Adornos and Cosmological Expression

An Iconographical Analysis of the Zoomorphic Adornos found at the Amerindian Site of El Flaco (13th - 15th Century), Northwestern Dominican Republic

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1. Introduction

For thousands of years humans have lived in a world filled with images (Mitchell 1986). Studies of images, within the disciplines of art history and archaeology, have revealed the complicated relationship of images and the people, who interacted with them. Similar to a language, images involve a symbolic system of communication, in which ideas of the creators and viewers, concerning cosmological and sociological concepts, are expressed (Helms 1995). Images, produced by Caribbean communities from the early Ceramic Age bearers of the Saladoid culture to the so-called Taíno encountered by the Europeans, have been deciphered in the past by art historians and archaeologists, and revealed an immersion of cosmological concepts, including the creation of the world, heroes who brought cultural gifts, and animals (Petitjean Roget 1997). However, we are far from revealing all the information the images of the pre-colonial communities of the Caribbean hold, or understanding their significance.

A significant source of information, concerning cosmological concepts, are the zoomorphic and anthropomorphic iconography, that frequently adorns the pottery of ceramic cultures in the Caribbean. Such iconography is commonly found on adornos, which are small zoomorphic, anthropomorphic and anthropo-zoomorphic headlugs that were appended to ceramic vessels. Despite the abundance of zoomorphic and anthropomorphic iconography, on copious adornos, and their indisputable symbolic importance, little systematic research has been done (Waldron 2010). As a result, many questions concerning the identification, classification and cultural relevance of adornos remain largely unanswered.

To address this issue, a sample of zoomorphic adornos, from the late pre-colonial site of El Flaco in the northwestern Dominican Republic, is systematically studied. The research sample consists of 43 adornos, which were recovered from three fieldwork campaigns from 2013 to 2015, from the site of El Flaco (13th - 15th century CE) (fig. 1). Excavations at El Flaco are part of the ERC-synergy NEXUS1492 project: New World encounters in a Globalizing World, Project 1: "Transformations of Indigenous Caribbean Cultures and

Societies Across The Historical Divide", directed by Prof. dr. C.L. Hofman, and conducted by Prof. dr. C.L. Hofman and Dr. M.L.P. Hoogland (Hofman and Hoogland 2015).

The site of El Flaco is a pre-colonial habitation site, which was inhabited by the so-called Taíno. It is situated in the northwest of the Dominican Republic, where the site is protected by the *Cordillera Septentrional* in the north and watches over the *Valle del Cibao* in the south. The site is in the environs of the so-called 'Ruta de Colón', through which Christopher Columbus travelled on his second voyage. The ceramics unearthed at the site are part of the Chicoid and Meillacoid series (de Ruiter 2012).



Fig. 1: Map of the Dominican Republic with the location of the site of El Flaco and El Cabo (after Google maps 2016).

1.1 Objectives

The objective of my research is to address the largely unknown cultural relevance of adornos and contribute to a better insight into the functions and meanings adornos have had in the lives of the pre-colonial communities of the Caribbean. It should be noted that a discovery of the meanings that were possibly assigned to the adornos is difficult to reach, and the accuracy cannot be guaranteed, as the adornos were made in a different time and place. However, further research on adornos may provide more solid ground for future research on the meanings and functions adornos possibly had to the pre-colonial communities of the Caribbean.

1.2 Research questions

The main research question is the following: What is the cultural meaning of the animals depicted on the zoomorphic adornos from the site of El Flaco (13th - 15th century CE), in the known traditional narratives and the cosmology of the so-called Taíno? This main question is divided into four sub-questions. The first question is related to the cultural background: What kind of animals are described in the early colonial historic sources to be connected with the Taíno worldview? The three following questions focus on the three levels of iconographical analysis: What kind of features and patterns can be recognized on the adornos? What kind of animals are represented by means of these features and patterns? What is the intrinsic meaning of these animals in the cosmology of the Taíno?

1.3 Methods, theory and approach

To discover which animal species are represented on the adornos, and what cultural meanings these species possibly had in the worldview of the 'Taíno', the zoomorphic adornos are studied using an iconographical analysis as developed by Panofsky (1939), consisting of a three-stage model. This three-stage model includes the pre-iconographic description, the iconographical analysis proper, and the iconological analysis. Furthermore, the classificatory system for the characteristics of 'Taíno' adornos, as developed by Oudhuis (2008), is applied in the pre-iconographical description. Although this system is developed for the analysis of the adornos found at the site of El Cabo in the southeastern Dominican Republic (fig. 1), it can be used for other ceramic assemblages, such as the adornos of El Flaco. Additionally, inspiration is taken from the research of Moravetz (2005) and Waldron (2010) on zoomorphic adornos from the Saladoid culture.

Furthermore, a multi-disciplinary approach is applied, confronting the archaeological dataset with traditional narratives on the cosmology of the 'Taíno'. Early colonial historic sources are studied to draw inference upon the significance of certain species in the Taíno worldview. It concerns texts from Ramón Pané, who participated in Columbus's second voyage and recorded 'Taíno' narratives (Petitjean Roget 1997).

1. 4 Outline of the thesis

In the following chapter we look into the role of animals in the cosmology and creation narratives of the so-called Taíno to provide a basis for the iconographical analysis. The subsequent chapters are divided based on the three-stage model, as developed by Panofsky (1939), which consists of three objects of interpretation and an act of interpretation. Chapter three is concerned with the primary or natural subject matter, which is interpreted by means of a pre-iconographic description. The object of interpretation in chapter four is the secondary or conventional subject matter, which is interpreted through an iconographical analysis proper. Finally, chapter five is concerned with the intrinsic meaning or content of the images on the adornos, which is interpreted by means of an iconographical synthesis or iconological analysis. Chapter five is followed by a discussion, and the final chapter consists of a conclusion.

2. The Taino and their cosmos

Following Panofsky (1939), for an iconographical analysis, it is essential to have knowledge of the recurrent themes and concepts in the lives of the creators of the images. A person who is, for instance, not familiar with biblical stories will not be able to identify an image of the Last Supper. Therefore, in this case, we have to familiarize ourselves with the themes and concepts present in the lives and beliefs of the Taíno. This chapter presents a general outline of the Taíno, to contextualize the adornos and identify the people who have interacted with them. Furthermore, significant elements in the cosmology of the Taíno peoples are discussed. Finally, we explore the role of animals in the creation narratives of the Taíno, as recorded by Friar Ramón Pané.

2.1 The Taino

For approximately five thousand years, long before the arrival of Columbus, people have been living on the Caribbean islands (Wilson 1997). Subsequent to the first colonization, the Caribbean islands have attested to interactions between peoples from diverse backgrounds. The Caribbean islands were hardly ever isolated, and are recognized with a dynamic and interconnected character. The inhabitants of the Caribbean islands had the knowledge necessary to be able to move between the islands, and from South and Central America, which they probably did frequently (Hofman *et al.* 2014).

Interaction probably resulted in some shared cultural characteristics, throughout the Caribbean islands, in terms of symbols and practices. However, these were likely manipulated by social agents resulting in different uses and meaning (Curet 2014). In northern Hispaniola, by means of interaction, potters from distinctive social groups would imitate or assimilate traits from another culture, which were modified and recreated according to a culture's own criteria, and thus maintaining cultural differences. In northern Hispaniola the coexistence of a diversity of social groups, around the time of contact, has been attributed to the Taíno (Ulloa Hung 2013).

