *cemí* with a certain ceremony; then through a cane having two branches that they insert in the nose, they sniff up this powder. The words which they spoke none of our men could understand. This powder makes them lose their senses and rave like drunken men."

Colón 1992:151

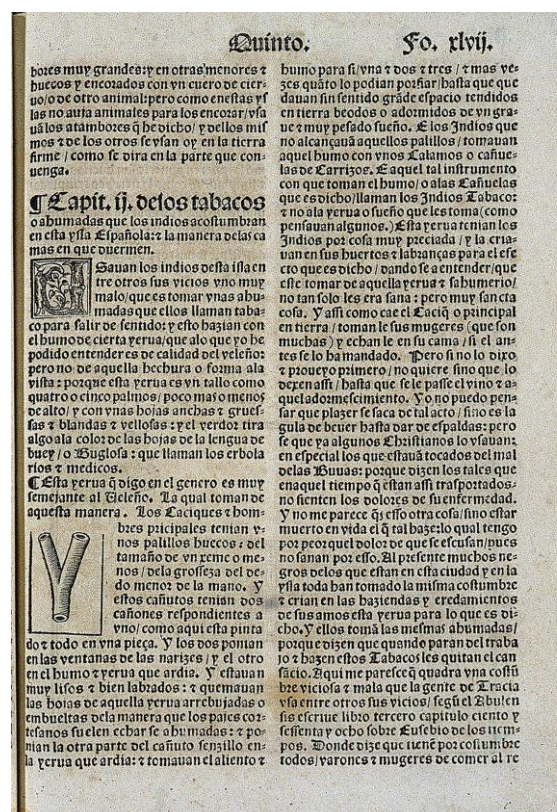
It is perhaps not surprising Columbus could speak with some authority

<sup>11</sup> This distinctive 'drug kit' (stands, vomiting spatulas, *duho*, snuffer) appears far less frequently in the Lesser Antilles (e.g., Kaye 1999a-b), though isolated artefacts do occur; when they do, they are often considered imports into the region from the Greater Antilles in the

Late Ceramic period (see discussion in Ostapkowicz et al 2011:152-155).

on snuff tubes: he was given four richly inlaid examples (called ‘perfumadores’ by the Spanish) shortly before his return to Spain from his second voyage. On 19 February 1496, his *Inventario* (a catalogue of all items brought by local indigenous groups in gift and tribute) lists “*cuatro perfumadores de narices con once pintas de oro*” [four snuff tubes with 11 pieces of gold] (Torres de Mendoza 1868:7).

Writing in 1498, Pané (in Arrom 1999:15-16) describes snuff tubes quite simply: “To take [the *cohoba* powder], they use a reed half a length of an arm, and they put one end in the nose and the other in the powder; thus they inhale it through the nose, and this serves them as a great purgative.” Oviedo illustrated a bifurcated tube in his *Historia* of 1535 (**Figure 7**) and described them as “[two] hollow tubes... the thickness of the hand’s little finger ...all in one piece...very smooth and well worked.”



**Figure 7.** The earliest depiction of a snuff tube: Oviedo’s illustration from the 1535 publication of *Historia general de las Indias*, 1a parte, fol. 47r. Courtesy, John Carter Brown Library, Acc no. 0245-2.

Las Casas, who had witnessed the *cohoba* ceremony several times (in Arrom 1999:63), provided greater detail:

...[the *cohoba*] powders were put into a round dish, not flat but rather a little curved or deep, made of such beautiful [and] smooth...wood that it would not have been much more beautiful had it been made of gold or silver; it was almost black and shone like jet. They had an instrument made of the same wood... with the same sheen and beauty; that instrument was constructed the size of a small flute, completely hollow... and two-thirds of the way down it separated into two hollow tubes.... They placed those two tubes into both nostrils and [the other end], in the powder on the dish, and ... inhaled...through their nostrils the dose of powder.... When they had consumed it, they immediately went out of their minds, and it was almost as if they had drunk a great deal of strong wine...”

Las Casas, 1559  
(in Arrom 1999:62)

Las Casas’ description brings to life the ritual accoutrements that were core to the ceremony, carved in dark wood, as “black as jet.”

