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From the Grave into the Spirit World: An analysis of a Caribbean snuff inhaler in the context of complex Amerindian deathways on Saba, Lesser Antilles (1300-1350 CE)

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An analysis of a Caribbean snuff inhaler in the context of complex Amerindian deathways on
Saba, Lesser Antilles (1300-1350 CE)

J.J.B. Meijer



Cover: Snuff inhaler Kelbey's Ridge II, interpretation and illustration by Van de Pol, L. (2022)

From the Grave into the Spirit World:

An analysis of a Caribbean snuff inhaler in the context of complex Amerindian deathways on Saba, Lesser Antilles (1300-1350 CE)

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Chapter 1: Introduction

1.1 Research Problem

From the Greater Antilles of the Caribbean, as depicted in figure 1.1 (Menno Hoogland, 2021), only few ethnohistorical sources from when late fifteenth-early sixteenth century Europeans came into contact with the so-called “*Taino*” peoples are left. In almost all of them the importance of an Indigenous ritual that involved a substance called *cojoba*, *cohoba*, or *cohobba* is mentioned (Oliver, 2008, 2009; Pagán-Jiménez et al., 2014; Rodd, 2002). This ritual – *ritual de la cojoba* – would involve the snuffing of a mixture of ground cohoba seeds (*Anadenanthera peregrina*) and seashells through the nose in order to reach a hallucinogenic trance in which the user could come into contact with the spiritual world. It is clear through the accounts in ethnohistorical sources and the intricate material culture that this ritual played a significant role in Indigenous Caribbean societies before the European invasion (Garcia Arévalo, 2019; Oliver, 2008, 2009).



Figure 1.1 Map of the Caribbean with Saba indicated in red taken from Hofman, C. L., Stancioff C. E., Richards, A., Auguiste I. N. (2021). *Resilient Caribbean Communities: A Long Term Perspective on Social adaptability to Natural Hazards and Sustainability in the Lesser Antilles*. *Sustainability* 2021, 13, 980

Artefacts associated with cohoba like *duhos*, snuff inhalers, vomiting sticks, snuffing bowls and *cojoba*-tray *cemies* are some of the most expressive and beautiful forms of Indigenous art that have been discovered up to today (Garcia Arévalo, 2019; McGinnis, 1997). There are almost no intact snuff inhalers found in burial context. Most intact inhalers are found deposited in caves as depicted in figure 1.2 (Ostapkowicz, 2020) and broken inhaler-fragments are often found discarded in middens, implying the importance of these artefacts when they were in use. Recent research has proposed that the inhalers

functioned as heirlooms when the original owner passed away, signifying their in-use context (Fitzpatrick et al., 2014). When in 1988 the excavations on Saba began at Kelbey's Ridge II and a carving from manatee bone was found inside a burial, this became one of the first instances when an intact snuff inhaler was found in its original context: as a grave good (Hofman, 2014).



Figure 1.2 Replica of the Bifurcated Wooded Inhaler taken from Ostapkowicz, J. M. (2020). *Conduits to the supernatural: Bifurcated sniff tubes in the pre-Columbian Caribbean*. *Journal of Caribbean Archeology*, University of Oxford, Oxford.

The presence of a snuff inhaler within a grave had not been documented before in the Greater and Lesser Antilles (Keegan & Hofman, 2017; Oliver, 2009). Because these valuable and highly decorated ritual object are rarely found in a burial context, the inhaler at Kelbey's Ridge presents a very valid opportunity to learn more about these type of artefacts. Snuff inhalers often suffer from the same fate as most decorated pre-Columbian artifacts: they are discovered in private collections and displaced from their original context (Garcia Arévalo, 2019; Oliver, 2009; Ostapkowicz & Hannah, 2021). The opportunity to study the original context of snuff inhalers does not present itself often and offers unique insights into the complex Amerindian deathways of the Lesser Antilles.

1.2 Research Objectives and Questions

Aims

This thesis aims to contribute to the overall conceptualisation of person-object relationships of the Indigenous peoples of the Lesser Antilles and ritual artefacts. To gain a better understanding of the importance of snuff inhalers as artefacts, knowledge about the role and use of cohoba is necessary. Because the fish inhaler on Saba was found in a burial, it is also critical to understand the burial customs of the peoples of the Greater and Lesser Antilles. To understand if inhalers got buried with certain individuals this thesis will also examine the meaning of death in Greater Antillean societies. The focus will be placed on ritual snuff inhalers in burial context using the ethnohistoric and the ethnographic record. Lastly, an investigation into the different individuals who were known to have used *A. peregrina* shall be started.

Due to the unique context of this object in relation to the burial, the following research question is proposed:

“What was the relationship between pre-Columbian humans and their ritual paraphernalia?”

In order to answer the main research question and structure my research, the following sub-questions are proposed:

“What were the functions of snuff inhalers within the ritual de la cojoba in the Greater Antilles?”

*“Who are documented in the ethnographic and ethnohistorical records to have used *Anadenanthera peregrina*?”*

“What are the burial customs concerning ritual artifacts such as snuff inhalers in the Caribbean area?”

1.3 Methodology and Theoretical Framework

This study is focused on Caribbean ritual practices within funerary archaeology using a multi-disciplinary approach, including archaeological, ethnographic and ethnohistorical data. Especially in the Caribbean area, ethnographic research is a key component to understanding and conceptualizing the ancient past (Oliver, 2009; Pagán-Jiménez et al., 2014).

The theoretical framework for this thesis is based on the Amerindian perspectivism as described by Viveiros de Castro. In contrast to a Western approach, in which culture and nature are divided, Western naturalism is based on the idea that the relationship between nature and culture is natural (Viveiros de Castro, 1998). This entails that all life is bound to certain laws of nature, e.g. gravity and osmosis. Even though we can study and use these laws through physics, chemistry, and biology, we are not able to alter these natural laws (Viveiros de Castro, 1998). Amerindian perspectivism is considerably different from the naturalistic ontology that Western researchers are often associated with. Amerindian perspectivism is a unique ontology that is built upon principles of interconnectivity (Viveiros de Castro, 1998, 2002, 2014).

The most remarkable differences can be found in the foundations of nature-culture and human and non-human relationships. These foundations of perspectivism find their roots in animism, an ontology that is based on a social continuity between nature and culture (Descola, 1992, 1996; Viveiros de Castro, 1998). To paraphrase Descola:

“Naturalism is based on the duality between nature and culture, where animism is based on the social character of relations between humans and non-humans.”

Both ontologies acknowledge a space between nature and culture in their relationship; in a naturalist ontology this space is natural (Viveiros de Castro, 1998, 2014), while in animism this space is social (Descola, 1992, 1996).

Because the idea of Amerindian animism is deeply rooted in Indigenous Caribbean cultures, symbology and ritual practice have completely different functions and values than individuals within Western ontologies (Viveiros de Castro, 1998, 2002). By using the framework presented by Viveiros de Castro, a fabricated world based on Amerindian concepts can be constructed:

‘‘My object is less the indigenous way of thinking than the objects of this thinking, the possible world projected by their concept. It is not an interpretative proposition of Amerindian thinking but an experiment with it, and, hence, with our thinking.’’

~ Viveiros de Castro, 2002, p. 124

1.4 Scientific and Societal Relevance

Sources of information on Pre-Columbian Indigenous peoples are limited, and those we have are often only partially reliable or incomplete. This thesis aims to use Amerindian perspectivism to reflect on societies through their own perspectives when taking the archaeological record of the region in consideration. By comparing, contrasting and confronting the archaeological record to principles constructed with Western and Amerindian ontologies, an experimental mental world is created through which different historical scenarios can be tested (Viveiros de Castro, 1998, 2014, 2002).

It is important to keep these different worldviews in mind when trying to reconstruct their past and ways of life. When the first Spanish invaders arrived in the Caribbean area, they explained the social structures of the native inhabitants through their own medieval Western perspectives. The Spanish chroniclers would interpret and document their observations in a way that would fit their own Christian European worldview (Curet, 2002; Wilson, 1990). This leads to an overall generalized picture of the Amerindian societies of the Greater and Lesser Antilles when solely studying the ethnohistorical record. By using multiple sources, this thesis will attempt to untangle the ‘‘western lens’’ and hopes to contribute to a more local perspective on human-object relationships.

Examining the archaeological record according to the main points of the Amerindian ontologies instead of a western naturalistic cosmology can also produce unique insights of social relevance. As a Western archaeologist, I understand that I am unconsciously biased to think within a certain ontology. In this thesis, I will try as best as I can to lose my own western lens and approach the material from a different perspective.

1.5 Structure of Chapters

The second chapter of this thesis will provide a general overview on the current state of knowledge on the context of the cohoba ritual in the Caribbean. This chapter will introduce Indigenous ritual practices and spirituality for the purpose of understanding its main characteristics. It will focus on creating a complete overview of the ritual. The research will be based on the large body of existing literature on the ritual practices of the peoples that inhabited the Greater Antilles.

The third chapter will discuss the methodology of the thesis and will include a definition of the theoretical framework and concepts used in this thesis. The Amerindian perspectivistic approach will be introduced, as well as how the non-Western ontologies will be incorporated into this research.

The fourth chapter will focus on the archaeological context of the fish inhaler found at the site of Kelbey's Ridge II, Saba, as thoroughly as possible. Not only the material culture, but also its archaeological context in the corresponding burial and the site itself will be treated in this chapter.

The fifth chapter consists of the results from the comparative analysis of the ethnohistorical and ethnographic records. First, this chapter will demonstrate the results of the ethnographic data using accounts of the usage of psychoactive snuffs from both the Caribbean area and the Orinoco basin, which will show different aspects of the ritual parts of Indigenous life. Second, the ethnohistorical results shall be demonstrated

The final chapter will provide the discussion and conclusion. The research will be summarized and the research questions will be discussed in the light of the methodology and results. The discussion will also include ideas for future research.

Chapter 2: Cohoba in context

2.1 Y-Shaped Inhalers and Snuffing Bowls

Even though so many decorated snuff inhalers can be seen in museums all over the world today, the relationship the Indigenous peoples of the Greater Antilles had with these artefacts is still a much discussed topic (Garcia Arévalo, 2019). Almost all inhalers are found in collections of private collectors without any descriptions of their original context. The removal from this context makes it hard to determine the role these implements had (Garcia Arévalo, 2019; Oliver, 2009). Because traces of *Anadenanthera peregrina* can be found in some of these inhalers, archaeologists can use the ethnohistorical and ethnographical sources to begin to comprehend these ritual instruments (De Smet & River, 1985; Keegan & Hofman, 2014; Oliver, 2009; Pagán-Jiménez et al., 2014)

Las Casas (1951) mentions in his work *Brevísima relación de la destrucción de las Indias* the ritual use of a cinnamon-like powder by the natives in order to reach a state of trance. The true identity of this powder has not firmly been established, but most evidence points to a mixture of equal parts ground *A. peregrina* seeds and seashell (De Smet & River, 1985; Oliver, 2009; Pagán-Jiménez et al., 2014). This powder was inhaled, or snuffed, by the *behiques* (shamans) and *caciques* (chiefs, who also had shamanic abilities) during rituals in order to consult or communicate with the spirits (Las Casas, 1951; Keegan & Hofman, 2014; Oliver, 2009; Pagán-Jiménez et al., 2014). How often these rituals took place is still unclear; the chroniclers only documented the ritual being used for making impactful socio-political decisions (Curet, 2002; Oliver, 2008, 2009; Wilson, 1990). It is however suspected that before the Spanish invasion the cohoba ritual was customary for everyday things such as fishing, harvesting, wedding dates, or other commercial expeditions (Curet, 2002; Oliver, 2008, 200; Wilson, 1990).