The 'Taíno' term and concept has been generally used to refer to a type of cultural identity shared by the social groups that inhabited the Greater Antilles during the time of

contact with Europeans. This view supposes the presence of a shared cultural background between these groups as a result of a mutual ancestry. In recent years many problems with this view have been revealed (Curet 2014). One of these problems is that the term 'Taíno' is used to refer to a false cultural homogeneity throughout the Greater Antilles, which actually consists of much greater diversity in terms of ethnicity, languages spoken, and political groups (Curet 2014; McGinnis 1997). However, shared commonalities can be recognized. For instance, concepts as cemíism and personhood probably shared relatively universal standards among social groups throughout the Greater Antilles (Curet 2014).

The so-called Taíno are described as demonstrating significant social differentiation and political elaboration at the time of European contact (Wilson 2007). In Hispaniola there were highly refined political territories at this time (Wilson 1990). The sociopolitical network of the Classic Taíno consists of chiefdoms (*cacicazgos*) ruled by chiefs (*caciques*), which consist of many smaller villages (*yucayake*). The chiefs had control over social, economic and ritual aspects of life (Torres 2013).

Fishing and hunting formed a significant food source for the Taíno peoples. Dogs were bred for food and hunting purposes, as a particular dog species was essential for hunting *hutía*, a nocturnal rodent. Furthermore, small birds, such as pigeons and turtledoves were domesticated, and mallards and other migrating ducks were hunted. Such hunting of natural fauna formed a significant part in the Taíno diet. Furthermore, in coastal mangrove swamps crabs, turtles and oysters were collected to be eaten. Additionally, the significance of the meat of iguanas was reported by Spanish chroniclers (Veloz Maggiolo 1997). The above mentioned animals can appear on ceramic animal imagery because of their capacity as utilitarian resources for those who would eat them (Waldron 2010).

2.2 Taíno cosmology

The Taíno peoples were keen observers of the dynamics of their environment. The knowledge they derived from the observation of their environment, and the interpretations on what manner the system of the world is structured and functions is called cosmology (Oliver 1997). Unfortunately, we do not have literary documents written by the Taíno peoples, which means we must depend on the documents of

Spanish chroniclers, in particular documents written by Ramón Pané, to reconstruct the Taíno cosmology. One must be aware that these documents are incomplete, secondary sources affected by bias (McGinnis 1997; Curet 2003). Therefore, one must remain critical in reviewing these documents. Furthermore, the informants Pané encountered were from a Macorix village in Hispaniola, in which the native language was not Taíno, and their beliefs may not have been shared across different villages (Keegan 2013). However, it is likely that there were major similarities in cosmology across the island.

The Taíno cosmology should not be viewed as primitive or superstitious, without a basis in reality. Their beliefs are, in fact, substantial philosophical ideas about the cosmos, based on keen observations of their environment, including both concrete experiences and perceived experiences, such as dreams and hallucinations (Oliver 1997). The cosmological views of the Taíno peoples reflect a recognition of the dynamics of the universe, in which there is a constant turn between order and disorder (Reichel-Dolmatoff 1975 in Oliver 1997). They sought to maintain stability and order in the cosmos, for which a lot of energy has to be spend. Many of the rituals and ceremonies, conducted by the Taíno peoples, served to maintain or restore order in the cosmos, and stimulate social integration, such as the *areíto* and the *batey* (Oliver 1997).

Taíno universe

Within the Taíno worldview, and in many other pre-Columbian cultures in the Americas, the universe is seen as concentric; comprising of three distinct layers. These three layers represent three planes of reality; the subterranean waters below, the earthly plane in the middle and the celestial vault above (fig. 2). All three planes are connected by sacred caves (Siegel 1997). Owls and bats are, therefore, of significance in Taíno cosmology, as these animals are frequently found in caves or caverns. Caves are regularly used as sanctuaries for ritual ceremonies as well (Keegan and Carlson 2008). Additionally, the axis mundi, which can be represented by a variety of subjects, provides a bridge for the people from the earthly plane to the spirit world above, and thus connects the various layers of the cosmos (Siegel 1997).

Through these three domains energy transfers occur, in a manner that the energy within the Taíno universe remains balanced over the three realms. Thus when energy is taken from one part in the system, it must be restored, which is done by means of ceremonies, often through animal actors or culture heroes. In these ceremonies, communication occurs between the three realms (Oliver 1998). For these reasons, animals that are able to move freely through the three realms were revered. For example, sea turtles have the ability to move freely from the sea to land. Additionally, birds, who can fly to the sky and walk on land, especially the ones who can also enter water, are likely to have had a special place in Taíno cosmology (Keegan and Carlson 2008).

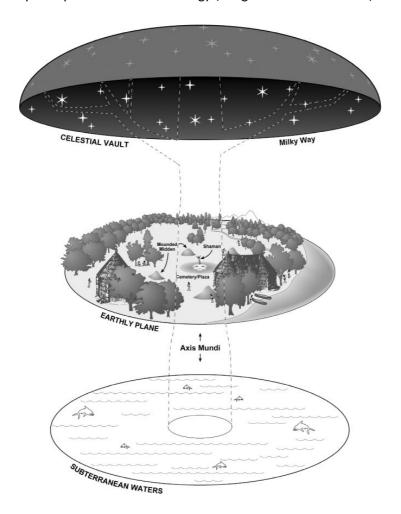


Fig. 2: Representation of the Taíno cosmos (Siegel 2010, 308).

Shamanism

Shamanism is an integral component in Taíno cosmology (Alegría 1997). The shaman or *behique* has the ability to transform into a spiritual creature by means of an altered, or shamanic, state of consciousness, which is triggered by the inducement of a strong

hallucinogen, called *cohoba* (VanPool 2009). This state allows the shaman or *behique* to travel along the axis mundi through the various realms of the cosmos. In the supernatural realm the shaman or *behique* often requests guidance or knowledge from the spirits, for instance in establishing the cause of an illness (VanPool 2009; Alegría 1997). The shaman or *behique* thus serves as an intermediary between the people living in the earthly plane and the spirit world (Siegel 1997). Images found on Taíno artifacts are regularly associated with the *cohoba* ritual (Alegría 1997).

Ancestors

Death was merely seen as the end of the physical human condition, as life would continue, for the soul, in an equally real state (García Arévalo 1997). Within Taíno cosmology, the dead became spirits who inhabit another realm in the cosmos (Siegel 1997). Funerary rites served to help in this transition from a tangible being to a spirit. Ancestor worship was an important element in Taíno cosmology and ideology, and great care was given to the dead in the form of offerings (Alegría 1997).

The souls of the dead, *opías*, would remain hidden during the day, and appeared only at night. At night they could take the condition of an animal or human, and move freely among the living. They would eat the sweet pulp of a fruit called guava (McGinnis 1997). The Taíno peoples were fearful of wandering alone at night, as the dead would emerge from their hideouts, and roam around the earth. If a person would encounter an *opía* and not feel fear, it would disappear. However, if you were frightened by an *opía*, you would lose your head and self-control (McGinnis 1997).

Because of these beliefs, night animals must have had a significant role in Taíno cosmology; including nighthawks, night herons, bats and owls. Images of night birds also frequently appear on pottery vessels (Keegan and Carlson 2008). Overall, symbols of death are common in Taíno artistic expression (García Arévalo 1997).

Animism

Based on ethnohistoric data, it is argued that the Taíno peoples' construction of personhood operates through an animistic view of the cosmos. In this worldview nonhumans, as animals, objects, places and spirits often are persons who encompass a

part of the human world. Human beings can socially engage with nonhumans that are perceived as persons, such as cemís (Oliver 2009).

An animistic view of the world is related to a 'multinatural' perspective. According to an animistic perspective, beings can have different natures. The transformation from one condition to another is a significant aspect in the interaction between beings, as each will take on a condition fitting with the relationships they are engaged in (Oliver 2009). Persons are continuously changing and developing, which is a recurrent theme in Taíno art as well (Oliver 2009; Garcia Arévalo 1997).