Insights from both ethnohistoric sources and the archaeological record indicate that there was a variety of ‘snuffers’ (tubes and bowls) in use in the Caribbean region, for ingesting an equally diverse range of potent powders/liquids/smoke. The simplest forms were bird bone tubes (**Figure 8a**) found throughout the Caribbean from at least AD 600 (Oliver 2009:14), though their history stretches back, at minimum, to 1000 BC in mainland South American (Wilbert 1987:60). They likely functioned as single snuff tubes or were combined as part of composite tubes, such as the V-shaped snuffer of two bird bones joined at one end, recovered at Barrio Coto, Puerto Rico and dating to AD 900-1200 (Rainey 1940:73; Plate 5, Figure 3). Tubes made of larger animal bones, such as deer (whose range extended into Trinidad – Giovas 2017b) have also been found in the

southern Lesser Antilles. These range from plain tubes (**Figure 8e-g**) to finely carved examples with anthropomorphic and zoomorphic designs (**Figure 8c-d**). Some of the tubes recovered from southern sites in Trinidad (e.g. Erin, Palo Seco) feature Barrancoid iconography (**Figure 8c-d**), suggesting that they may have been social valuables imported from the Lower Orinoco (Boomert 2000:480; Boomert,

pers comm 2015). Short, thick tubes carved from bone terminal ends may have functioned as cigar holders or pipes, while thinner bone tubes could have been used for a variety of purposes, "...from pouring tobacco or pepper juice into the nostrils, to blowing tobacco smoke over a patient, as enema tubes, or to suck 'spirit stones' out of a patient's body" (Boomert 2000:480).



**Figure 8. Bone tubes, predominantly Early Ceramic period (~500 BC – AD 600/800). a.** Two bird bone tubes, Canas, Puerto Rico. L: ca. 79mm; Peabody Museum of Natural History [PMNH] ANT 034283-4. **b.** Human bone carved with anthropomorphic figure, Canas, Puerto Rico; L:147mm; PMNH ANT 034921. **c.** Anthropomorphic bone carving, Erin, Trinidad; L:71mm; National Museum and Art Gallery of Trinidad and Tobago [NMAGTT], 80/A/154/8. **d.** Barrancoid style bird head carved on the distal end of an animal bone, possibly Palo Seco; H: 60mm. Courtesy, Trustees of the British Museum, crate WIN/B33. **e.** Hollow bone featuring parallel grooves; H: 53mm; Erin, Trinidad, NMAGTT, n/n. **f.** Hollow bone tube; L 67mm; Erin, Trinidad, PMNH ANT 170252; **g.** hollow bone tube, L: 27mm; Erin, Trinidad, PMNH ANT 171190. Photos: Ostapkowicz, courtesy museums listed.



A variant of such tubes are the carvings made from human long bones found in Puerto Rico, which typically feature anthropomorphic figures and are thought to date to roughly AD 400-1100 (**Figure 8b**) (Roe 1991; Rainey 1940:30-31), though based on context, a tighter span to AD 600-900 may be warranted (Carlson 2015:252). The few extant examples appear to be perforated for suspension or adornment, and some have their medullary bone removed at their distal ends, potentially to serve as spoons (Roe 1991:857) or containers. The latter are

comparable to the animal long bone snuff containers documented by Richard Spruce in the mid-nineteenth century among the Guahibo of the Orinoco (in Schultes and Hofman 1992:119), and collected as part of a complete set of artefacts related to *A. peregrina* processing (ibid:116; see also Wastiau 2016:67 for another Orinoco example). If such use can be proposed for the Caribbean examples, then these were unlikely to have been used as snuffers but were nonetheless integral to the processing and/or storage of the hallucinogen.



**Figure 9. Replica of a bifurcated tube featuring anthropo/zoomorphic imagery, the original reportedly recovered from ‘Picmi’ cave, La Gonave, Haiti prior to 1941. L: 24cm. Photos: Ostapkowicz, Courtesy, National Museum of the American Indian, 0241863.000.**

Bifurcated snuff tubes were the most complex variant, featuring either a Y- or V-shaped tube formation. In the former, the two nostril holes merge internally mid-way within the body of the carving, creating one terminal hole (**Figure 9**). V-forms consist of parallel tubes running at a slight angle through the body, and only converging at the base (e.g., **Figure 3**). Snuff tubes of either form come in two varieties: complete (carved entirely from one material and finished as a functional tube) and composite (made from several interconnected elements that, when aligned, create the functioning object). Surviving examples, in either form, are by

no means common: even Fewkes (1907:63), with his extensive knowledge of both private and public collections in the early twentieth century, noted that “...no [bifurcated tube] specimen is known in any collection that has been made on any of the [Caribbean] islands.” Since then only a few have come to light, particularly from the Dominican Republic/Haiti, unfortunately most recovered outside of archaeological contexts. As far as published sources allow us to judge, there are roughly a dozen surviving Y- or V-shaped (complete) snuff tubes featuring anthro/zoomorphic,