The cohoba ritual as mentioned by Fray Ramon Pané, describes a ritual where a *cacique* snuffs a mixture of cohoba in order to reach a decision about a socio-political issue (Oliver, 2008; Pané, 1974):

“The cojoba ritual begins with the cacique and only other men gathering in the coney house of the village. They start the preparations of the cojoba snuff and use vomiting sticks and maracas before the cacique actually inhales the powder. The cacique sits on his duho and has his cemí idol in front of him to hold the ground mixture. When he inhales the powder through a snuff inhaler everybody is quiet and watches as he slowly hangs his head and rests his hands on his knees. The other men sit silently in the house and after sometime he raises his head again and speaks; sometimes clear words, sometimes almost intelligible. All the men in the coney house then thank the cemies and try to interpret the divination.”

~ Oliver, 2008; Pané, 1974, chapter 19

2.2 The Human Trip

To understand the function behind the cohoba ritual, archaeologists have used bioarchaeological residue analysis to determine what substances in cohoba cause the psychoactive reaction (De Smet & River, 1985; Pagán-Jiménez et al., 2014). It became clear through ethnographic research that there are multiple plants and other resources that have been used to make stimulating substances throughout South America (De Smet & River, 1985; Pagán-Jiménez et al., 2014; Rodd, 2002; Schultes, 1998).

Cohoba and yopo are both hallucinogenic snuffs that have been made and used in different South American cultures, and are based on the psychoactive properties of the *A. peregrina* seed as depicted in figure 2.1 (Safford, 1916) (De Smet & River, 1985; Pagán-Jiménez et al., 2014; Schultes, 1998).

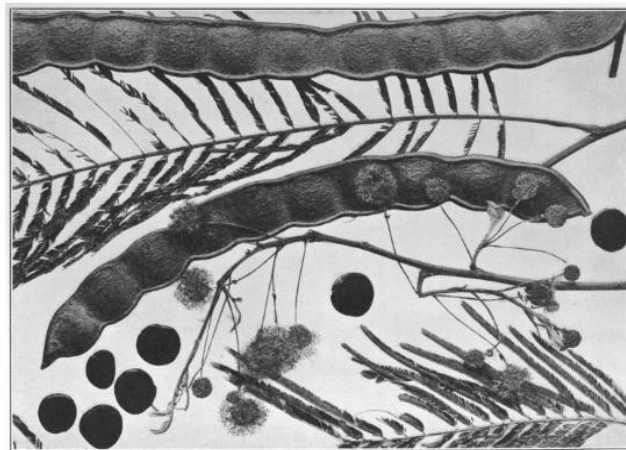


Figure 2.1 Illustration of Cohoba taken from Safford W. E. (1916). Identity of cohoba, the narcotic snuff of ancient Haiti. *Journal of the Washington Academy of Science* Vol. 6, No. 15 (september 19, 1916), pp. 547-562.

Even though the Orinoco cultures use different ways of preparing the powder, the preparation of *A. peregrina* seeds is the first step in the process (De Smet & River, 1985; Humboldt & Bonpland, 1881; Oliver, 2008; Pagán-Jiménez et al., 2014). These seeds, roasted or raw, are ground using a mortar and pestle to make a fine powder (De Smet & River, 1985; Oliver, 2008; Pagán-Jiménez et al., 2014). In some cases, other ingredients, such as seashells in the Otomacos culture, containing alkaline properties are added, resulting in accelerated absorption through the mucous membranes in the nose (Oliver, 2008; Pagán-Jiménez et al., 2014). Water is added to the mixture and it is left out in the shade to dry for four days and then ground again into a fine grey to light-brown powder (Pagán-Jiménez et al., 2014).

Within this powder, the main psychoactive ingredients are dimethyltryptamine (or DMT), 5-hydroxydimethyltryptamine (or bufotenine), and 5-methoxydimethyltryptamine (5-MeODMT) (De Smet & River, 1985; Pagán-Jiménez et al., 2014). These tryptamines cause multiple physical and psychological reactions in humans. A single dose would not usually exceed five grams and the effect would last one-quarter to two hours (Coppens & Cato-David, 1971; De Smet & River, 1985; Pagán-

Jiménez et al., 2014). The Venezuelan Cuiva Indigenous have been documented to take this amount one to three times a day (Coppens & Cato-David, 1971; De Smet & River, 1985).

The effects of the psychoactive substances are described as follows (Oliver, 2008):

- phosphenes
- slight seizures
- lack of coordination
- muscle tremors
- nausea
- visual hallucinations
- sleep disorder
- macropsia
- salivation and watering of the eyes and nose

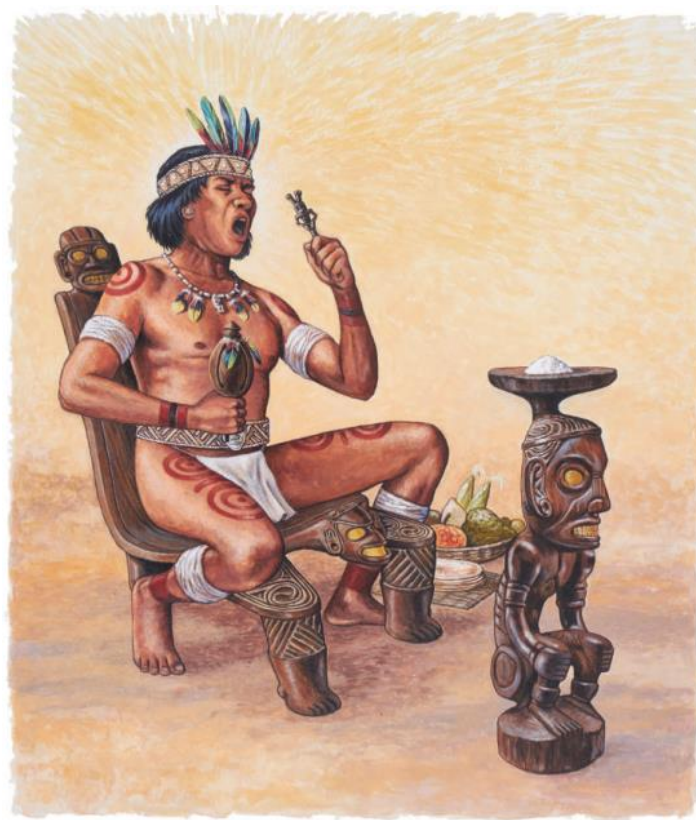


Figure 2.2. An interpretation of a cohoba user taken from García Arévalo, M. A. (2019). Taínos: Arte y Sociedad. Banco Popular Dominicano, Dominican Republic.

2.3 Personal Ritual Protection

When discussing tools that are associated with the cohoba ritual as depicted in figure 2.2 (García Arévalo, 2019), it is necessary to understand the relationships that the people of the Greater Antilles could have with certain objects (Fitzpatrick, 2008; Oliver, 2008, 2009; Siegel, 2005). Amerindian Perspectivism acknowledges not only the existence of natural animals and humans, but also that of the

“invisible supernatural” (Viveiros de Castro, 1998, 2014). This “invisible supernatural” would often take the form of ancestral spirits, supernatural forces of nature, or *cemies* which all could be interacted with (Hofman, 2014; Oliver, 2008, 2009; Viveiros de Castro, 1998, 2014). Because the bodies of deceased family members were buried inside the family huts, the ancestral spirits often surrounded the villages of their living relatives (Hofman, 2014; Keegan and Hofman, 2017; Oliver, 2009). Other spirits had their own associated places to live but could still interact with the living when invoked or encountered (Oliver, 2008, 2009). Las Casas documents the following about an encounter that a chief had with a spirit, that became the *cemí* associated with his *duho* (Las Casas, 1951; Oliver, 2008, 2009):

“First the cemí would make itself known to the cacique as a tree while he was in the forest. The cacique asked his behique for help and the behique went to the tree and underwent a ritual de la cojoba. Under influence of the cojoba the behique could interact with the spirit and he received not only a proper identification of the cemi (name, gender, rank, genealogy and powers) but also instruction on how to treat it. Finally, the cemí would tell the behique how to shape him and the behique, or another craftsman, started on shaping the duho from the original tree. Then the duho was presented to the cacique and the cemí’s instructions were explained and heeded. If not, the cemi could make its ‘owner’ dangerously ill, only to be healed by a behique using a different ritual.”

~ Las Casas, 1951. 51; my translation

The *duho* as depicted in figure 2.3 (Garcia Arévalo, 2019) was an important wooden artefact from the Caribbean that was used during the cohoba ritual (Garcia Arévalo, 2019; Keegan and Hofman, 2017; Oliver 2008, 2009; Pané 1974). The person who would undergo the ritual, usually a *behique* or *cacique*, would sit on the *duho* instead of on the ground while snuffing the hallucinogenic powder (Garcia Arévalo, 2019; Oliver 2008, 2009; Pané 1974 ch. 19). The *cemí* that was infused into the *duho* was a companion of the cojoba user and would act as a guide when communicating the spirit world together with all the other *cemies* that were owned by the user (Garcia Arévalo, 2019; Oliver 2008, 2009; Pané 1974). *Duhos* are only one example of paraphernalia that were used during the cohoba ritual, as all instruments connected to this ritual could function as *cemí* (Garcia Arévalo 2019; Keegan & Hofman 2017; Oliver 2008, 2009; Pagán-Jiménez et al. 2014;).



Figure 2.3 A duho made out of guayacán wood of unknown origin taken from García Arévalo, M. A. (2019). *Taínos: Arte y Sociedad*. Banco Popular Dominicano, Dominican Republic.

2.4 Spiritual Toolsets

Inhalers were part of a toolset that would ‘assist’ the cohoba users when they entered the spirit world under the influence of the powder.

These types of artifacts did not only have a practical function during the cohoba ritual but also had a personal relationship with its user (Fitzpatrick, 2008; Oliver, 2008, 2009). During the cohoba ritual the paraphernalia would combine their *cemí* power to protect its user and help them navigate the spirit world (Oliver, 2008, 2009). Because of this concept, the *caciques* and *behiques* relied on the *cemies* in their care and tried to add as many powerful *cemies* to their collection as they could during their lifetime (Oliver, 2008, 2009). Alongside the *duho*, the known ritual paraphernalia that were used in the cohoba ritual include:

Cemí Idols

Cemí idols could be made from any material but most frequently were made from wood, stone, ceramics, bone or shell (García Arévalo, 2019; Oliver, 2008, 2009). These idols were made from different types of wood like *Cordia sp.*, *Carapa sp.*, *Swietenia sp.*, *Clusia sp.*, *Andira sp.*, and *Petitia cf. dominguisis* (Ostapkowicz et al., 2011). Highly polished idols made from the black wood



Figure 2.4 Cemí idol with a snuffing tray on its head of unknown origin (900 – 1500 CE) taken from García Arévalo, M. A. (2019). *Taínos: Arte y Sociedad*. Banco Popular Dominicano, Dominican Republic.

Guaiacum sp. are represented the most in the archaeological record as depicted in figures 2.4 and 2.5 (Garcia Arévalo, 2019) (Helms 1986; Ostapkowicz et al 2011). The specific *cemí* idols that were related with the cohoba ritual often share some distinguishing features (Garcia, Arévalo 2019; Oliver, 2008, 2009; Ostapkowicz et al., 2011):

- ❖ The idols are male with prominent erect penises
- ❖ The idols are emaciated to the point where the ribs and other bone structures are visible
- ❖ The idols have enlarged eyes with tears often flowing down their cheeks and bared teeth
- ❖ The idols often have plates on the top of their head where the cohoba powder could be placed before it would be snuffed

After the cohoba powder had been prepared, it was placed onto the plate on top of the head of the *cemí* before the person who would undertake the cohoba ritual (Garcia Arévalo, 2019; Oliver, 2008, 2009; Ostapkowicz et al., 2011). These stands were often made from black wood and used during official ceremonies as described by Pané as mentioned above (Garcia Arévalo, 2019; Oliver, 2008, 2009; Pané, 1974 ch. 19). Most *cemí* idols that are present in the archaeological record date to the first millennium CE and cluster around 900 – 1500 CE (Garcia Arévalo, 2019; Oliver, 2008, 2009; Ostapkowicz et al., 2011).