Cemíism

The Taíno peoples perceived the dynamics of the universe as being driven by antagonistic forces, which bring stability and change. They 'captured' these antagonistic forces, and personified them into cemís. This 'practice' is codified in the belief system of cemíism (Oliver 1997). These antagonistic forces or spiritual beings, called cemís, can be embodied or imbued in physical form, such as stone, wood or bones, or in the form of natural phenomena, such as hurricanes or floods (Oliver 2005 in Oliver 2009). A cemí is an animate being with a changing nature, and could represent anything with spiritual power, from ancestors to trees (Oliver 2009).

Within the cult and worship of cemís, the Taíno peoples represented their ancestors and spirits of nature in artistic images of various materials. These artifacts were then endowed with supernatural powers, and were a significant medium in the Taíno cosmos (Oudhuis 2008). The cemís were worshiped in special shrines, separated from the houses (Alegría 1997). They were regularly placed in caves, and served for spiritual guidance. The Taíno peoples visited these caves in times of drought to ask for help, or the cemís were buried in the ground to ensure a successful production of fruits or manioc crops (Rouse 1992). According to Oudhuis (2008), the adornos were probably part of the cemí cult.

The cemís were perceived as persons and could engage in social relations with human beings. Similarly to human beings, cemí beings, had names and titles, roles based on age and gender, and a social rank constructed on their deeds and relations with other beings in the cosmos (Oliver 2009). Their personal identity is based on their biography constructed by their relationships with other beings (Insoll 2007). Each cemí idol will engage in different relations under different contexts. A cemí is thus a distinct being or person, with a unique biography (Graeber 2001).

2.3 Creation narratives

The creation narratives of the Macorix village and probably the Taíno peoples, as recorded by Pané, are significant for the reconstruction of the meanings that were possibly attributed to particular animals. Animals, in particular, have a prominent role in these narratives. The events and actors in the narratives of creation belong to the past in a primordial cosmos. The actors can go from one condition, such as human, to another, such as rocks, plants or animals. Some actors are described as being both human and animal simultaneously (Oliver 1997). The creation of the cosmos involves five eras, closing with the tragic demise of the Taíno population (Arrom 1997). These eras are described below.

First era

The first era starts with *Yaya* (Supreme Spirit) and his son *Yayael*. *Yaya* banished and killed his son, after he wanted to kill his father. Subsequently, *Yaya* put his bones in a gourd, and hung it from the roof of his house. One day, when *Yaya* and his wife looked inside the gourd, they found many fishes, into which the bones had changed, and they ate them (Arrom 1997; Keegan and Carlson 2008).

On another day, *Yaya* went out to his lands, after which the four sons of *Itiba Cahubaba* (Bloodied Aged Mother or Bleeding Ancient One) visited. *Itiba Cahubaba* died during childbirth of her four sons, and the sons had to be pulled from her womb. One of the sons, *Deminán Caracaracol* (Scabby), dared to lower the gourd, after which the four sons stuffed themselves with fish. While stuffing themselves, the brothers heard *Yaya* returning, and they rehung the gourd in a hurry. However, the gourd was not rehung correctly, as it fell to the ground and broke. Water ran out of the gourd with many fish, and flooded the earth, and so the ocean was created (Arrom 1997; McGinnis 1997).

The four brothers were fearful of *Yaya*'s anger, and ran to the land of another *cacique*, called *Bayamanaco*, who was their grandfather. *Bayamanaco* knew how to make fire, and could, therefore, prepare cassava bread. *Deminán Caracaracol* requested some of the cassava bread, which enraged his grandfather, who spit on the back of his grandson. The saliva of *Bayamanaco* contained *cohoba*, and caused the growth of a swelling on the back of his grandson (Arrom 1997). In another version, as described by McGinnis (1997), *Bayamanaco* threw a *guanguaio* at his grandson, which is a bag that served to hold tobacco, but was full with *cohoba*, and hit him in the shoulder. The three brothers of *Deminán Caracaracol* pulled a female tortoise from the swelling. Afterwards, the brothers began a sedentary life, as they built a house, which they shared with the tortoise. Furthermore, they were now able to cook food with the discovery of the use of fire (Arrom 1997; Waldron 2010). In the version of Matyr, a woman emerged from the swelling, who became the wife of each of the four brothers, and gave birth to their sons and daughters (McGinnis 1997).

Second era

The second era is the time of the origins of humans, who were the descendants of the female tortoise and the four brothers (Arrom 1997).

In Hispaniola there was a province called *Caonao*, in which a particular mountain is located, called *Cauta*. This mountain has two caves, called *Cacibajagua* and *Amayaúna* (Arrom 1997). Most of the people inhabiting the island originated from the *Cacibajagua* cave (Keegan and Carlson 2008). When these people were in the cave, one named *Mácocael* (Without Eyelids or He of the eyes that do not blink) had guard duty. One day, *Mácocael* arrived too late at the mouth of the cave, after which the sun had carried off, and *Mácocael* was turned into stone, representing the realm of the minerals. Others, who went fishing, were also caught by the sun and turned into trees, representing the realm of the plants. Similarly, one named *Yahubaba* was send, by one named *Guahayona*, to go and acquire a plant called *digo*, that was used to clean their bodies. He, *Yahubaba*, went out before sunrise, and was caught by the sun, which turned him into a bird that sings in the morning, similar to a nightingale, named *yahubabayael*, representing the realm of terrestrial and flying animals. *Guahayona* decided to leave the

cave as well, as the man he had sent to collect *digo* did not return (Arrom 1997; McGinnis 1997).

After the gourd of *Yaya* broke, and the gourd had created the sea and the fish in it, the islands were not yet able to sustain human life. To make the islands habitable, the turn of the Sun and the Moon, light and darkness, and dry and rainy weather had to be founded. The Sun and the Moon appeared from a cave, called *Iguanaboina*, which is located in the land of a *cacique*, whose name is *Mautiatihuel* (Lord of the Dawn). Within the cave, there were two cemís named *Boinayel* and *Márohu*. The cemí *Boinayel* (Son of the Grey Serpent) manages the bringing of good rains, while *Márohu* (Cloudless) brings clear skies (Arrom 1997).

Through the establishment of the turn between the Sun and the Moon, and the realms of the minerals, plants and animals, the islands were turned into an inhabitable place for humans. Subsequently, *Guahayona* authorized the others to appear from the darkness in the cave, into the sunlight, to spread over the plains and fertile valleys of the islands (Arrom 1997).

Third era

The third era is the time when humans moved from a natural to a social nature (Arrom 1997).

Before *Guahayona* (Our Pride) left the cave, he told the women to leave their husbands and children, take *güeyo* and herbs with them, and go to other lands, as they would come back later (Arrom 1997). *Güeyo* was a sacred plant, possibly tobacco (Waldron 2010). Their children were left, and when they reached a river stream, they cried for their mothers by screaming "toa, toa", after which they turned into animals resembling frogs (Arrom 1997).

Guahayona travelled in a canoe with the women, including the wife of his brother-in-law, and his brother-in-law himself, named Anacacuya (Central Star) (Arrom 1997; Waldron 2010). However, Guahayona tricked Anacacuya into falling in the ocean, as he exclaimed about a cobo (sea snail) laying in the water, after which he took the women again for himself. However, at an island called Matininó (Fatherless), he left the women, and

travelled further to another island, called *Guanín* (Hammered gold) (Arrom 1997; Waldron 2010). On the island of *Guanín*, *Guahayona* saw he had left a woman, named *Guabonito*, in the ocean, which made him glad. He was looking for substances to wash himself, as he had lesions caused by the French sickness, also known as syphilis. The woman brought him to a sheltered place, where he was cured from his lesions. *Guabonito* provided him many *guanines*, which are a low- grade gold similar to a florin, and *cibas*, which are stones similar to marble that are worn around the arms and neck (Arrom 1997; McGinnis 1997). Afterwards, *Guahayona* returned to the mountain *Cauta*, which is located in the land of his father (Arrom 1997).