imagery.<sup>12</sup> The largest of these complete examples are carved in wood, ranging up to 24cm in length. Only two wooden tubes from Hispaniola have been documented in the literature (Kerchache 1994:84; Wassén 1964:99, 103; 1967:237)(**Figure 9**); a further two are known from Vega Baja, Puerto Rico (Alegría 1981:28; Oliver 2009:Figure 7). As little is known concerning their context, their chrono-logical placement is uncertain – though both Hispaniolan pieces feature the elaborate iconography associated with the apogee of artistic expression in the region (ca. AD 1000-1500; see Ostapkowicz et al 2012; 2013). In these examples, an anthropomorphic/transformative being is positioned centrally at the tube's bifurcation, with the nostril tubes emerging directly from the figure's head. Given that wood carving is a subtractive process, this suggests that the positioning of the tubes in relation to the iconography was planned from the start, with the drilling among the earliest phases of the carving. This hints at the degree of skill required, not least to successfully drill the long, narrow tube, but then to bifurcate this into two. Such examples show the height of artistry in the pre-Columbian Caribbean, likely made by artisans in the service of prominent leaders or *caciques*.

The central components of the surviving composite snuffers, of which about 10 are known, are carved from stone, bone and wood and feature mainly zoomorphic imagery – from fish (Hoogland 1996:157; Figure 6.24h) and sharks (Crock and Carder 2011:579, Figure 6), to dogs (Olsen 1974: 103; 108)(**Figure 10a**), turtles (Ostapkowicz et al. 2011a)(**Figure 10b**) and birds (**Figure**

**10c**)(see Kaye 2001:34). They appear in both Y- and V-varieties, though there are exceptions: one example, carved in the form of a turtle (**Figure 10b**), features parallel holes that do not merge in the body of the creature, suggesting the use of two long extension tubes running independently through the shallow body of the animal and possibly extending above the nostril platforms. Often, slightly projected platforms demark the nostril holes of these composite centres (e.g., **Figure 10a**) – these work to raise these ends for positioning directly against the nostrils, though it is possible that small tubes of bird bone may have been inserted into these to more efficiently deliver the snuff into the inner nostrils.

Among the most accomplished examples comes from La Cucama, Dominican Republic: a skeletal, acrobatic anthropomorphic male figure carved in manatee bone depicted with his legs above his head, the feet forming the nostril holes, the anus serving as the base for the uptake of the powder (Kerchache 1994:82-83). The positioning of the tube via the anus undoubtedly had significance, open to multiple interpretations – from phallic imagery (a common motif in classic Taíno art) to a graphic depiction of an enema (the latter featuring in the art of neighbouring Mesoamerica, and certainly a known practice among some South American cultures – see Furst and Coe 1977). While rarely so explicitly depicted, the contorted body is an element present in a number of anthropomorphic and transformative figures carved as duhos and vomiting spatulas (e.g., Ostapkowicz et al 2011b: Figure 5).

<sup>12</sup> It is unclear exactly how many examples survive; roughly a dozen have been documented in the literature, with particular emphasis on the most elaborately carved examples often featured in museum exhibits (e.g., Kerchache 1994). However, there are undoubtedly others in museum collections that have remained unpublished (e.g., the Museo del Hombre Dominicano catalogue lists 27 examples) or unrecognized for what they are – as indeed was the case with the St Vincent snuff tube under discussion here. Further, there are a number in private national collections (e.g., Fundación García Arévalo contains several non-representational bifurcated snuff tubes on

display, some illustrated in Caro Alvarez 1977). Until these collections are studied in detail, it is difficult to clarify numbers, as not all are what they seem: in the last 50 years, there has been a significant increase in forgeries, including snuff tubes. The most frequently forged examples are those 'inspired' by the famous acrobatic anthropomorph snuff tube from La Cucama, DR in the collections of the Fundación García Arévalo (Kerchache 1994:82-83); several such examples are now in international museum collections (e.g. Delpuech 2016:Figure 3; Kaye 2018:Figure 6.3; see Ostapkowicz, forthcoming for further discussion).