Figure 2.5. *Cemí* idol with a snuffing tray on its head of unknown origin (900 – 1500 CE) taken from García Arévalo, M. A. (2019). *Táinos: Arte y Sociedad*. Banco Popular Dominicano, Dominican Republic.

Mortar and Pestle



Figure 2.6 Pestle with two anthropomorphic faces of unknown origin and period taken from García Arévalo, M. A. (2019). *Táinos: Arte y Sociedad*. Banco Popular Dominicano, Dominican Republic.

Both *caciques* and *behiques* used mortars and pestles as pulverisers to create medicine, including the cohoba powder (Keegan & Hofman, 2017; Oliver, 2008; Pané, 1974, c.19; Pagán-Jiménez et al., 2014). These artefacts were often made of wood or ground-stone and could be highly decorated as depicted in figure 2.6 (Garcia Arévalo, 2019) (Garcia Arévalo, 2019; Keegan & Hofman, 2017). These artefacts have been present in the archaeological record since the archaic age (5700 – 200 BCE) but have not always held a ritual function in the cohoba ritual (Keegan & Hofman, 2017). These artefacts were very simplistic in design at first, but started getting more sophisticated and detailed in appearance around the first millennium CE (Garcia Arévalo, 2019; Keegan & Hofman, 2017).

Snuff inhalers

Inhalers could be made from any material and were made into many different shapes. The most common materials would be bone, wood, stone, ceramics and shell. There are two main categories of shapes used for these snuffing tools; snuffing bowls and Y-shaped inhalers (Garcia Arévalo, 2019; Pagán-Jiménez et al., 2014; Kaye, 1999; Keegan & Hofman, 2017; Oliver, 2008). Snuffing bowls are decorated bowls with one or two spouts to inhale the powder through. The Y-shaped inhalers could be used by placing one end in the powder and the other two ends in the users nose and inhaling the powder (De Smet & River, 1985; Garcia Arévalo, 2019; Humboldt & Bonpland, 1881; Oliver, 2008; Pagán-Jiménez et al., 2014). Some materials are favoured for certain types of inhaler: the use of hollow long bones of birds due to their practical natural shape and Y-shaped inhalers carved from manatee bone are also not uncommon in the archaeological record (Garcia Arévalo, 2019; Keegan & Hofman, 2017; Oliver, 2008; Pagán-Jiménez et al., 2014). Noticeably, another fish-shaped inhaler made from manatee bone was found at Sandy Hill, Anguilla (Keegan & Hofman, 2017)



Figure 2.7 Replica of the bifurcated snuffing bowl from La Hueca taken from García Arévalo, M. A. (2019). Taínos: Arte y Sociedad. Banco Popular Dominicano, Dominican Republic.

The first snuffing bowls as depicted on figure 2.7 date to the La Hueca culture ca. 160 BCE – 520 CE and the first Y-shaped inhalers are suspected to date around the first millennium CE but their context is yet to be determined in further research (Keegan & Hofman, 2017; Oliver, 2008; Ostapkowicz et al., 2021; Pagán-Jiménez et al., 2014;).

Vomiting spatulae

Vomiting spatulae are another type of artefact that was often highly decorated and laid in with mother-of-pearl, shell and gold. The spatulae were shaped as long, slightly curved sticks that could be inserted into mouth, while touching the back of the throat of an individual in order to make them vomit. Vomiting is suspected as a way to “cleanse” an individual before entering the spirit world or performing rituals, but it would also prevent the cohoba users from vomiting while in the presence of the spirits (Keegan & Hofman, 2017; Oliver, 2008; Pagán-Jiménez et al., 2014; Pané, 1974, c.19.). The archaeological record shows spatulae made from wood and bone (Garcia Arévalo, 2019; Oliver, 2008). Manatee ribs are noticeably often used as raw material to carve due to their natural curved shape as depicted on figure 2.8 (Keegan & Hofman, 2017; Oliver, 2008).



Figure 2.8. Different vomiting spatulae made from manatee bone of unknown origin taken from García Arévalo, M. A. (2019). Taínos: Arte y Sociedad. Banco Popular Dominicano, Dominican Republic.

Maracas and drums

Maracas and drums were not only used by the *behiques* and *caciques*, but also by onlooking attendees during the cohoba ritual (Garcia Arévalo, 2019; Oliver, 2008). These artefacts were made from wood or gourds, the dried fruit of the calabash tree (*Crescentia cujete L.*), and filled with small stones to produce a rattling sound when shaken (Garcia Arévalo, 2019). It is unknown when the first maracas were used but it is suspected that they must have existed around the first millennium CE (Garcia Arévalo, 2019).

2.5 Graverobbing and Heirlooms

As mentioned before, most snuff inhalers are found outside of their original archaeological context, which makes it hard to interpret them (Garcia Arévalo, 2019; Oliver, 2009). Some exceptions are found in burials like the snuff inhaler found at Kelbey's Ridge II, Saba, but these burials are quite rare to non-existent (Keegan & Hofman, 2017). In 2008 Scott Fitzpatrick published an article about evidence for the inter-island transport of heirlooms during the early Ceramic Age (ca. 400 C.E. and onwards) (Fitzpatrick, 2008). Here, Fitzpatrick suggests the possibility of snuff inhalers functioning as an heirloom based on their use-context and luminescence data (Fitzpatrick, 2008). He suggests the reason why snuff inhalers are not often found in an intact state in the archaeological record, is because their importance lies in their use-context and therefore they are passed down as heirlooms to the next generation (Fitzpatrick, 2008). When an inhaler breaks, it loses its value and is discarded as any other broken item which is why broken inhaler fragments can be encountered in regular middens (Fitzpatrick, 2008).

Chapter 3: Methodology

This chapter will outline the theoretical concepts that will be used in this thesis. First, what theoretical premises will be used will be defined, and then ontologies such as Amerindian perspectivism in contrast to Western naturalism will be discussed.

3.1 ‘A European-biased Lens’

When reconstructing past societies of the Greater Antilles it is not uncommon for researchers to encounter a specific problem: the scarcity of primary documentary evidence. Historians, ethnohistorians, anthropologists, and archaeologists have all used the same ethnohistoric documentation provided by the Spanish chroniclers from the sixteenth century to the best of their abilities. These sources, however, can lead to an uncritical and simplistic view of the Indigenous cultures due to the contradicting descriptions. An example of this can be found in the work of Antonio Curet published in 2002 where he expresses his concerns about using the ‘*vague and sometimes contradictory European descriptions*’ when researching succession in the Greater Antilles (Curet, 2002).

Curet emphasizes the recognition of chroniclers, such as Las Casas and Mártir de Anglería, that their own knowledge of the subject was limited. As some chroniclers never even visited the so-called New World and some even openly displayed their disapproval of the Indigenous Caribbean cultures, there is enough reason to take a critical stance against these Spanish documentary evidence (Curet, 2002). Another example comes from Veloz Maggiolo (1993) who used both ethnohistoric and archaeological data to demonstrate the over-inclusiveness of the term ‘*Taino*’ given to the Indigenous peoples within the Greater by Rafinesque, a 19th century polymath researcher (Curet, 2002, Keegan & Hofman, 2017). The term would be too inclusive and masked the cultural variability of the cultures of the Greater Antilles, which is becoming a very prominent topic in current scientific debate (Curet, 2002; Keegan & Hofman, 2017). This also serves as an example of how the simplistic view of the Spanish chroniclers could have oversimplified the Indigenous cultures (Curet, 2002). More examples of this cultural variability can, for example, be found in material evidence of ritual activities and domestic activities in Puerto Rico (Curet, 2002; Curet & Oliver, 1998). The simplistic view of the chroniclers would blind them to some crucial aspects of the Indigenous cultures such as a high cultural variability (Curet, 2002; Keegan & Hofman, 2017).

3.2 A Foundation of Misinterpretation

Curet states that this simplistic view might have manifested itself because of the likelihood that the Spaniards wrongly interpreted certain Indigenous words. Terms like “laws” could be interpreted as an European concept of written rules for a society, while the Indigenous term for “laws” stood for a different concept of their own Amerindian society (Curet, 2002). Another example for such misinterpretation or mistranslation can be found in the work of Viveiros de Castro (1998). Because Amerindian perspectivism makes distinctions between not only humans and animals, but spirits as well, the Amerindian perspectivists’ definition of “human” is quite different from that of a Western naturalist (Viveiros de Castro, 1998). To cite Viveiros de Castro:

“Typically, in normal conditions, humans see humans as humans, animals as animals and spirits (if they see them) as spirits; however animals (predators) and spirits see humans as animals (as prey) to the same extent that animals (as prey) see humans as spirits or as animals (predators). By the same token, animals and spirits see themselves as humans: they perceive themselves as (or become) anthropomorphic beings when they are in their own houses or villages and they experience their own habits and characteristics in the form of culture - they see their food as human food (jaguars see blood as manioc beer, vultures see the maggots in rotting meat as grilled fish, etc.), they see their bodily attributes (fur, feathers, claws, beaks etc.) as body decorations or cultural instruments, they see their social system as organized in the same way as human institutions are (with chiefs, shamans, ceremonies, exogamous moieties, etc.).”

~ Viveiros de Castro, 1998

Perspectivism is based on animism and therefore sees the nature-culture relationship as social. What differentiates perspectivism from animism however is the human-nonhuman relationship. it: “Whilst our constructionist epistemology can be summed up in the Saussurean formula: *the point of view creates the object*. The subject being the original, fixed condition from where the point of view emanates. Amerindian ontological perspectivism proceeds along the lines that the point of view creates the subject (Viveiros de Castro, 1998). As a human, we all have different points of view and therefore we are all subjects rather than objects. Nonhumans, such as animals or spirits, also have points of view for themselves and are therefore also seen as subjects rather than objects. Animals and spirits are regarded as also having a certain “human” consciousness and this makes for completely different human-nonhuman relationships (Viveiros de Castro, 1998, 2014).

When the Spanish chroniclers translated terms such as ‘wari’, ‘dene’ or ‘masa’ as ‘people’, they did not realize that this was not the definition of humans as a species, but only the distinctions for the different classes of beings (Viveiros de Castro, 1998). Humans used these terms to denote other humans as human beings just as animals would use the same terms to denote other animals because

they all shared the same class of beings and consider their class as their ‘people’ (Viveiros de Castro, 1998). This would not only result in misinterpretation, but also in oversimplification of characteristics of the Indigenous communities (Curet, 2002; Viveiros de Castro, 1998). On top of the fact that the chronicles of the Spaniards are full of these types of misinterpretations due to translation issues, it becomes clear that they viewed the Indigenous peoples and their lifeways and beliefs through an ‘European lens’. They expected the Indigenous cultures to be familiar with Western concepts like laws, monogamous marriage, and ownership of lands (Curet, 2002; Wilson, 1990). Chroniclers like Oviedo¹, Martyr² and even Columbus³ called the Indigenous communities of Hispaniola lazy and cowardly because they avoided open combat and had no ambition of landownership (Colon, 1984, p 359; Martyr, 1970, c1, p63, 75, 81; Oviedo, 1959, c1, p34, 64). Because of their ‘European lens’ and expectations of these types of concepts they assumed that these concepts did not exist yet among the Indigenous communities, which in its turn led to an oversimplification of the Indigenous societies (Curet, 2002; Wilson, 1990).

Because of this issue of misinterpretation many unfounded assumptions have been made and handed down in the historical and ethnohistorical records we currently possess (Curet, 2002; Wilson, 1998). This is also why researchers like Curet see the necessity to take a critical stance toward the Spanish documentary ethnographic evidence; their contradicting nature and biased interpretations stated as factual make it difficult to determine fact from assumption. Therefore this thesis will examine and study the cohoba snuff inhalers using different sources to compare/contrast the archaeological and ethnographic records against the ethnohistorical record. As a result, there will be optimal usage of the different datasets that are currently available.