As a consequence of the theft of the first women, the men were left with no women, and they were anxious to have women (Arrom 1997). When it rained the men would search for their women. One day, they saw a kind of person falling from the trees, who had neither the sexual parts of a man nor a woman (Arrom 1997; Keegan and Carlson 2008; McGinnis 1997). The men attempted to capture these creatures, but they slithered away. Therefore, the *cacique* demanded four *Caracaracoles*, who were men that were infected with the scabby disease, to catch the creatures, because they were able to grab them with their rough hands (Loven 1935 in Moravetz 2005). Afterwards, the men caught birds that make holes in trees, called *inriri*, or the woodpecker. These birds were tied to the body of the women, who had neither the sex of a woman nor a man, and the bird would make holes in the place a female's sex is usually located, and in this manner women were created (Arrom 1997; Keegan and Carlson 2008; McGinnis 1997).

Fourth and fifth era

During the fourth era, the Taíno lived in harmony with nature, as the aftermath of the sins in previous eras were overcome, the *caciques*' power was sacralised, and the essential aspects of their laws and knowledge were established. The Taíno lived in this manner for centuries, until three foreign boats appeared on the horizon, which brought an end to the fourth era. The fifth era would be brief and tragic, as it saw the demise of Taíno culture (Arrom 1997).

A cemí called *Opigielguouiran* was owned by a man named *Cauauaniouaua*. This cemí had four feet, resembling a dog, and was made of wood (i.e. tree spirit). At night

Opigielguouiran, the 'dog god', ran away into the forest. Every morning they went to search for him and brought him back home, where they tied him with cords, after which he would return to the woods, and had to be brought back again. However, on the arrival of the Europeans on the island of Hispaniola, *Opigielguouiran* did not return to his proximate home (based on the material he was made of, wood), but to the waters. They followed his tracks to a lagoon, but were never able to find him, see or hear him ever again (Bourne 1905; Waldron 2010).

2.4 Concluding remarks

Throughout this chapter we have explored the 'Taíno' concept and term in broad strokes, recurrent themes of Taíno cosmology, and the role of animals in the creation narratives. The adornos, found at the site of El Flaco, were made in a time of considerable cultural interaction and change in the history of the Taíno peoples and their artistic expression was influenced by the cultural interaction between diverse groups, while maintaining cultural differences (Ulloa Hung 2013).

The creation narratives have revealed the prominent role of animals in Taíno cosmology, among which are fish, a tortoise, birds, frogs and a dog. Metamorphosis, or 'multinaturalism', is a recurrent theme related to these animals in the creation narratives, as the animals have changed or developed from one nature to another. Furthermore, within Taíno cosmology, animals that have the ability to move freely between the three realms of the sky, land, and the subterranean waters were probably revered. Similarly, animals vacating in caves are probably highly esteemed, as caves form a bridge between the three realms. Additionally, night animals, such as the owl and the bat, might have been associated with the *opías* who emerge from their hideouts at night to roam around the earth. Furthermore, turtles, rodents and small birds may appear on ceramic animal imagery because of their capacity as utilitarian resources for those who would eat them.

3. Pre-iconographic description

The first level of iconographical analysis is called the pre-iconographic description, which is concerned with a description of the primary or natural subject matter, comprising the world of pure forms and artistic motifs. These pure forms consist of certain configurations of lines and shapes that form animal or human features (Panofsky 1939). The pre-iconographic description can be divided into two steps. The first step is highly descriptive, and consists of an enumeration and identification of the motifs used to represent the features of animal species (Moravetz 2005). The second step consists of the identification of repetitive combinations of these motifs, which form characters (Oudhuis 2008). The second level of iconographical analysis, conducted in the next chapter, is concerned with the identification of the secondary or conventional subject matter, or the animal species, represented by these characters.

Before we begin it should be noted that the pre-iconographic description is conducted based on photographs, instead of the adornos themselves. There are a number of limitations to conducting an analysis dependent on photographs, which might have influenced the recording of the adornos. One of these limitations is that the adornos were photographed from a single view, the front, while other views might hold essential knowledge for a correct interpretation of the adornos. Additionally, although most of the adornos were photographed with a centimeter bar, some were not, which limited the possibility of taking measurements of these adornos. Furthermore, some adornos were too damaged to be able to perform a proper iconographical analysis. Therefore, these adornos were taken out of the sample. In appendix 1 basic information is given of the 43 adornos that are part of the sample, and have been analyzed.

3.1 Enumeration of motifs

For the first step of the pre-iconographic description, the classificatory system for the characteristics of Taíno adornos, as developed by Oudhuis (2008) for the adornos of the site of El Cabo in the southeastern Dominican Republic, is applied. According to this classificatory system all the relevant characteristics of the zoomorphic adornos from El Flaco are recorded. These characteristics and their frequency of occurrence are discussed below. The percentages given are rounded to a whole number.

Orientation

For each adorno the orientation is recorded from the perspective of the adorno in relation to the vessel. It was only possible to record the orientation for a number of adornos, because the adornos are largely broken off from the vessel, which makes it difficult to see how they were attached. The following orientations were identified: unclear, facing out, facing in, and looking up (tab. 1). From the adornos whose orientation could be recorded, facing out is the most prominent.

Tab. 1: Orientation.

	Unclear	Facing out	Facing in	Looking up
No.	33	7	2	1
%	77	16	5	2

Place of attachment

Similarly, it was largely not possible to identify the place where the adorno was attached to the vessel. For many adornos not enough referential vessel material remained to be able to derive the place of attachment. Nevertheless, the following places of attachment were identified: unclear, under rim, on rim, and on vessel (tab. 2). For the adornos, of which the place of attachment could be derived, under the rim is the most frequent occurring place.

Tab. 2: Place of attachment.

	Unclear	Under rim	On rim	On vessel
No.	30	6	4	3

%	70	14	9	7

Type

In the creation narratives of the Taíno, animals can change or develop from one nature to another. In a similar manner some adornos seem to be portrayed with a double nature, such as the anthropo-zoomorphic adornos. The following types were identified: zoomorphic, anthropo-zoomorphic, geo-zoomorphic and anthropomorphic (tab. 3). Zoomorphic is clearly the dominant type in the sample.

Tab. 3: Types: Zoomorphic (0), Anthropo-zoomorphic (1), Geo-zoomorphic (2), Anthropomorphic (3).

	0	1	2	3
No.	35	7	1	2
%	78	16	2	4

Composition

The adornos, in the sample, principally depict only a head, but other compositions are present as well. The following compositions were recorded: head; body; head and neck; head and body; head, neck and body (tab. 4). The adornos predominantly consist of the depiction of solely a head.

Tab. 4: Compositions: head (0); body (1); head and neck (2); head and body (3); head, neck and body (4).

ı	0	1	2	2	1
	U	1		3	4

No.	37	1	2	1	2
%	86	2	5	2	5

Head shape

The head shapes of the adornos are recorded from a frontal view. The following shapes were identified: unclear, round, high oval, wide oval, conical, high rectangular, and wide rectangular (tab. 5). Round appears to be the foremost frontal head shape, along with high oval and conical. In appendix 2 these shapes are illustrated.