**Figure 10. Multiple views (running vertically) of the central components of three composite snuff tubes. a. Dog headed Y-configured tube, steatite(?), Barbuda. H: 13.5cm; Library of Congress, KPC0106.1990.022.00.0009. b. Turtle with two parallel tubes, *Guaiaacum* sp., Battawia, St Vincent. AD 1160-1258, L: 102mm; National Museum of Natural History, A34542-0. c. Pelican (?) V-shaped tube, quartz(?), Guadeloupe. L: 84.5mm; Photo © musée du quai Branly - Jacques Chirac, Dist. RMN - Grand Palais / Claude Germain, 71.1887.164.1. Photos: Ostapkowicz, courtesy institutions listed.**

The iconographic complexity of such surviving examples, most often associated with the artistic height of Hispaniolan chiefdoms, together with the early *cronista* accounts of their use as part of the highly developed ‘*cohoba* kit’ has conflated the view that these were objects restricted to the Greater Antilles during the late pre-colonial/early colonial period. Yet, several examples have been found from the Lesser Antilles, and certainly the St Vincent snuff tube would suggest that the chronological range of such complex equipment is earlier than initially thought. With further research, perhaps other Lesser Antillean composite snuff tubes may be identified as Early Ceramic in date (pre-AD 800) (e.g.,

**Figure 10a;c).** If so, this would suggest that the spread of elaborate composite snuff tubes was not north to south – from Hispaniola to the Lesser Antilles – as might initially be expected (see discussion in Ostapkowicz et al 2011a:138-140; 152-156). The Barrancoid style of the St Vincent snuff tube suggests an export from mainland South America, quite possibly directly from the Orinoco basin. It is thus not only one of the earliest examples of the material and iconographic complexity of drug paraphernalia in the region, but more strongly links the drug to its probable source region in the Orinoco. It was likely part of a ‘kit’ of paraphernalia linked with the ingestion of powdered psychoactive

substances – something that would later be identified in the *cronista* writings as *cohoba* – which was itself originally a South American import. In this light, the *cohoba* complex as documented in the

Greater Antilles was merely an end product in a long chain of historic interactions and connections that linked the region's settlers to their South American homeland.



**Figure 11. Multiple views (running horizontally) of three nostril bowls, roughly to scale. a. Three views of a single-spouted bowl from Dominican Republic (note that spout is at top of upper right image). L: 148mm; Museo Arqueológico Regional Altos de Chavón, n/n. b. Double-spouted bowl, recovered from St Bernard, Trinidad. L: 139mm; National Museum and Art Gallery of Trinidad and Tobago, n/n. c. La Hueca double-spouted bowl. L: 139mm; Centro de Investigaciones Arqueológicas, Universidad de Puerto Rico. Photos a-b: Ostapkowicz; photos c: Yvonne Narganes Storde. Images courtesy institutions and individuals listed.**

### **The wider context of drug paraphernalia: nostril bowls**

What is equally intriguing is the fact that these composite tubes were in circulation at the same time as nostril bowls (**Figure 11**), suggesting the contemporary use of different drug forms. Nostril bowls are single or twin-spouted vessels that are small and simple in form, occasionally featuring zoomorphic iconography (**Figure 11b-c**)(see also Fitzpatrick et al 2009:Fig

3f). Their capacity and shape (spouts immediately below rim; high, domed openings) suggest containers for a liquid rather than powdered drug (for which shallow, flat surfaces would be expected) – perhaps used for the pouring of tobacco or pepper juice into the nostrils, as has been documented among some South American groups (Boomert 2003a:153; Wilbert 1987). In contrast single or Y-shaped tubes are consistently used for powder among



contemporary South American groups (Schultes and Hofman 1992:116-118). Nostril bowls are in use in the insular Caribbean from ca. 400 BC – AD 600 (Boomert 2000:479; Oliver 2009:14) and well into AD 1500 on some islands, such as St Lucia (Harris in Fitzpatrick et al 2009:599), Grenada (Jonathan Hanna, pers comm 2019) and the Dominican Republic (e.g., Veloz Maggiolo 1972: figure 21; Ortega and Pina 1972:20; see also Kaye 1999b:211; 2001) – though these later forms are larger.<sup>13</sup> Such a chronological range would make nostril bowls contemporary with the ‘*cohoba* kit’ in use at this time, though unlike the snuff tubes, no *cronista* accounts specifically describe them or their use (Kaye 1999b:200). There is, however, a reference to the use of tobacco liquid in the Lesser Antilles: Sieur de la Borde (1674), who worked as a Jesuit missionary in Dominica and St Vincent, documents its use during the initiation of a *payé* (shaman), where “...on several occasions they make him swallow tobacco juice, which makes him vomit up his insides and roll around until he faints, when they say that his spirit goes on high to talk to the *Zemeen*; they rub his body with gum, cover him with feathers in order to render him adroit at flying, and to go to the house of the *Zemeen*” (in Hulme and Whitehead 1992:147). The parallels to *cohoba* are striking – from the physical reaction to tobacco juice to the links to flying, whether manifested in adorning the body with feathers, or through the depiction of birds on drug paraphernalia, as often seen in Hispaniola. Both practices aimed to communicate with numinous powers, though clearly there were differences in the degree of investment in their associated paraphernalia: nostril bowls were, with the exception of the extraordinary example from La Hueca (**Figure 11c**), predominantly ceramics and simple in form. *Cohoba*-related artefacts tended to be