3.3 Methods and Approach

To offer answers to the research questions in the introduction this thesis shall examine three scientific records. The archaeological record of Kelbey’s Ridge will be examined to understand the snuff inhaler as an archaeological artefact in its intact context. The choice for an ethnographic and ethnohistorical approach is made because these records from northern South America have proven to be a vector for the Caribbean cultures (Oliver, 2008, 2009; Pagán-Jiménez et al., 2014). The unique situation where peoples live in remote villages with parallels to the cultures in the insular Caribbean makes the ethnographic record a very reliable source for data (Keegan & Hofman, 2017). First, the data of the ethnographic record will consist of the following sources where the preparation and usage of hallucinogenic snuffs have been documented:

¹ Oviedo y Valdes, Gonzalo Fernando de, *Historia General y Natural de las Indias*. Madrid 1959

² Martyr d’Anghera, *Pedro, The eight decades of Pedro Martyr*. New York, 1970

³ Colón, Henando, *Historia del Almirante*, Madrid, Historia 16, 1984

Table 3.1 Mentions of hallucinogenic snuffs in ethnographic sources.

	Author	Indigenous peoples and location of research
1.	Alexander von Humbolt (1881)	Otomacos of the Orinoco region in Venezuela
2.	Rodd (2002)	E'ñepa (Piaroa) of southern Venezuela
3.	Chagnon (1992)	Yanomamö of the southern Orinoco delta
4.	Jackson (1983)	Tucano of northwest Amazonia

Secondly, the selection of the sources from the ethnohistorical record where hallucinogenic snuffs are mentioned is as follows:

Table 3.2 Mentions of hallucinogenic snuffs in ethnohistoric sources.

	Author	Work	Topic
1.	Cristóbal Colón	<i>Historia del Almirante</i>	<i>Burial practices and ritual de la cojoba</i>
2.	Bartolomé de Las Casas	<i>Historia General y Natural de las Indias</i>	<i>Myth and ritual life</i>
3.	Ramon Pané	<i>Relación Acerca de las Antigüedades de los Indios</i>	<i>Ritual de la cojoba</i>
4.	Gonzalo Fernández de Oviedo y Valdés	<i>Historia General y Natural de las Indias</i>	<i>Ritual de la cojoba and cacique burial rites</i>
5.	Fernando Colombo	<i>Historie</i>	<i>The work of Pané</i>

These sets of data will be contrasted, combined, and interpreted using the framework presented by Viveiros de Castro (1998). The data will be subjected to a fabricated world based on Amerindian concepts and through this experiment, answers to the formulated research questions can be suggested.

Chapter 4: Kelbey's Fish Inhaler

4.1 The Y-Shaped Fish Inhaler

The fish inhaler from Kelbey's Ridge II depicted in figure 4.1 (Hoogland, 2022), Saba, is one of the few snuff inhalers that have been fully documented in its original context along with two avian hollow bones. The carving of a grouper is made from manatee bone and material analysis suggests that it had been painted at some parts (Hofman et al., 1987; Hoogland et al., 1993; Mol et al., 2015). A resin has also been found in the eye cavities of the fish that suggests that these used to be inlaid with another material (Hofman et al., 1987; Hoogland et al., 1993; Mol et al., 2015).



Figure 4.1. The Y-shaped Fish Inhaler (1300 - 1350 CE). Image courtesy of M. L. P. Hoogland (2022)

There are two holes behind the gills that connect to the hole at the mouth of the fish making the Y-shaped cavity inside the carving (Hofman et al., 1987; Hoogland et al., 1993; Mol et al., 2015). Two hollow avian long bones could be inserted into these holes behind the gills to allow the fish carving to be used as a snuff inhaler (Hofman et al., 1987; Hoogland et al., 1993; Mol et al., 2015). Traces of *A. peregrina* have been identified inside the inhaler (Hoogland & Hofman, 1999), but further research is underway (Pagán-Jiménez pers. comm., 2022).

What is unique about this inhaler is the fact that it is difficult to use if one does not have the matching avian long bones to insert behind the gills. The corresponding two avian long bones are found at the same burial where the fish inhaler was discovered: F068 (Hofman et al., 1987; Hoogland et al., 1993, 1996). This is one of the first documented instances where a snuff inhaler was found complete with the corresponding hollow avian bones in a burial (Hofman et al., 1987; Hoogland et al., 1993, 1996). The iconography of a fish is not often associated with the cohoba ritual (Fitzpatrick et al., 2014; Hoogland, 1996; Oliver, 2009).

4.2 Kelbey's Ridge II (1300-1350 CE)

This peculiar site fits its time period (1300-1350 CE) perfectly, but it has some remarkable characteristics that sets it apart from any other site in the Lesser Antilles. It is located on the north-eastern side of Saba and overlooks the sea from a strategic vantagepoint. Even though Saba is a small volcanic island (13km²) in the Caribbean, it still has a handful of archaeologically significant sites. According to the current archaeological record, the first occupants of the island must have arrived at c. 3800 years ago (Hofman et al., 2006). To date the most recent pre-Columbian sites on the island is Kelbey's Ridge II, the site was excavated by Hofman and Hoogland between 1988 and 2000 (Hofman, 1993; Hofman & Hoogland, 2016; Hoogland, 1996). Unexpectedly, one of the most deviant burials of the Caribbean was found in this excavation (Hofman, 1993; Hoogland, 1996).

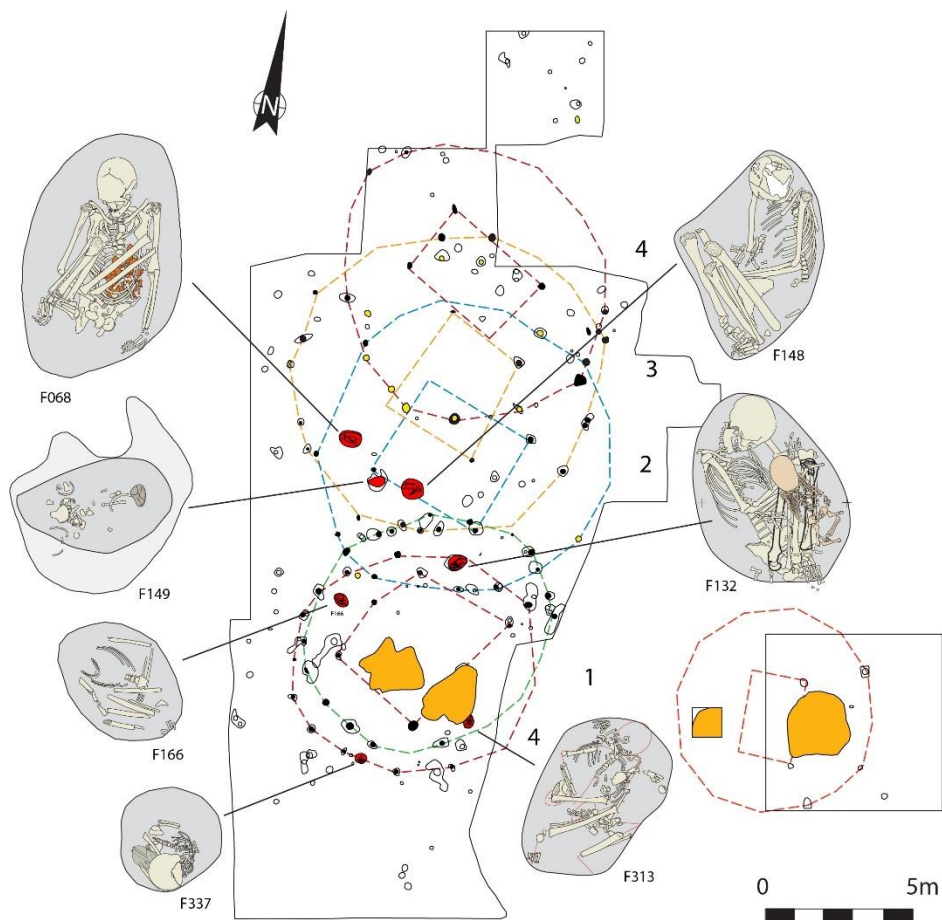


Figure 4.2. Schematic view of Kelbey's Ridge II. Image courtesy of M. L. P. Hoogland (2022)

Kelbey's Ridge II consists of seven circular series of postholes that represent the outlines of seven hut plans as depicted on figure 4.2 (Hoogland, 1996). Within these postholes, features like human burials and hearths have been identified and excavated. The site has characteristics of a small community that housed four to five families at the height of the population number. A community such as this thrived

on the fertile fishing grounds of the Saba bank and their pottery belongs to the Chicanean Ostionoid subseries as seen on the example on figure 4.3 (Hofman & Hoogland, 2011).

One of the burials is feature F068, which contained not only the inhaler, but also some unusual human remains (Hofman et al., 1987, 2014; Hoogland, 1996). Single or double human burials from the fourteenth century are not uncommon in the Lesser Antilles (Hoogland & Hofman, 2013; Keegan & Hofman, 2017; Oliver, 2009). Usually, individuals are buried in flexed positions with their knees bent to their chest and their head oriented either to the northeast or southwest (Hofman et



Figure 4.3. Chicoid Adorno found at Kelbey's Ridge II (1300-1350 CE). Image courtesy of M. L. P. Hoogland (2022)

al., 1987; 2014, Hoogland, 1996; Keegan & Hofman, 2017; Oliver, 2009). Human remains are often found between the post holes of huts, which indicates that they were buried within a corner of a house (Hofman et al., 1987; 2014, Hoogland, 1996; Keegan & Hofman, 2017; Oliver, 2009,).

These burials were often disturbed at later times to retrieve the cranium or long bones, that would be used for ancestral cemification (Keegan & Hofman, 2017; Oliver, 2009). Such burials can also be found at Kelbey's Ridge II, like burials F132, F337, and F313, but F068 has some deviations from the usual burial practices (Hofman et al., 1987, 2014, Hoogland, 1996).

At first glance, F068 seems like a moderately preserved, single burial of a ca. 50 year old human male with the right femur missing (Hoogland, 1996). In its vicinity a hollow avian long

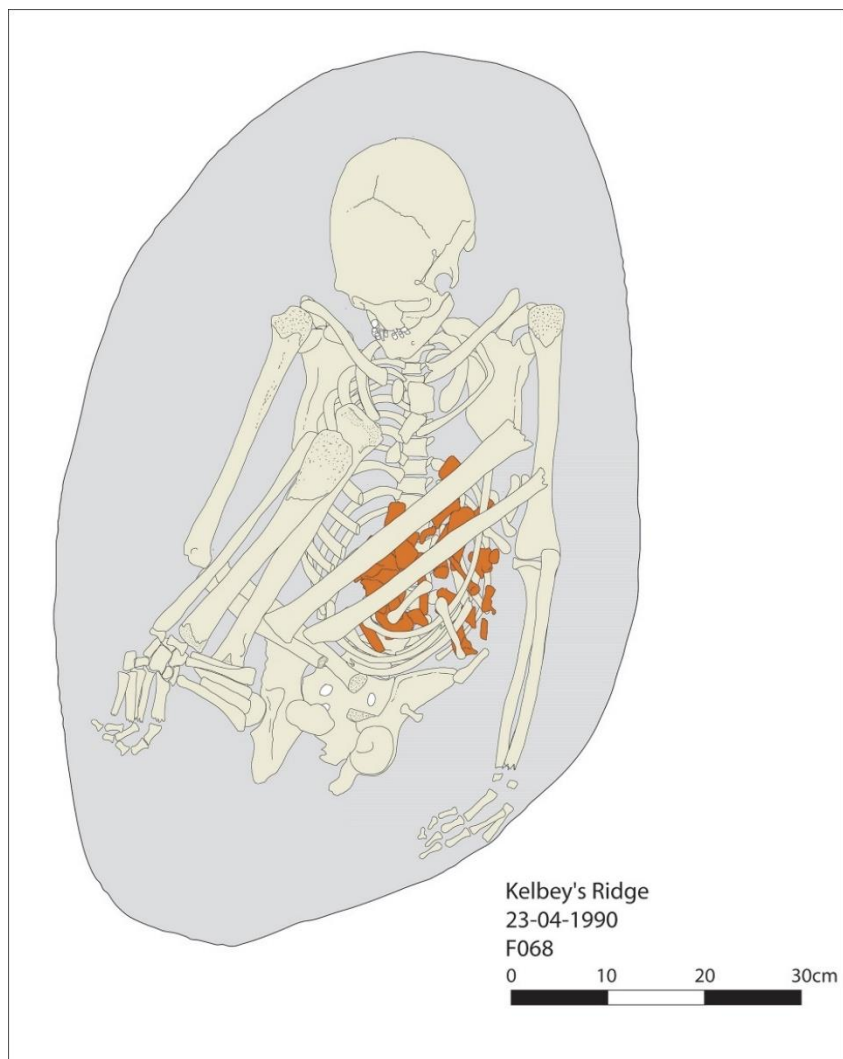


Figure 4.4. Burial F068 at Kelbey's Ridge II including an adult male and the cremated remains of two children. Image courtesy of Hoogland, M. L. P. (2022)

bone and a snuff inhaler made from manatee bone can be found, which could be considered as mortuary goods (Hoogland, 1996). When examining the chest of the 50 year old individual, a secondary interment was identified. Within the left half of the chest, the ribs were disturbed in order to make space for the cremated remains of two children as depicted on figure 4.4 (Hoogland, 2022) (Hofman et al., 1987; 2014, Hoogland, 1996). The cremated remains are distributed in an oval shape, suggesting that they were wrapped in a piece of cloth before they were buried (Hofman et al., 1987, 2014, Hoogland, 1996). The remains show no transverse fracture lines along the long bones, which would indicate that the bones were removed from the flesh and in a dry state before being burned (Hofman et al., 1987, 2014, Hoogland, 1996).