Tab. 5: Head shape front: unclear (0), round (1), high oval (2), wide oval (3), conical (4), high rectangular (5), and wide rectangular (6).

	0	1	2	3	4	5	6
No.	1	17	9	2	10	2	1
%	2	40	21	5	23	5	2

Measurements

The adornos were photographed with a centimeter bar, providing the possibility to measure the height and width of the adornos. However, some adornos were photographed without a centimeter bar, as a result the measurements could not be taken of these adornos. The height and width of these adornos are recorded as 'unclear'. For the adornos, that could be measured, the following measurements were taken: head height (tab. 6), head width (tab. 7), maximum height (tab. 8) and maximum width (tab. 9). The measurements are grouped in increments of two centimeter.

Tab. 6: Head height.

	Unclear	0-2 cm	2-4 cm	4-6 cm
No.	6	3	20	13
%	14	7	48	31

Tab. 7: Head width.

	Unclear	0-2 cm	2-4 cm	4-6 cm
No.	8	1	22	11
%	19	2	52	26

Tab. 8: Maximum height

	Unclear	0-2 cm	2-4 cm	4-6 cm	6-8 cm
No.	7	1	13	18	4
%	16	2	30	42	9

Tab. 9: Maximum width

	Unclear	0-2 cm	2-4 cm	4-6 cm	6-8 cm	8-10 cm
No.	8	0	17	13	1	4
%	19	0	40	30	2	9

Features

The adornos depict a number of features of an animal head. These features include: eyes, nose, mouth, beak, top head decoration, ears/side head decoration and face (tab. 10). The numbers in tab. 10 are not cumulative, as the adornos often have multiple features.

Tab. 10: Features.

Eyes	Nose	Mouth	Beak	Тор	Ears/	Face
				head	side	
					head	

No.	41	15	17	3	22	18	28
%	95	35	40	7	51	42	65

These features are created through motifs, which are made by means of several different techniques, including incision, moulding, and punctuation. These techniques can be used separately or combined. Appendix 3 lists the different techniques and the combinations of techniques used, and the motifs they produce. These motifs are coded in the appendix, to which will be referred in the text below. The descriptions of the motifs were provided by Oudhuis (2008). Below is elaborated on the way these motifs are used in the sample to represent the features mentioned above.

Most adornos that depict a head, have a pair of eyes. For the eyes, the following motifs were identified: oval with incision, incised oval with a horizontal incision in the center (1.5); round with incision, incised circle with a horizontal incision in the center (1.3); stripe incision, incised horizontal line (1.0); round with punctation, incised circle with a punctation in the center (1.4.4); punctation, a single cavity on a plain surface (4.1); moulding, moulded convex form (2.1/2.2/2.3); and nubbin-like, moulded round knob with a punctation in the center (3.1.4). The most prominent technique used to represent eyes is punctation, as can be seen in tab. 11.

Tab. 11: Eye motifs: oval with incision (0), round with incision (1), stripe incision (2), round with punctuation (3), punctation (4), moulding (5), and nubbin-like (6).

	0	1	2	3	4	5	6
No.	1	4	11	3	17	2	3
%	2	10	27	7	41	5	7

Within the sample, the nose is represented in a number of different ways, which incorporates the following motifs: two nubbins, two nubbins horizontally attached to each other (3.2.4); single punctation; one round cavity on a plain surface (4.1); two

punctations, two small round cavities horizontally on a plain surface (4.2); moulding, moulded convex form (2.1/2.2/2.3); moulding and punctation, moulded convex form with two small punctations horizontally in the center (2.2.4/2.3.4). Moulding appears to be the foremost technique applied to represent the nose (tab. 12).

Tab. 12: Nose motifs: two nubbins (0), single punctation (1), two punctations (2), moulding (3), moulding and punctation (4).

	0	1	2	3	4
No.	2	1	3	8	1
%	13	7	20	53	7

Regarding the mouth and the beak, the following motifs were recognized: incision, incised wavy line (1.2); oval with incision, incised horizontal oval with a horizontal incision in the centre (1.5); stripe incision, incised horizontal line (1.0); moulding, moulded convex form (2.1/2.2/2.3); moulding and incision, moulded convex form with incised line(s) in center (2.2.0/2.3.0/2.3.1). Only three adornos clearly portrayed a beak, of which one was formed through moulding, and the other two through moulding and incision. To represent the mouth, incision is the main technique applied (tab. 13).

Tab. 13: Mouth/ beak motifs: incision (0), oval with incision (1), stripe incision (2), moulding (3), moulding and incision (4).

	0	1	2	3	4
No.	6	4	5	1	5
%	29	19	24	5	24

Furthermore, there are several decorative motifs found on top of the head of some adornos. It is often not clear what kind of animal features they represent. However, the top head decoration could possibly represent hair, feathers or ears. Within this category the following motifs were recognized: incision, incised wavy, straight and/or vertical lines (1.0/1.1/1.2); stripe incision, multiple vertically incised lines next to each other (1.1);

moulding, moulded convex form (2.1/2.2/2.3); moulding and incision, moulded convex form with multiple vertically incised lines (2.2.1); nubbins and incision, a combination of nubbins (3.1.4). In the sample, incision and moulding are separately the most common techniques applied to generate a top head motif (tab. 14).

Tab. 14: Top head decoration motifs: incision (0), stripe incision (1), moulding (2), moulding and incision (3), nubbins and incision (4).

	0	1	2	3	4
No.	7	1	8	5	1
%	32	5	36	23	5

Additionally, many adornos have a particular side head decoration. These probably represent ears or feathers. The following motifs were identified for the ears/side head decoration: nubbin, moulded round knob with a deep punctation in the center (3.1.4); punctation, one or two round cavities on a plain surface (4.1/4.2); two nubbins, two nubbins horizontally or vertically attached to each other (3.2.4); moulding, moulded convex form (2.1/2.2/2.3). The two nubbin motif on each side of the head is clearly the dominant motif applied to represent the ears/side head decoration (tab. 15).

Tab. 15: Ears/ side head decoration motifs: nubbin (0), punctation (1), two nubbins (2), moulding (3).

	0	1	2	3
No.	2	1	12	3
%	11	6	67	17

Finally, there often is decoration visible on the face of the adornos, generated by means of incision, which is not part of any of the above mentioned features. This feature is called 'face'. The following motifs for the feature 'face' are identified: line incision surrounding eyes, incised wavy line encircling the eyes (1.7); line incision surrounding eyes and nose, incised wavy line encircling the eyes and nose (1.8); line incision

surrounding face, incised wavy line encircling the face (1.9). Many of the adornos have multiple lines of incision surrounding part of the face, therefore the numbers shown in tab. 16 are not cumulative. It is clear that a line incision surrounding the eyes is the main motif applied in the category 'face'.

Tab. 16: Face motifs: line incision surrounding eyes (0), line incision surrounding eyes and nose (1), line incision surrounding face (2).

	0	1	2
No.	26	3	12
%	93	11	43

3.2 Characters

For the second step, characters are identified based on repetitive combinations of the motifs that have been described above. The grouping of adornos into characters or types has already been done by Oudhuis (2008) on the adornos from the site of El Cabo, and Moravetz (2005) on Saladoid adornos from St. Vincent. Regarding the adornos of El Flaco, identifying characters is a difficult task, because there are many variations of combinations, and only a few repetitive combinations of motifs can be recognized. Therefore, some characters only consist of one adorno. The division of the adornos into particular characters is presented in appendix 4 with the images of the adornos, and discussed below.