ornate, often featuring anthropomorphic or zoomorphic carvings, and showing a high degree of carving skill in dense, durable materials. This contrast is readily apparent in surviving artefacts specifically from St Vincent, where at least four nostril bowls spanning AD 350-1492 have been recovered (Kaye 1999a:67), all of which are quite simple in comparison to the bird/monkey snuff tube under discussion here (**Figure 12**). Kaye (2018:167-168) has proposed that, generally, the simple forms of the nostril bowls, together with their typical deposit in middens rather than caches, suggest that these were personal items for use in a less elaborate or formal ritual, and potentially with “less prestigious or less important drugs” (Kaye 2018:168) – and hence not used as expressions of social power. In contrast, the ‘*cohoba* kit’, which included elaborate snuff tubes, tend to be recovered from cave deposits and burials, suggesting the removal of valuable objects from circulation – a process potentially linked with status and political power. Indeed, such a cave deposit has been found in neighbouring Battowia, where a cache consisting of a snuff tube (**Figure 11b**) and *duho* (and possibly other ritual items) was documented (Ostapkowicz et al. 2011:139-140; 143). Does the elaborate nature of the bird/monkey snuff tube under discussion suggest an earlier date for power inequalities in the Caribbean region, or might it simply reflect the growing appreciation of finely made objects as critical to significant ritual events? Might it have been an heirloom piece, not only in the Orinoco, but after its presumed arrival on St Vincent (estimated after AD 300) – and as such contemporary with other elaborate snuff tubes, such as the Anguilla shark, dating to ca. AD 900-1500? As its archaeological context is not known, we can only speculate – but it certainly does raise questions about our assumptions of this artefact category.

<sup>13</sup> A study of a nostril bowl from Carriacou found in deposits dating to AD 1000-1200, but thermoluminescence dated to 400 ±189 BC, suggested to the researchers (Fitzpatrick et al. 2009) that such vessels may have been used as heirlooms, passed down the generations. Though intriguing, the difference in date here

(ca. 1500 years) seems implausible for any artefact, let alone so simple and easily manufactured an object. The application of chronometric hygiene would reject such a significant discrepancy between object and its context, unless sufficient evidence was provided to the contrary.



**Figure 12. Two different conduits for drug inhalation, potentially contemporaneous, from St Vincent. *Left*: two views (running vertically) of a ceramic nostril bowl, L: 51mm; W: 64mm; H: 24mm, St Vincent and the Grenadines National Trust, SVC 254. *Right*: central component of a composite snuff tube, cannel coal, H: 86mm; W: 53mm; D: 67mm, Pitt Rivers Museum, University of Oxford, 1900.44.1. Photos: Ostapkowicz, courtesy institutions listed.**

### Conclusions

The St Vincent snuff tube provides not only insights into a period that marked long-distance circum-Caribbean connections to the South American mainland, but is also a precursor to the rituals that included elaborate paraphernalia for the ingestion of drugs, an artistry that reached its apex in the *cohoba*-related elite material culture of the contact period Greater Antilles. The material from which it is carved – cannel

coal (Brock et al. 2020) – is a rare choice for a complex carving of this calibre: not only is it a challenging material to work, and easily damaged, but its black, lustrous surface foreshadows the ‘black as jet’ *cohoba* paraphernalia used by caciques on Hispaniola nearly a millennium later. This material is in stark contrast to the other vibrant exotics (amethysts, diorites and jades) that were circulated in the Lesser Antilles in the Early Ceramic period, most

carved into small body ornaments. Indeed, in its scale it draws more parallels to the 'jet' carvings recovered from Venezuela, from various cultures and for various purposes (Rouse and Cruxent 1963:Plate 30a; Boulton 1978). The choice of black for a ritual item, a conduit to the supernatural, was likely significant here (Ostapkowicz 2018:169-173). At a minimum, the St Vincent carving can directly inform on

people's socio-political connections, artistry and beliefs – aspects that are only beginning to emerge as we study such 'loaded' ritual items in increasing detail. It enriches our understanding of this dynamic period of regional interaction and underscores the importance of revisiting legacy collections, to bring these pieces into circulation again in our discourse of the prehistoric Caribbean.

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