The practice of cremation is highly uncommon for this period of time in the Greater and Lesser Antilles (Hofman, 2014; Keegan & Hofman, 2017; Oliver, 2009). Bodies of the deceased were usually buried within huts assumingly to keep the ancestral spirits close to the living relatives (Oliver, 2009; Viveiros de Castro, 2014). The use of fire during burial rites, however, was more common (Hoogland, 1996). The possessions of the deceased member that would not be inherited by kin were often been burned next to the grave, covering the remains in ashes (Hoogland, 1996; Keegan & Hofman, 2017; Oliver, 2009, Hofman, 2014). For burial F068 these ashes are also present and the following steps for the burial process that involve the burials F068 and F148 have been identified and depicted in figure 4.5 (Hofman & Hoogland, 2016) (Hofman & Hoogland, 2016; Hoogland, 1996):

- 1) A deceased child of five years is buried in the house (F148) and a cranium of a three-year-old child is kept separately in the house.
- 2) The adult male (F068) passes away and is placed in a grave in the house and desiccated near a fire.
- 3) The grave of the child (F148) is opened and the skeletal remains of both children collected.

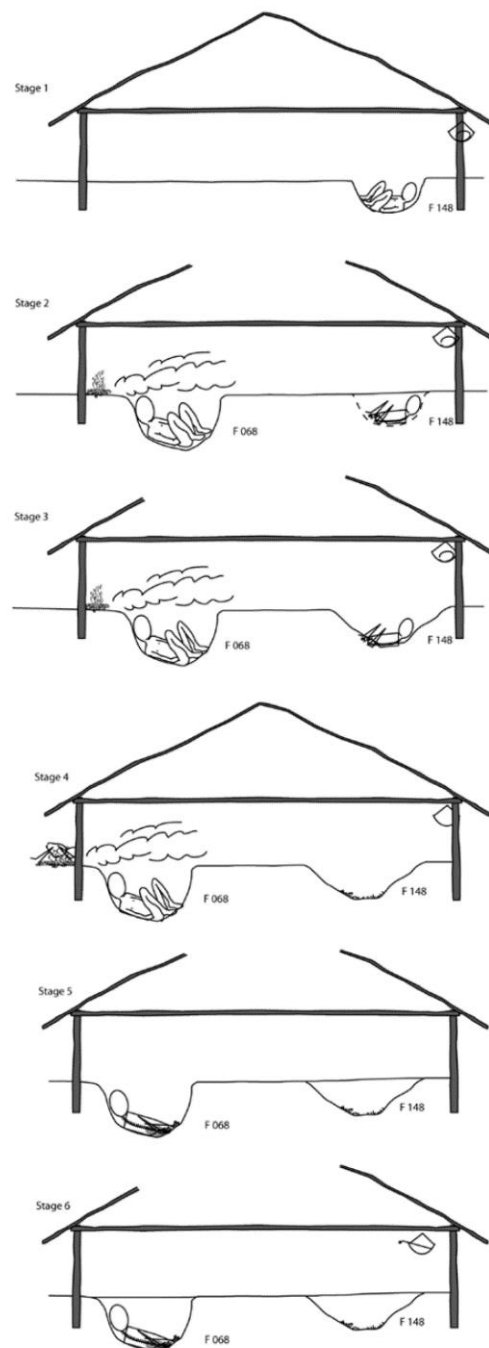


Figure 4.5 Interpretation of the burial process of F068 taken from Hoogland, M. L. P., Hofman, C. L. (2016). *Saba's First Inhabitants*. Sidestone Press, Leiden.

- 4) The remains of two children are being cremated outside the house.
- 5) The grave of the adult male is reopened and the cremated remains are deposited in his ribcage.
- 6) One of the long bones of the adult is taken from the grave and the grave is filled again.

Because of the dry state of the cremated children's remains before they were burned, it is suggested that these remains were buried before they were cremated (Hoogland, 1996). Burial F148 is also disturbed and incomplete which would suggest that it was opened to retrieve the bones in order to be cremated and deposited within the ribcage of the adult in composite burial F068 (Hoogland, 1996). F068 and F148 are also located within the same house which could symbolize a relationship between the deceased individuals.

In the following chapter, the role of inhalers in the ethnographic and ethnohistorical records shall be examined.

Chapter 5:

Snuffing Evidence from Ethnohistoric and Ethnographic Sources

To gain a concrete understanding of the reason why the Kelbey's Ridge inhaler could have been placed inside the burial of F068, the archaeological record alone does not yield enough data to come to any concrete interpretations. In this chapter the ethnohistoric and ethnographic records will be analysed. The cohoba use and burial customs of various Indigenous groups of the Orinoco delta and northern South America will be examined. The ethnohistoric record will also be examined to determine if the Spanish chroniclers documented any native cohoba use in the late fifteenth-early sixteenth century CE.

5.1 Ethnographic Sources

Because the data of past societies that archaeologists and historians study is incomplete, the ethnographic record of different, but comparable, modern-day cultures can offer scientifically significant parallels (Oliver, 2009; Pagán-Jiménez et al., 2014; Rodd, 2002; Safford, 1916). When studying the ritual practices of the cultures of the Greater Antilles, parallels can be found in the Northern parts of the South American mainland as marked on figure 5.1.



Figure 5.1. Map of ethnographic accounts of ritual *A.peregrina* intake

As mentioned in Chapter 2, the roots of the Indigenous cultures (known as Saladoid and Huecoid) that moved north in the Early Ceramic Age (from 400 BCE onwards) lie in this part of South America. Not to mention that the cohoba tree (*Anadenanthera peregrina*) is native to this area and many of the

contemporary communities that live in this area are known to use the hallucinogenic properties of the cohoba seeds (Oliver, 2009; Pagán-Jiménez et al., 2014; Rodd, 2002; Safford, 1916). Even though these peoples have different subsistence economies, live in different environments, and speak different languages, they still share similar traditions to the cohoba ritual under different names (Oliver, 2009; Pagán-Jiménez et al., 2014; Rodd, 2002; Safford, 1916). It should also be mentioned that these ethnographic accounts are all documented by Western researchers who could have described their subjects through a western lens.

5.1.1 Cohoba-Related Snuff Inhalers in Ethnography

Otomacos of the Orinoco Basin (Humboldt & Bonpland, 1881)

One of the earlier complete accounts of the use of hallucinogenic snuffs in the Orinoco basin comes from Alexander von Humboldt, a German botanist, at Urana, 1801 (Humboldt & Bonpland, 1881; Pagán-Jiménez et al., 2014; Safford, 1916; Schultes, 1998). At a Catholic mission on the Orinoco river, he describes a group of Otomacos men preparing and using a snuff called *yupa* or *ñupa* (Humboldt & Bonpland, 1881; Safford, 1916). This snuff is supposed to put its user in a trance and give them visions, not unsimilar to the effects of the cojoba snuff as described by Las Casas (Humboldt & Bonpland, 1881; Oliver, 2009; Pagán-Jimenez et al., 2014; Safford, 1916). What is remarkable, is that Humboldt does not only describe the process of how the snuff is produced, but also specifies the instrument that was used to snuff the powder as depicted in figure 5.2 (Humboldt & Bonpland, 1881; Safford, 1916).



This inhaler seems very reminiscent of the Y-shaped inhaler described in the second chapter. Humboldt also emphasizes that the tribesmen believed that he could not take the snuff without the seven inches long hollow avian bones (Humboldt & Bonpland, 1881; Safford, 1916). This understatement that the ritual would not work without the bifurcated tube suggests the importance of the snuff inhaler as a tool within the rituals of the Otomacos.

Figure 5.2 Snuffing tube used by the Otomacos tribe as described by Humboldt. Berlin Museum taken from Safford W. E. (1916). Identity of cohoba, the narcotic snuff of ancient Haiti. Journal of the Washington Academy of Science Vol. 6, No. 15 (september 19, 1916), pp. 547-562.

Piaroa of the Parguaza River (Rodd, 2002)

In 2000, Robin Rodd stayed for an ongoing six months with José-Luis Díaz, a highly respected Piaroa shaman. The Piaroa are a people of the middle Parguaza River and have been known to partake in a ritual concerning the snuffing of *yopo* (Rodd, 2002; Safford, 1916). *Yopo* is a powder with hallucinogenic properties made with the seed of the *A. peregrina*, similar to cohoba (Rodd, 2002). The

powder consists of a mixture of ash from the bark of the *yopo* tree, burned *yopo* seeds and several *Banisteriopsis caapi* liana cuttings worked into a dough before being baked above a fire (Rodd, 2002). The combination of *yopo* and *B. caapi* is for the Piaroa intimately tied and the shamans almost always take an oral dose of *B. caapi* before snuffing the powder (Rodd, 2002). The snuffing ritual takes place for several hours after the consumption of *B. caapi* and makes use of a circular, fish-tailed wooden tray and bifurcated heron-bone inhaler:

‘‘A circular, fish-tailed wooden tray (*flu 'afamose*) is held in the right hand while the left guides the inhaling device over the tray until the snuff has been fully inhaled. Small blocks of cooked *yopo* are broken with a hard, wooden pestle (*fiua jwawiiwiuka*) immediately preceding inhalation. Excess snuff is dusted off the tray for a second round of inhalation with a small hair and resin brush (*iiua tahepu kunawatsu*). Immediately after inhalation, the bifurcated inhaler is cleaned with a long, thin feather (*iiua duchewui*).’’

~ Rodd, 2002

The bifurcated heron-bone inhaler is a good example of the type of advanced snuff inhalers that the Indigenous peoples of the Caribbean also must have used around the time of the Spanish invasion. It seems similar to the one used by the Otomacos in Humboldt’s report and again it is shown to have a certain significance within the ritual itself (Rodd, 2002).

Yanomamö of the Southern Orinoco Delta (Chagnon, 1992)

The Yanomamö of the southern Orinoco delta have been documented by the American anthropologist Napoleon Chagnon to use hallucinogenic snuffs called *ebena* and *yopo*. *Ebena* is a snuff made from the resin of *Virola elongata* and contains high concentrations of 5-Meo-DMT and DMT. *Yopo* is a snuff made from *Anadenanthera peregrina* and is usually cultivated by the shamans or *shabari*. The shaman is believed to have spirits, or *hekura*, reside in his body and he can use the snuffs for healing rituals and divinations. Older experienced men only need a little of the snuffs in order to reach the preferred trance, while the younger shamans can ‘‘freak out’’ due to an overdose on the hallucinogenic substances. Any male member of the community can become a *shabari* and the snuffs are taken daily by the male members of the community.