Character 1

Character 1 comprises the largest group within the sample, consisting of ten adornos. This character is identified by a particular motif that occurs on the side of the head of several adornos in the sample. It is a nubbin-like feature consisting of two nubbins on each side of the head (fig. 3). The two nubbins possibly represent ears or feathers. This motif appears in a diversity of ways, in regard to size, place of attachment and punctation. Additionally, character 1 can be recognized by having two incised lines, one surrounding the eyes and one surrounding the face (fig. 3). The eyes of character 1 are

variously represented by means of punctation or incision. Similarly, the shape of the head is variously identified as high oval, high rectangular or round.

Within this character some variation occurs, therefore character 1 is divided into subtypes, to which is referred as 1A, 1B, 1C, 1D and 1E. Subtype 1B additionally has a forehead that is pronounced forward, and adorno 29 depicts nostrils. Furthermore, subtype 1D can be recognized by a particular top head decoration that consists of moulding and incision, which can be clearly seen on adorno 35. However, for adorno 20 and 21 the top head decoration is not complete. Additionally, adorno 20 and 21 depict a protuberance below the head, which is slightly pointed towards the eyes. Furthermore, subtype 1E depicts a mouth generated by means of incision.



Fig. 3: Subtype 1C, adorno 39 (NEXUS1492).

Character 2

Another character, which comprises a relatively large group within the sample, is character 2. Character 2 is identified with a moulded nose, which is placed relatively high on the head, and a mouth generated by means of incision (fig. 4). The mouth is predominantly curved downwards. Character 2 seems to contain both zoomorphic and anthropomorphic features. There is some variation visible, therefore character 2 is divided into subtypes, referred to as 2A and 2B. The eyes of subtype 2A are circular, whereas the eyes of subtype 2B consist of two incisions on the side of the head. The head of subtype 2A is slightly pronounced forward above the eyes. Additionally, adorno 13 and 15 portray an incised line above the eyes (fig. 4).



Fig. 4: Subtype 2A, adorno 15 (NEXUS1492).

Character 3

Character 3 is identified by circular eyes with an incision in the center, a semi-ovoid mouth, and a moulded ridge in the center of the head. Additionally, below the head of adorno 4, a foot emerges from the vessel, as if the vessel is the body of the animal (fig. 5).



Fig. 5: Character 3, adorno 4 (NEXUS1492).

Character 4

Character 4 is characterized by eyes generated through incision, and a line incision surrounding the eyes. Character 4 is divided into two subtypes, referred to as 4A and 4B. Subtype 4A additionally portrays a slightly pronounced forehead and chin or jaw. Subtype 4B is identified with an oval shaped head, with a smaller extension of the head that appears on top of the head, which is separated from the head by means of an incision (fig. 6).





Fig. 6: Subtype 4A, adorno 8 (left) and subtype 4B, adorno 16 (right) (NEXUS1492).

Character 5

Character 5 is identified with a conical shaped head, a mouth generated through incision, and the depiction of a nose with nostrils. The adornos of character 5 are divided into subtypes, referred to as 5A, 5B, 5C and 5D. The eyes of subtype 5A are generated by means of deep punctation, creating high oval shaped eyes. Above the eyes a ridge is visible, which looks similar to eyebrows (fig. 7). The forehead of subtype 5B and 5D is slightly pronounced forward (fig. 7 and 8). Subtype 5C additionally depicts a particular top head motif, which can be described as two moulded convex forms with three incised lines (fig. 8).



Fig. 7: Subtype 5A; adorno 7 (left) and subtype 5B; adorno 10 (right) (NEXUS1492).



Fig. 8: Subtype 5C; adorno 22 (left) and Subtype 5D; adorno 37 (right) (NEXUS1492).

Character 6

Character 6 is identified with a particular top head motif consisting of a moulded convex form that is wider on the ends, possibly representing ears (fig. 9). The head of character 6 is round, and both the face and the eyes are surrounded with a line incision.

Additionally, adorno 23 and 32 depict a nose. The nose of adorno 23 is recognized with two punctations, whereas adorno 32 only depicts one punctation.



Fig. 9: Character 6, adorno 23 (NEXUS1492).

Character 7

Character 7 consists of adornos that depict a beak. These adornos show much variation from one another, and are therefore divided into subtypes. The beak of subtype 7A and 7B is generated by means of a moulded convex form with an incised line in the center, whereas the beak of subtype 7C consists of a moulded form with dents on the sides (fig. 10). Additionally, subtype 7A has two nubbins attached to the sides of the head, possibly representing feathers. Furthermore, subtype 7A is identified with an oval shaped head from which a neck appears that is attached to part of the body. From the body two

rectangular shaped forms appear, which possibly represent wings. Subtype 7B has a particular top head motif that is similarly observed on character 6. Furthermore, the eyes of subtype 7B consist of two relatively large cavities.



Fig. 10: Subtype7A; adorno 14 (left), subtype 7B; adorno 18 (middle) and subtype 7C; adorno 3 (right) (NEXUS1492).

Character 8

Similar to character 1, character 8 has two nubbins attached to each side of the head, probably representing ears (fig. 11). The eyes are represented by means of an incised circle with a punctation in the center. Additionally, the lower part of the head is more pronounced forward, similar to a snout or beak.



Fig. 11: Character 8; adorno 2 (NEXUS1492).

Character 9

Character 9 is recognized by a particular motif on top of the head, which consists of a moulded convex form with two incised lines angled inward, probably representing part of the ears (fig. 12). Additionally, subtype 9B depicts a round form attached to the head

beneath this particular motif. Furthermore, subtype 9A depicts a motif consisting of two incised lines beneath the head, probably representing the paws or claws of an animal.



Fig. 12: Subtype 9A; adorno 38 (left) and subtype 9B; adorno 30 (right) (NEXUS1492).

Character 10

Character 10 is identified by a round shaped head, with a particular top head motif consisting of two round forms laterally attached to the head, probably representing ears (fig. 13). The eyes are generated through an incised circle and an incision in the center. Furthermore, the nose consists of two nubbins laterally attached to each other.



Fig. 13: Character 10; adorno 31 (NEXUS1492).

Character 11

Character 11 portrays a relatively elaborate top head decoration consisting of a moulded convex form with five nubbins and an incised circle, probably representing a flower (fig. 14). The head is cylindrically shaped and tapers downwards. Below the head appear two moulded forms with two/three line incisions, probably portraying its paws. Furthermore, the eyes of character 11 are generated by means of incision.



Fig. 14: Character 11; adorno 5 (NEXUS1492).

Character 12

Character 12 can be described as consisting of a round shaped head, with eyes created by means of an incised circle with an incision in the center (fig. 15). The eyes are surrounded by means of an incision. Furthermore, character 12 has a particular form of top head decoration, consisting of a moulded convex form with a horizontal incised wavy line.



Fig. 15: Character 12; adorno 1 (NEXUS1492).

Character 13

Character 13 is different from the other adornos, as it portrays the whole body of the animal, including the head, forelimbs and hind limbs, and the belly (fig. 16). The eyes of character 13 are generated by means of two flattened nubbins next to each other. The head shape is, viewed from above, conical.



Fig. 16: Character 13; adorno 6 (NEXUS1492).

Character 14

Character 14 is recognized by a round head, eyes generated through incision, and an incised line surrounding the eyes (fig. 17).



Fig. 17: Character 14, adorno 43 (NEXUS1492).

Character 15

Character 15 is identified with an oval shaped head, eyes generated by means of incision and ears represented by nubbins (fig. 18). Furthermore, character 15 has a particular top head motif, consisting of triangular moulded convex forms with two incised lines.

Additionally, the mouth of character 15 is generated by means of an incision on an elevated surface.



Fig. 18: Character 15; adorno 26 (NEXUS1492).