Anthropologist Chagnon suspects that the snuffs have a social function within the structure of the community. When the male members are in trance and start to act unpredictable and sometimes even violent, the community accepts that the *yopo* users are in a trance and cannot be accountable for their actions. Like a drunken stupor, the *yopo* users do not have any control over their actions and can therefore not be blamed for their otherwise socially unacceptable behavior. The indirect function of the snuffs is therefore to allow frustrated men to release their pent-up frustration.

The Amazonian Tucano People (Jackson, 1983)

The Tucano people of Northwest Amazonia believe that the shaman is an important figure who “sees” the relationship with the universe. He warns and helps the community to keep the balance with the world and protect the harmony with nature. While protecting the individuals in his care with healing rituals, he can also bring misfortune and illness to their enemies. He protects his community through performing necessary rituals, giving food prescriptions, and making divinations through “seeing” by going into trances. He also protects the fertility of the community by officiating all initiations and ushering all newborn babies. Any male member of the community can become a shaman after at least a year of apprenticeship with an experienced shaman. Shamans interchange between food and “soul food” like *tobacco*, *coca*, *banisteriopsis* & *chicha*.

Shamans can also become “evil” and when they do, they are no longer considered human but they become animal. The trances through which they make the divinations are invoked by a snuff made from the *Virola sp.* and when inhaling these powders into their noses and reaching the preferred trance, they use bifurcated snuff inhalers.

After the death of a Tucanoan shaman, their corpse is quickly buried within the longhouse of their community together with their closely identified ritual paraphernalia. A fire is built above the grave to stop the spirits to leave the grave. After dying, people go to the “deceased people spirit houses” for their specific language group or, if they were bad people during their life, they tend to stick around their graves and need to be exorcised by another shaman.

5.1.2 Deathways in Ethnography

Trio/Tiriyó (Rivière, 1969)

The people of the Trio tribe in northern South America see a correlation between dreams and death. Certain dreams are believed to predict the death of the person to whom the dream comes. *Noeke* (Termite nests) and *rapa* (arrowhead fish) are common indicators that individuals are not long for the world of the living. The souls of Trio Tribesmen can also get lost in “dreams of faraway places” while sleeping so they cannot return to the body when it wakes and the body gets weak and starves. When a shaman appears in your dreams, he can also take your soul away, causing your body to wither and die. When Trio tribespeople die, most of their possessions get destroyed with the use of fire unless they are valuable or have ritual significance, like the shaman’s rattles which contain spirits. Destroying these objects would release the spirits who would affect the world around them for the worse.

Taruma People (Farabee, 1967)

Among the people of the Taruma people of Amazonia it is believed that death is caused by opposing tribes like the Waiwai people who can send evil spirits. They almost always cremate their dead on wooden pyres without formal ceremonies in the woods together with the personal possessions of the deceased. Only valuable personal objects like canoes, bows, and dogs can get inherited by other members of the family. To indicate somebody died, all roads to their home get marked with bundles of leaves. The smoke of the cremation and leaf markers do not serve as ways of intimidation but solely serve to provide information. Only children and shamans do not get cremated but are buried instead. Building a pyre is according to Farabee too much trouble for the cremation of a child and shamans get buried silently, not to disturb the spirits of other shamans.

The Waiwai and Kworokjam (Fock, 1963)

The Amazonian people of the Waiwai tribe believe that there are 3 main causes of death:

- Children die of supernatural diseases called *poyin*
- Old people die of fever called *eperia* because they are weakened. The fever is caused by an evil spirit who used to be human called *Kworokjam*.
- Any soul can be taken at any age by *Kworokjam*, but the Waiwai shaman always returns the souls to their bodies if he does his duties properly. This way the people are depending on the Waiwai shaman and this gives him more social control. Also, if the deceased is not treated properly, the *ekatonimbo* (spirit of the deceased) can spread disease and death among his relatives.

The Waiwai people also cremate their dead but before the sick individual has passed away, they are already isolated from the rest of the community in a special area of the communal hut. Only the spouse or mother of the sick individual sees and treats the patient out of fear that *Kworokjam's* reach would spread to the rest of the village. The cremation ceremonies are, in contrast to the Taruma's, public. The whole community, except the children who are susceptible to *poyin*, usually attends them. The shaman always attends the cremation to protect the villagers against the spirits of the dead and *Kworokjam*. When the fire burns at its highest, the body gets cast into it along with the personal possessions of the individual. Valuable objects can be kept at the request of the offspring of the deceased but sometimes even plants, dogs, the house of the individual, or even the whole village gets burned out of sheer anger.

After the cremation everyone returns to their village and continues their life. If the deceased passed away due to the curse of a shaman, a family member selects a couple of bones from the cremation pile

and becomes responsible for the *parawa*, the revenge. The retrieved bones are kept in cooking pots inside the house, and this custom gave life to the European misconception that the Indigenous populations of the Orinoco delta had cannibalistic tendencies.

Carib/Kalinago Customs (Alhbrinck, 1931 & Kloos, 1971)

Among the Carib/Kalinago peoples of the Lesser Antilles and northern South America, humans are believed to die due to natural evil spirits or due to other people who curse them. Evil spirits like *Yulawai* also prey on the weak (similar to the Waiwai and *Kworokjam*). The deceased usually get buried and some personal effects are placed in the grave along with the body but the rest are burned so the deceased loses connection to the living world. The body gets washed with *papasaka* leaves (*sp. Piper*) and is dressed in clean clothes directly after passing away. The heel is punctuated with a needle to help the soul leave the body and the feet get painted red with *kusewe*. The body is placed in a hammock in the house with the feet to the east because the soul travels to the east after death. A coffin is then made by the men of the village and the body is wrapped in a red piece of cloth and placed in the coffin underneath the hammock.

In the areas that were not reached by the Christian church, Alhbrinck witnessed in 1931 that the Carib/Kalinago still buried their dead inside the house dressed in adorned garments together with cassava, water, and personal effects. They were placed in wooden boats or coffins before they were buried, but Alhbrinck mentions that the dead used to be buried in large pots. After the *aite dei* ('eight day') mortuary feast or the *ormangono* ('one month') feast, the possessions of the deceased are either sold or burned. The family usually lives in the same house until multiple family members are buried underneath it. When all the houses in the village have multiple burials, families start to move away to a new village. Gillin (1936) does however report cases where people leave and burn their house even if only one family member is buried underneath the house.

Wajana People (Alhbrinck, 1956)

The Wajana people of the Guinean highlands believe in natural death as well as evil spirits. If people die of a natural death like old age, they get buried. If people get cursed by a shaman or succumb to evil spirits, they get cremated to destroy the contagious spirit. Cases of sudden death are attributed to spirits, but deaths due to snakebites, drowning, accidents or epidemics are attributed to natural ways to die. Whenever somebody dies, a member of the tribe walks through the village with an instrument made out of rope and bamboo or reed that would produce sounds to scare off malevolent spirits and indicate the passing of a villager.

When the deceased gets buried, a one-meter deep hole is dug inside the house where the individual is dressed in a traditional headdress and other garments and is placed in a half-sitting, half-lying position facing the setting sun. The grave then gets covered in sticks and tree bark before it is filled up with sand. When the body of the individual has to be cremated, this either happens publicly in the village or in the forest with only up to three attendees. The public pyres are intricate and built as small houses. Before they are lit, the throat, wrists, and feet of the deceased are bound with ropes in order to keep the *jolok*, the evil spirit who caused the death, inside the body. The spirit can reside in the top half or the bottom half of the body, and before the body gets burned, half of the bow of the individual gets stabbed in the place where the spirit resides. The evil spirit then travels through the bow back to the *piai* (shaman) who was responsible for the murder. The possessions and ancestral bones of the deceased are gathered next to the pyre and after the cremation, they are wrapped in a cloth and buried.

The cremations in the forest have some additional steps and are led by the Wajana *piai*. The heart of the individual is carved out of his body and put in a pot filled with krapa-oil, maize, pepper, and pieces of *petpë* bush. When the pyre is lit and the pot is placed above the flames, it starts to boil. The heart starts to simmer and this is considered to be the voice of the *jolok*. Upon hearing the simmering heart, the Wajana *piai* smashes the pot and the *jolok* gets sent back to the *piai* who summoned it and is expected to die in a frenzy of rage. All remains of the ceremony get buried on site.

5.2 Ethnohistorical Sources

Because cohoba has been mentioned in many ethnohistorical sources, it has become clear that it must have played a significant role in the cultures of the pre-Columbian Greater Antilles (Oliver, 2009; Safford, 1916). The first description of the ceremonial use of cohoba comes from 1496 and was written by Friar Ramon Pané during the second voyage of Columbus (Safford, 1916)⁴. Pané describes a powder that can be taken through the nose that will intoxicate you to the extent of having no more control over your actions (Pane, 1496 in Colombo, 1571; Safford, 1916). Fernando Colombo, an Italian historian who frequently quotes Pané, adds in his work *Historie* (1571) that the powder was snuffed using a round wooden table and bifurcated tube that was placed in both nostrils (Colombo, 1571; Safford, 1916)⁵. This is the first ethnohistoric record of the Indigenous peoples of the Greater Antilles using the advanced bifurcated snuff tubes and *cemi* trays.

The description of Las Casas in his work *Apologeticahistoria* gives more proof of the usage of multiple specialized ritual artefacts (Las Casas, *Apol. Hist, de las Indias*, Chapt. 166, pp. 445-446, ed. Serrano y Saenz, Madrid. 190)⁶. First, Las Casas describes a hollow tube-like instrument the size of a flute that split into two ends from two-thirds of its length. The two ends were placed in the “*windows of the nostrils*” as the cohoba user drew as much of the finely ground, cinnamon-coloured powder as

⁴ Ramon Pane, (1496), in appendix to Fernando Colombo's *Historie*, cap. XV, f. 134. 1571. ⁶ Ramon Pane, op. cit., f. 1

⁵ Fernando Colombo (1571), *Historie*, cap. XV, f. 134.

⁶ Las Casas. *Apol. Hist, de las Indias*, Chapt. 166, pp. 445-446, ed. Serrano y Saenz, Madrid. 190

he needed through the tube into his nose. Las Casas also describes the cohoba ritual as a custom that the tribesmen would do when facing difficult decisions that they deemed important.

Las Casas describes the cohoba ritual as he had witnessed it, while emphasizing the connection between the ritual itself and all the ritual paraphernalia used. He mentions the handsomely carved low benches called *duhos* and the *cemi* idol, that would have been responsible for the vision that he had been given, and their significance in a successful ritual (Las Casas, *Apol. Hist. de las Indias*, Chapt. 166, pp. 445-446, ed. Serrano y Saenz, Madrid. 190; Safford, 1916). This put more emphasis on the personal connection that the cohoba users could have with these personal *cemies* that would guide them in the spirit realm.

Oviedo has not only mentioned the relevance of the cohoba ritual in his works *Historia General y Natural de las Indias*⁷, but also claimed to have attended a burial ceremony of a *cacique* which is paraphrased as the following (Oliver 2009; Oviedo 1959; Wever 1991):

“First the body of the cacique was bandaged with bands of cotton. The grave was dug and a wooden roof was constructed to provide cover for the body. The chief was sat on his duho inside the grave as his body was adorned with jewels and other prestige goods. Other personal items that he became attached to during his lifetime were also placed in the grave beside him and he was given water, cassava and fruits. Then the grave was closed and fifteen to twenty days of mourning and laments were customary. In these days other caciques would come to mourn and receive movable property of the late cacique.”

~ Oviedo, 1959; Wever, 1991

Oviedo also mentions that at the funeral of the great *cacique* Behechio, two of his wives would let themselves be buried together with their husband (Oliver, 2009; Oviedo, 1959; Wever, 1991). He also mentions two possibilities what happens to the personal effects of the *cacique*. If the *cacique* was personally attached to it, like to his personal *duho* for example, they would be buried together with him in his grave (Oviedo, 1959; Wever, 1991). The other is that his movable property would be given to other *caciques*, so in other words, they would be passed on or inherited by another generation (Oviedo, 1959; Wever, 1991).

⁷ De Oviedo y Valdes, Gonzalo Fernando de, *Historia General y Natural de las Indias*. Madrid 1959

Chapter 6: Discussion and Conclusion

The burial F068 from Kelbey's Ridge II, Saba, a small outpost on the edge of the Greater Antillean *cacicazgos*, shows some remarkable deviations from the rest of the human burials on Saba. Not only was the burial of the adult male disturbed to add the cremated remains of two infants into his chest cavity, but it is also one of the first cases where a ritual snuff inhaling set was discovered in its original context. A small carving of a grouper made out of manatee bone was excavated next to two avian hollow long bones. Together these artefacts could be used for the snuffing of cohoba, an ancient hallucinogenic that was taken in the cohoba ritual. Hispanic chroniclers who arrived in the late fifteenth-early sixteenth century mention the importance of this ritual and its corresponding ritual paraphernalia to the Indigenous communities. Unfortunately, there are not many cases where the original contexts of these ritual artefacts have been documented until the fish inhaler from Saba was unearthed. This thesis aimed to offer new insights on ritual paraphernalia in burial context by answering the following research questions;

“What were the functions of snuff inhalers within the cohoba ritual in the Greater Antilles?”

After examining the archaeological record and different types of snuff inhalers that have been identified, one can conclude that the fish carving found at Kelbey's Ridge II is indeed a snuff inhaler. The presence of the two avian hollow long bones next to the inhaler in the burial indicates that the fish carving is intended to be used with these hollow bones for snuffing. The traces of *A. Peregrina* found inside the fish prove that the fish carving was used in the cohoba ritual. The usage of manatee bone is also a recurring material theme for ritual paraphernalia, as other snuffing tools and vomiting sticks are often also made from manatee bone. One thing that is uncommon for snuff inhalers, however, is the symbology of a fish. Groupers are not known to be associated with the cohoba rituals in the “*Taíno*” mythology of the Greater Antilles; turtles or birds are commonly depicted on the ritual paraphernalia used in the rituals.

6.1 Something Fishy...

When taking the Amerindian Perspectivism ontology into consideration, the importance of symbology and iconography on the edges of the *cacicazgos* becomes clear. The historical record emphasizes that all paraphernalia used in the cohoba rituals would fulfill the role of *cemí*. As a *cemí*, the spirits associated with the objects would travel to the spirit realm during the effect of the cohoba on its user and serve as a guide and protector. This shows the importance of the spiritual function of a *cemí* to a cohoba user. Evil spirits were namely the main reason people were believed to get sick, and only the *behiques* could give the patients instructions to remove them. The *cemí* would be responsible for protecting the individual and keeping him from falling prey to the evil spirits that also existed in the spirit realm. When selecting a *cemí* that would be responsible for such a task, it is to be expected that

the cohoba users get visited by a *cemí* that they were familiar with. For the inhabitants of Kelbey's Ridge II, assuming this site functioned as a fishing outpost of a larger "Taíno" *cacicazgos*, the symbology of a fish would be significant because of its familiarity with the marine life of the fishing grounds of the Saba Bank. The perspectivistic ontology assumes a certain "connectedness" with the flora and fauna of the direct living environment of an individual. The subsistence of the inhabitants of Kelbey's Ridge II as a fishing outpost and the dependence on marine life and the familiarity with fish as animals can suggest an explanation for this unusual symbology. The same could be assumed for the fish inhaler found at Sandy Hill, Anguilla, which also is a very suitable site for a fishing outpost of a *cacicazgos*.

Saba had prior occupations before Kelbey's Ridge II (1300 – 1350 CE) which are evidentiary in sites such as Spring bay Ia & Ib (400 - 600 CE & 800 - 1200 CE). It might explain why the iconography of a turtle might not be used, as it is a more common icon associated with the cohoba ritual because of its spiritual role in "Taíno" mythology. The inhabitants of Saba prior to 1300 CE used ceramics that can be classified as Cedrosan Saladoid and Mamoran Troumassoid subseries. The Spanish Chroniclers have left modern researchers with the image of a culturally homogenous Caribbean, due to misinterpretation and oversimplification in their chronicles. When using the Amerindian perspective of an overall connectedness, it suggests a more culturally diverse Caribbean with different occupations over time.

The Amerindian perspective does not assume that the concept of borders, as they were drawn up by the Europeans during the colonization of the Caribbean, was known in the pre-Columbian Lesser Antilles. It leaves the probability that mobility through seafaring was a much bigger part of the subsistence strategies than Western researchers suspect through a Western lens. If these mobile groups would travel from the Greater to the Lesser Antilles, the inhabitants of Saba must have come into contact with these mobile groups. If characteristics of the culture of the inhabitants of Saba, who based their subsistence economy on fishing on the Saba bank, were fused and mixed with the mobile "Taíno" expansionists' culture, it would explain why the fish iconography was chosen instead that of a turtle.

"What are the burial customs concerning ritual artefacts such as snuff inhalers in the Greater Antilles?"

Assuming the Saba fish functioned as a snuff inhaler and a *cemí*, the question if it was deliberately placed in the grave still remains. Because the context of so many snuff inhalers is missing, there is still much to discover about how these artefacts were treated. The historical sources suggest that ritual objects of significance to a community such as *cemí* idols could be inherited by the kin of the deceased. Some personally significant artefacts, such as the *duho*, would get buried alongside the deceased individuals. The rest of the personal objects would get destroyed using fire to ease the individuals transition into the spirit world.

In the case of Kelbey's Ridge II, however, the two hollow bird bones next to the inhaler can serve as an indication that the snuffing set was meant to be complete and ready for usage. As noted before, the fish inhaler cannot be used efficiently without the matching hollow long bones to insert into the gills and snuff through. The presence of these bones inside the grave indicates that the snuffing set was deliberately kept together. Assuming the set was intentionally kept together, it is logical that the set was also deliberately placed into the grave. If the snuff inhaler was unintentionally discarded, it is improbable that the snuffing set would still be complete with the two long bones.

When also taking the ethnographic and ethnohistorical records into the equation, one of the more noticeable burial practices is the inheritance and destruction of personal properties. Among almost all the groups of the Caribbean and Northern South America that have currently been documented, it is customary to either inherit or burn the personal possessions of the deceased individual at their funeral to help them transition from the physical world into the spiritual. More valuable objects like a canoe or a dog are often inherited by relatives of the deceased or, in case of the death of a chief, other chiefs. It is very crucial however to note that both in the ethnohistorical and ethnographic record cases have been documented. Personal belongings of high personal significance to the individual, such as *duhos* or other *cemies*, were given as funerary gifts alongside them in the grave. This was the case among the 'Taíno', Tucano, Trio, Taruma, Carib/Kalingo and Wajana peoples.

When examining the archaeological reports on Kelbey's Ridge II, traces of ashes have been identified in burial F068 which indicates that a fire was made when the grave was still uncovered. This suggests the practice of the destruction of personal property with fire as a burial custom. All the personal property of the individual were either burned, inherited, or placed inside his grave as objects of personal significance. Therefore, it is logical to assume that the snuff inhaler found in F068 along with the hollow bird bones, were deliberately placed inside the burial because they were of high personal significance to the adult male.

*“Who are documented in the ethnohistorical and ethnographic records to have prepared and used *Anadenanthera peregrina*?”*

From the historical sources Oviedo and Las Casas mention that only the *caciques* and *behiques* partook in the cohoba ritual. The ritual is depicted as a highly respected ritual that is only used by the leaders, social or ritual, of communities. The *behique* is also documented to prepare the snuff on his own in the presence of other community members in a hut. In the ethnographic record, something else seems to be the case among the different groups of the Orinoco delta. The Otomacos seem to prepare and use the snuffs in male groups. Any group of men can use bifurcated snuff inhalers that are believed to give the cohoba mixture its hallucinogenic properties in order to reach an altered state of mind.

Among the Piaroa, there are highly respected shamans who prepare the snuffs. These shamans have ritual paraphernalia like wooden snuffing trays, bifurcated heron inhalers, and wooded pestles to crush the blocks of *yopo*. The presence of specialized shamans who fulfill only ritual tasks is also customary among the Tucano. Solely the shamans can “see” and interpret the relationship between humans and nature and only they can perform the rituals necessary to keep the balance. Even though the shaman can give people certain food prescriptions to protect themselves, only trained shamans are able to make divinations through drug-induced trances. The shamans are also known to possess powerful ritual paraphernalia and are even in some cases buried with them after their passing.

Among the Yanomamö, it is more generally accepted for any male individual to use the snuffs as a way to release any pent-up frustration. The plants necessary for the preparation of the snuff are often cultivated by a specialized shaman. To become a shaman, male individuals must undergo a year of training before they are recognized as *shabari*. Even though only the shamans are believed to have strong spiritual connections, this does not seem to be a requirement to partake in snuffing.

“*What was the relationship between pre-Columbian humans and their ritual paraphernalia?*”

First, it has become clear that the fish carving found in burial F068 is, although it has a different symbology, is a ritual snuff inhaler. Not only because of the typical Y-shaped inner structure of the carving, but also due to residue analysis and the presence of two hollow avian long bones in its context, it is almost certain that the carving has been used as a snuff inhaler. The ethnohistoric record also shows that these snuff inhalers could be considered as *cemies*, which allowed the *caciques* and *behiques* to manifest personal relationships with these objects. Secondly, through the presence of the matching avian long bones and comparison of ethnohistoric and ethnographic parallels, it has also become very likely that the carving was deliberately placed in the grave instead of unintentionally discarded. Instances from the ethnohistorical and ethnographic record support this theory and even give it more depth. Both records show instances where individuals who fulfilled specific ritual functions within a community, were buried together with a personal ritual object. When we apply this theory to Kelbey’s Ridge II, it becomes a possibility that the fish carving is a personal possession of the adult male buried in F068. Assuming that the snuff inhaler was a personal belonging of the buried individual, it becomes likely that he often partook in the cohoba ritual with his personal fish inhaler.

Proving that the individual was a cohoba user, would indicate that he possibly fulfilled a specific ritual function within the Kelbey’s Ridge II community. Throughout the ethnohistorical record, the chroniclers emphasize the social relevance of the cohoba ritual, thus making it possible that every community had its own cohoba users who fulfilled the functions of a ritual specialist. This is also represented in the ethnographic record, where almost every single community has its own version of a ritual specialist, either as an individual or as entire group. The male in F068 could have been the ritual

specialist of the fishing outpost on Kelbey's Ridge II, who reached an altered state of mind using his personal fish inhaler.

The conclusion posed in this thesis is constructed using an Amerindian perspectivistic framework. The experiment of examining the archaeological, ethnographic, and ethnohistorical, avoiding a 'Western lens' and using Amerindian concepts in order to construct a possible reality only produces a possibility. The western lens is something that Western archaeologists deal with. To prove this, future research on the ethnographic and archaeological records should be conducted. Studying the ways of the native peoples of the Orinoco delta and the Amazon could offer more insights into the specific burial rites for ritual specialists. Object biographies of personal ritual paraphernalia can also offer a better understanding of how these unique and important artefacts were passed down through generations. Looking at these artefacts not just as objects, but as personal instruments infused with spiritual properties, can indicate just how important the role of these deceptively simple tools was in Lesser Antillean past societies.