Character 16

Character 16 consists of a high rectangular body, with two moulded convex forms attached at the top, which portray an incised circle with two incisions in the center, probably representing eyes (fig. 19). From the moulded convex forms appears a double incised wavy line. Furthermore, in the center of the rectangular body a circular hole is visible.



Fig. 19: Character 16; adorno 25 (NEXUS1492).

Character 17

In contrast to the above discussed adornos, character 17 does not depict the head of an animal. Alternatively, character 17 portrays two incised triangles with an incised line in the center (fig. 20). These triangles probably represent the wings of an animal.



Fig. 20: Character 17; adorno 11 (NEXUS1492).

3.3 Concluding remarks

After this extensive pre-iconographic description it has become evident that the zoomorphic type predominates in the sample. Although it is difficult to establish with certainty the place of attachment on the vessel, for 77 percent of the adornos, of which the place of attachment could be determined, the place of attachment is near or on the rim. Similarly, it is difficult to determine the orientation of the adornos as result of the shortcoming in referential vessel material. However, facing out appears to be the dominant orientation. Furthermore, regarding the head shape front, round dominates along with high oval and conical. The feature eyes predominates in the sample, and punctation is the motif most frequently used to represent the eyes. Additionally, the feature 'face' has a high occurrence rate of 65 percent, of which 93 percent consists of an incised line surrounding the eyes. Furthermore, from the grouping of the adornos into characters it appears that the adornos are highly diverse. Features of these characters are compared to features observed on animals in the following chapter.

4. Iconographical analysis

The second level of an iconographical analysis is the iconographical analysis proper. The iconographical analysis proper consists of the identification of the secondary or conventional subject matter, or the animal species represented (Panofsky 1939). The configurations of motifs, which have been described and assigned to characters in the pre-iconographic description, are compared to the anatomical features observed on particular animals, to identify the animals represented on the adornos. There are a number of controlling principles applied to guide the identification, of the animals represented, to an identification that is probable.

One of these controlling principles is knowledge of the local fauna. Knowledge of the local fauna is useful, as much of the iconographic supply for the zoomorphic adornos probably derived from the observation of and/or interaction with particular animals. These encounters with animals probably informed the role of particular animals in both the iconography and cosmology of the makers of the adornos as well. Therefore, another controlling principles is knowledge of the cosmology and creation narratives of the Taíno peoples in relation to animals, which has already been discussed in chapter 2. Animals that are thought to have a significant role in the lives of the Taíno peoples, based on their cosmology and creation narratives, are likely to be represented on the adornos. Furthermore, insight into the manner in which various animals were expressed by forms, under varying conditions, can be applied as a controlling principle in the identification of the animals represented on the adornos (Panofsky 1939). Therefore, examples of zoomorphic iconography from the Caribbean are provided when appropriate.

These controlling principles can guide the identification of the adornos to what is likely represented. Nevertheless, a correct identification of the animals cannot be guaranteed. The adornos were made in a different time, place and culture, and any attempt to identify and interpret the meanings that have been assigned to the adornos from El Flaco remains uncertain, which has already been argued by Moravetz (2005).

4.1 Mammals

Bats

Bats are the best represented group within the mammalian fauna of the Caribbean (Raffaele and Wiley 2014). A few of the main species found on the island of Hispaniola are the *Artibeus jamaicensis* (fruit eating bat), the *Eptesicus fuscus* (big brown bat), the *Mormoops blainvillii* (ghost-faced bat), and the *Molossus molossus* (free-tailed bat) (Rodríguez-Durán and Kunz 2001). Bats appear to be the best represented group on the adornos from El Flaco as well. Adornos from character 1, subtype 5A, 5B and 5D, subtype 9A and 9B, character 10, character 14 and character 17 (see appendix 4) show similarity with features observed on bats, comprising a group of eighteen adornos. Bats are regularly represented in the material culture of the Taíno peoples (Petitjean Roget 1997). Additionally, because bats are nocturnal animals that are regularly found in caves, they are likely to have had a significant role in the cosmology of the Taíno, which is argued in chapter 2.

The adornos from character 1, 9A, 9B and 10 depict ears. The ears of these bat adornos are all relatively large in comparison to the eyes, similar to bats. However, the ears of the adornos that are identified as representing bats are portrayed in a diversity of ways. Subtype 9B clearly portrays the ears of a bat, which are round below, and become pointed upward (fig. 21). The depiction of ears in subtype 9A is similar to the way the ears of subtype 9B are depicted.



Fig. 21: Eptesicus fuscus (fcps.edu).

The ears of character 10 seem to represent the ears of a particular bat species, the *Molossus molossus* (fig. 22). The ears of both this particular species and character 10 are round and laterally attached to the head.



Fig. 22: Molossus molossus (inaturalist.org).

Furthermore, the two nubbin motif is characteristic for the depiction of ears throughout character 1. This motif is observed by Oudhuis (2008) on the bat adornos from the site of El Cabo in the eastern of the Dominican Republic as well (fig. 23). These two nubbins possibly reflect the human character of bats, as it is known that the Taíno peoples from Hispaniola often wore ear plugs, creating ears similar in shape to the two nubbins (Oudhuis 2008; García Arévalo 1992). This motif can be observed on a particular vessel as well (fig. 24).



Fig. 23: Bat adorno from the site of El Cabo, eastern Dominican Republic (Oudhuis 2008, 55).



Fig. 24: Effigy vessel from the Dominican Republic representing the being Itiba Cahubaba (Arrom 1997, 69).

The adornos from subtype 5A, 5B and 5D differentiate themselves from the other adornos, as they have a simian aspect. Similar images have been referred to as "monkey face" or "monkey type" designs (Krieger 1931 in García Arévalo 1997). However, Herrera Fritot and Youmans (1946, 69-83) interpreted these images as humanized bat faces, which highlight the isomorphism between bats and the souls of the dead. Additionally, the adorno from subtype 5A seems to fuse skull-like features, such as deep eye-sockets, with a bat. An image of a bat with skeletal-like features is found on an amulet from the Dominican Republic as well (fig. 25).



Fig. 25: Amulet from the Dominican Republic (García Arévalo 1997, 118).

Furthermore, the eyes of the adornos from character 1, 5A, 5B, 5D, 9A, 10 and 14 are generated by means of punctuation or incision. Similarly, the eyes of bats appear to be small and round when open (fig. 21), and can resemble the shape of an incision when closed or narrowed (fig. 22). Additionally, the adornos from character 1, 5B, 9, 10 and 14 portray an incised line surrounding the eyes, probably marking the border between the hairless face of the bat and it's furry body (fig. 21 and 22). Adornos from subtype 1B, subtype 5A, 5B, 5D and character 10 depict nostrils, which is a feature that is observed on bats too. This feature is in particular prominent in the *Artibeus jamaicensis* (fig. 26). Additionally, the *Artibeus jamaicensis* has a forehead that is slightly pronounced forward, which can be observed on adornos from subtypes 1B, 5B and 5D.



Fig. 26: Artibeus jamaicensis (fm2.fmnh.org).

In contrast, character 17 does not depict the head of an animal, but the wings, which displays much similarity with the wings of a bat. The wings of the bat and character 17 are both triangular. Additionally, the wings of character 17 portray an incised line in the center, which can be observed on the wings of bats as well (fig. 27). Bat wings are regularly appear on Taíno art (Veloz Maggiolo 1977 in García Arévalo 1997).



Fig. 27: Noctilio leporinus (wikimedia.org).