References

- Ahlbrinck, W. (1931). *Encyclopedie der Karaïben*. Koninklijke Akedemie van Wetenschappen.
- Ahlbrinck, W. (1956). *L'Encyclopédie des Caraïbes*. Centre National de la Recherche Scientifique.
- Chagnon, N. A. (1992) *Yanomamo – The last days of Eden*. Harcourt Brace and Company.
- Coppens, W., & Cato-David, J. (1971). Aspectos etnograficos y farmacologic os el yopo entre los Cuiva-Guajibo. *Antropologica*, 28, 3-24.
- Curet, L. A. (2002). The chief is dead, long live... who? Decent and succession in the protohistoric chiefdoms of the Greater Antilles. *Ethnohistory* 49, 259-280. DOI: 10.1215/00141801-49-2-259
- Curet, L. A., & Oliver, J. R. (1998). Mortuary practices, social development, and ideology in precolumbian Puerto Rico. *Latin American Antiquity*, 9, 217–239.
- Davilar, J., Verbeeck, L., Wever, N., & Woesndregt, R. (1991). *Historische Bronnen van het Caribbisch gebied. Hoofdstuk IV. Religie, mythen en riten*. Universiteit Leiden.
- Descola, P. (1986). *La nature domestique: symbolisme et praxis dans l'e'cologie des Achuar*. Maison des Sciences de l'Homme.
- Descola, P. (1992). Societies of nature and the nature of society. In A Kuper (Ed), *Conceptualizing society*, pp. 1-19. Routledge.
- Descola, P., & Palsson, G. (1996). *Nature and Society: Anthropological perspectives*. Routledge.
- Farabee W. C. (1967). The central Caribs. *University of Pennsylvania, the University Museum Anthropological Publications*. Volume 10. Reprint of 1924 edition.
- Fitzpatrick, S. M., & Merlin, M. D. (2019). *Drugs and Psychotropics*. Society of Archaeological Sciences Encyclopedia. Wiley: Scholar One Manuscripts. DOI:10.1002/9781119188230.saseas0202
- Fitzpatrick, S. M., Kaye, Q., Feathers, J., Pavia, J. A., & Marsaglia, K. M. (2009). Evidence for inter-island transport of heirlooms: luminescence dating and petrographic analysis of ceramic inhaling bowls from Carriacou, *West Indies Journal of Field Archaeology*, 343, 247–266. <https://doi.org/10.1016/j.jas.2008.08.007>
- Fock, N. (1963). *Waiwai: Religion and Society of an Amazonian Tribe*. The National Museum of Copenhagen.
- Garcia Arévalo, M. A., (2019). *Taínos: Arte y Sociedad*. Banco Popular Dominicano.
- Helms, M. W. (1986). Art styles and interaction spheres in Central America and the Caribbean: polished black wood in the Greater Antilles. *Journal of Latin American Lore*, 12(1), 25–43.
- Hofman, C. L. (1993). “In search of the native population of pre-Columbian Saba AD 400–1450. Part one. Pottery styles and their interpretations.” Ph.D. dissertation, Leiden University.
- Hofman, C. L., & Hoogland, M. L. P. (2014). Kelbey’s Ridge 2, a 14th century Taíno settlement on Saba, Netherlands Antilles. In The end of our third decade. Papers written on the occasion of the 30th anniversary of the Institute of Prehistory, edited by C. Bakels, pp. 163–181. *Analecta Praehistorica Leidensia*, 26 vol. 2.
- Hoogland, M. L. P. (1996). “In search of the native population of pre-Columbian Saba AD 400–1450. Part two. Settlements in their natural and social environment.” Ph.D. dissertation, Leiden University.
- Hoogland, M. L. P., Hofman C. L., & Boomert, A. (2011). *Argyle, St. Vincent: New insights into the Island Carib occupation of the Lesser Antilles*. Paper presented at the XXIV Congress of the International Association for Caribbean Archaeology. Martinique Humboldt, Alexander von, and Aimeé Bonpland 1881 Voyage aux regions équinoxiales, Vol. II. George Bell and Sons.
- Hoogland, M. L. P., & Hofman, C. L. (2016). *Saba’s First Inhabitants*. Sidestone Press.
- Jackson, J. E. (1983). *The Fish People – linguistic Exogamy and Tukanoan Identity in Northwest Amazonia*. Cambridge University Press.
- Kaye, Q. (1999). Intoxicant Use in the Prehistoric Caribbean with Particular Reference to Spouted Ceramic Inhaling Bowls. *Papers from the Institute of Archaeology*, 10, 55–73. DOI:10.5334/pia.136.

- Keegan W. F., & Hofman, C. L., (2017). *The Caribbean Before Columbus*. Oxford University Press DOI: 978-0-19-060525-4
- Keegan, W. F., (1992). *The people who discovered Columbus*. University Press of Florida.
- Kloos P., (1971). *The Maroni River Caribs of Surinam*. Van Gorcum.
- Las Casas, B. de. (1951). *Historia General y Natural de las Indias*. 3 volumes, edited by A Millares Carlo. Fondo de Cultura Económica.
- Las Casas. Bartelomeo. de, *Apolog. Hist, de las Indias, Chapt.* 166, pp. 445-446, ed. Serrano y Saenz. (1909).
- McGinnis, S. A. M. (1997). *Ideographic Expression in the Pre-Columbian Caribbean*. Dissertation at University of Texas.
- Martyr d'Anghera, P. (1970). *The eight decades of Pedro Martyr*. New York University Press.
- Oliver, J. R., McEwan, C., and Casas A. (2008). *El Caribe precolombino: Fray Ramón Pané y el universo taíno*. Ministerio de Cultura, Museu Barbier Mueller d'Art Precolombí, Museo de América, Fundación Caixa Galicia.
- Oliver, J. R. (1999). *The 'La Hueca Problem' in Puerto Rico and the Caribbean: Old problems, New perspective and possible solutions*. Archaeological Studies Leiden University. Faculty of Archaeology.
- Oliver, J. R. (2008). El universo material y espiritual de los taínos. In Oliver J. R., McEwan C and Casas A., *El Caribe precolombino: Fray Ramón Pané y el universo taíno* (pp. 137–201). Ministerio de Cultura, Museu Barbier-Mueller d'Art Precolombí, Museo de América, Fundación Caixa Galicia.
- Oliver, J. R. (2009). *Caciques and Cemi Idols. The Web Spun by Taíno Rulers between Hispaniola and Puerto Rico*. University of Alabama Press.
- Ostapkowicz, J. M., Ramsey, C.B., Wiederhoeft, A.C. and Wilson, S. (2011). Treasures... of black wood, brilliantly polished: Five examples of Taíno sculpture from the tenth-sixteenth century Caribbean. *Antiquity* September, 2011.
- Ostapkowicz, J. M. (2020). Conduits to the supernatural: Bifurcated sniff tubes in the pre-Columbian Caribbean. *Journal of Caribbean Archeology*, volume 20, 2020 University of Oxford.
- De Oviedo y Valdes. F. (1959). *Sumerio de la natura historia de las Indias* (1525). 5 vols.
- De Oviedo y Valdes, G. F. (1959). *Historia General y Natural de las Indias* (1851). 5 vols.
- Pagán-Jiménez, J. R., & Carlson, L. A. (2014). Recent Archaeobotanical Findings of the Hallucenogetic Snuff Cojoba (*Anadenanthera Peregrina* (L.) Speg.) in *Precolonial Puerto Rico. Latin American antiquity*, 2014-03, Vol.25 (1), p.101-116. <https://doi.org/10.7183/1045-6635.25.1.101>
- Pané, Ramón [annotated version of J. J. Arrom] (1974) Fray Ramón Pané: *Relación Acerca de las Antigüedades de los Indios*. Nueva versión [1497– con notas, mapa y apéndices por José Juan Arrom. Siglo XXI Editores, México, 1498]
- Rivière, P. (1969). *Marriage among the Trio*. Clarendon Press.
- Rodd, R. (2002). Snuff synergy: Preparation, Use and Pharmacology of Yopo and Banisteriopsis Caapi Among the Piaroa of Southern Venezuela. *Journal of Psychoactive Drugs*, 34, 3, 273- 279. DOI: 10.1080/02791072.2002.10399963
- Rouse, I. (1992). *The Taínos: The people who greeted Columbus*. Yale University Press.
- Safford W.E. (1916). Identity of cohoba, the narcotic snuff of ancient Haiti. *Journal of the Washington Academy of Science*, 6, 15 (september 19, 1916), pp. 547-562.
- Schaffer W. C., Carr, R. S., Day J. S., & Pateman M.P. (2012). Lucayan-Taíno Burials from Preacher's Cave Eleuthera Bahamas. *International Journal of Osteoarchaeology*, 22, 45-69. DOI:10.1002/oa.1180
- Schultes R. E., & Siegel, P. E. (2010). Continuity and change in the evolution of religion and political organization on pre-Columbian Puerto Rico. *Journal of Anthropological Archaeology*, 29, 302–326. DOI: 10.1016/j.jaa.2010.04.002

Schultes R. E. (1998). Antiquity of Use of New World Hallucinogens. *The Heffer Review of Psychedelic Research*, Volume 1, 1998.

Viveiros de Castro, E. B. (1998). Cosmological Deixis and Amerindian Perspectivism. Oxford: Royal Anthropological Institute of Great Britain and Ireland. *The Journal of the Royal Anthropological Institute*, 1998-09-01, Vol.4 (3), p.469-48. DOI: 10.2307/3034157

Viveiros de Castro, E. B. (2002). O nativo relative. *Mana*, 8(1), 115–144. DOI: 10.1590/S0104-93132002000100005

Viveiros de Castro, E. B. (2014). *Perspectivism. Cannibal Metaphysics*. University of Minnesota Press, Univocal Publishing.

Wilson, S. M. (1990). *Hispaniola: The chiefdoms of the Caribbean in the early years of European contact*. University of Alabama Press. DOI: 978-0-8173-8100-4

Figures:

Figure 1.1. Map of the Caribbean with Saba indicated in red, courtesy of Menno Hoogland 2021 taken from Hofman, C. L., Stancioff C. E., Richards. A., Auguiste I. N. (2021). Resilient Caribbean Communities: A Long Term Perspective on Social adaptability to Natural Hazards and Sustainability in the Lesser Antilles. *Sustainability*, 2021, 13, 980.

Figure 1.2 Replica of the Bifurcated Wooded Inhaler taken from Ostapkowicz, J. M. (2020). Conduits to the supernatural: Bifurcated sniff tubes in the pre-Columbian Caribbean. *Journal of Caribbean Archeology*, volume 20, 2020 University of Oxford

Figure 2.1 Illustration of cohoba seeds as taken from Safford W. E. (1916). Identity of cohoba, the narcotic snuff of ancient Haiti. *Journal of the Washington Academy of Science*, 6, 15 (september 19, 1916), pp. 547-562.

Figure 2.2 An interpretation of a cohoba user taken from García Arévalo, M. A. (2019). *Táinos: Arte y Sociedad*. Banco Popular Dominicano.

Figure 2.3 Duho made out of guayacán wood of unknown origin taken from García Arévalo, M. A. (2019). *Táinos: Arte y Sociedad*. Banco Popular Dominicano.

Figure 2.4 Cemí idol with a snuff tray on its head of unknown origin taken from García Arévalo, M. A. (2019). *Táinos: Arte y Sociedad*. Banco Popular Dominicano.

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Figure 4.4 Burial F068 at Kelbey's Ridge II including an adult male and the cremated remains of two children. Image courtesy of M. L. P. Hoogland (2022). Personal Communication

Figure 4.5 Interpretation of the burial process of F068 taken from Hoogland, M. L. P., Hofman, C. L. (2016). *Saba's First Inhabitants*. Sidestone Press, Leiden.

Figure 5.1 Map of ethnographic accounts of ritual A.peregrina intake.

Figure 5.2 Snuffing tube used by the Otomacos tribe as described by Humboldt. Taken from Safford W. E. (1916). Identity of cohoba, the narcotic snuff of ancient Haiti. *Journal of the Washington Academy of Science*. 6, 15 (september 19, 1916), pp. 547-562.

Tables:

Table 3.1 Mentions of hallucinogenic snuffs in ethnographic sources.

Table 3.2 Mentions of hallucinogenic snuffs in ethnohistoric sources.