Primates

Primates, other than humans, once occupied the Greater Antilles. For instance, the species *Antillothrix bernensis* used to live on the island Hispaniola. The primates of Hispaniola show similarity with other new world monkeys, or *Platyrrhini*. These *Platyrrhini* are linked with the modern titi monkey of the genus *callicebus* from South America (fig. 28) (Rosenberger *et al.* 2011). Within the sample of the site of El Flaco one adorno from character 15 shows resemblance with these primates. Characteristic for the Titi monkey is the mouth, which appears on an elevated part of the face (fig. 28). This is similarly observed on the adorno from character 15.



Fig. 28: Titi monkey (calphotos.berkely.edu).

Additionally, character 15 has a particular top head decoration, which consists of two triangular protrusions. This motif may be tentatively compared to the facial hair of the Amazonian black bearded saki monkey, *Chiropotes satanas* (fig. 29).



Fig. 29: Chiropotes satanas (zoochat.com).

Rodents

Rodents are an important group in the terrestrial mammal fauna of Hispaniola. Hutias are the most common group and probably the most important to the Taíno peoples, as they were also part of their diet (Rosenberger *et al.* 2011). The main types of rodents that can be found in Hispaniola, are the *Isolobodon portoricensis*, *Plagiodontinae aedium* and *Solenodon paradoxus* (Ottenwalder 2001; Rosenberger *et al.* 2011). In the sample from the site of El Flaco, four adornos from character 6 and 8 show resemblance with rodents.

Characteristic for rodents are the round ears, which appear relatively high on the head (fig. 30). This is similar to the ears depicted on the heads of the adornos from character 6 and 8. Rodents have relatively round heads similar to character 6. Furthermore, the eyes of rodents, and character 6 and 8, are small and circular. Additionally, adorno 32 from character 6 depicts a single round punctation below the eyes, probably representing the snout of a rodent, while adorno 23 from character 6 depicts the nostrils.



Fig. 30: Plagiodontinae aedium (planet-mammiferes.org).

Furthermore, character 8 may be tentatively compared to the *Solenodon paradoxus*. The adorno from character 8 appears to have an elongated snout, which is partially eroded complicating the possibility to identify the animal depicted on the adorno. Nevertheless, the *Solenodon paradoxus* has an elongated snout as well (fig. 31). Furthermore the fur of the *Solenodon paradoxus* has a darker spot above the eyes, which can be observed on character 8 as well.



Fig. 31: Solenodon paradoxus (arkive.org).

4.2 Reptiles

Turtles/tortoises

The main types of turtles to be found on the island of Hispaniola are the Antillean slider (*Trachemys stejnegeri*), the Hawksbill turtle (*Eretmochelys imbricata*), the Green turtle (*Chelonian mydas*), and the Leatherback turtle (*Dermochelys coriacea*) (Raffaele and Wiley 2014). Turtles appear to be well represented in the sample of adornos from the site of El Flaco. Twelve adornos from character 2, character 3 and character 4 show similarity with features observed on turtles.

A distinctive feature on the adornos from character 2 is the nose, which is placed relatively high on the face. This is a characteristic that is observed on turtles as well (fig. 32). Additionally, a similar depiction of a nose is found on an adorno of a turtle from St. Vincent (fig. 33).



Fig. 32: Antillean slider (Wikipedia.org).



Fig. 33: Freshwater turtle adorno from Escape, St. Vincent (Waldron 2011).

In contrast, the adornos from character 3 depict a ridge between the eyes towards the mouth. This ridge can be similarly observed on the green sea turtle and the hawksbill turtle, which depict a beak-like mouth (fig. 34).



Fig. 34: Hawksbill turtle (arkive.org).

Furthermore, adornos from subtype 2A and 4B depict an extension of the head. This feature can be similarly observed on turtles. The neck of the turtle consists of concentric flaps of skin while the head is retracted. However, when the head hangs low the skin of the neck resembles headgear (Moravetz 2005). This can be seen, to some extent, in fig. 32, which is probably what is represented on the adornos by the extension of the head.

The eyes of the adornos from character 2 and 3 are generated by means of moulding with an incision or punctation in the center. The clay surrounding the punctation or incision resembles the eyelids of the turtle. Furthermore, the mouths of some adornos from character 2 are bent downwards, which resembles the mouth of the Antillean slider (fig. 32). However, the mouths of the adornos from character 3 are semi-ovoid. This shape can be observed on a turtle when its mouth is opened (fig. 35).



Fig. 35: Green sea turtle (awesomeocean.com).

The adornos from character 4 seem to have a rather simplistic and rough or robust form. They show similarity with a particular turtle species, the leatherback turtle. The head of the leatherback turtle appears rough and robust with a pronounced forehead and chin (fig. 36), which is similar to the adornos from subtype 4A. This characteristic is observed

on some adornos from the site of El Cabo as well (fig. 37). Additionally, the frontal head shape of the adornos from character 4 is oval, which is similar to the head shape of the leatherback turtle.



Fig. 36: Leatherback turtle (youtube.com).



Fig. 37: Leatherback turtle adorno from the site of El Cabo, eastern Dominican Republic (Oudhuis 2008, 58).

Crocodiles

There is one species of the crocodile known to have inhabited Hispaniola, which is the *Crocodylus acutus* (Raffaele and Wiley 2014). Features from one adorno from subtype 5C are similar to features observed on the crocodile. The crocodile can be characterized by round eyes with eyelids, a long snout with two nostrils at the end, and the opening of the mouth below (fig. 38). These features can be observed on the adorno from subtype 5C.



Fig. 38: Crocodylus acutus (wikimedia.org).

Additionally, the adorno from subtype 5C portrays a particular motif on top of the head consisting of two rounded forms with three lines of incision, which possibly represent the skin of the crocodile. This motif can be similarly seen on an adorno from the Dominican Republic representing a crocodile (fig. 39).



Fig. 39: Carinated bowl with crocodile head adornos, Dominican Republic. Museo del Barrio, New York, gift from Florence and Brian Mahony (Roe 1997, 148).

Lizards

The remaining animals within the category of reptiles are lizards. Lizards that occur in Hispaniola are the Brook's house gecko (*Hemidactylus angulatus*) and the Hispaniolan gracile anole (*Anolis distichus*) (Raffaele and Wiley 2014). Features observed on character 11 are similar to those observed on lizards.

Lizards have relatively large almond-shaped eyes, which slightly protrude from the head (fig. 40). Similarly the eyes of the adorno from character 11 are semi-spherically shaped. Furthermore, lizards have cylindrically shaped heads that taper towards the snout, which

can be observed on the adorno as well. Additionally, the Hispaniolan gracile anole has claw-like feet (fig. 40). This is probably represented on the adorno by the two/three incised lines below its face.



Fig. 40: Hispaniolan gracile anole (Anolis distichus) (anoleannals.org).

4.3 Amphibians

Frogs/toads

The frogs/toads that can be found in Hispaniola are the *Eleutherodactylus abbotti*, the *Bufo guentheri guentheri*, and the *Hypsiboas heilprini*. The adornos from character 13 and 16 resemble features observed on frogs/toads. These adornos illustrate the characteristic bulging round eyes of the frog (fig. 41). Additionally, the legs of character 13 resemble the folded-like legs and the head shape of frogs, as seen from above. Furthermore, character 16 is similar to a frog motif observed on an adorno from the site of El Cabo (fig. 42).



Fig. 41: Eleutherodactylus abbotti (photo.net).

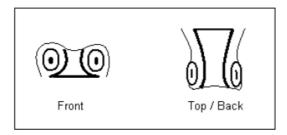


Fig. 42: Frog motif observed on an adorno from the site of El Cabo, eastern Dominican Republic (Oudhuis 2008, 57).

4.4 Birds

Owls

Owls that can be found on the island of Hispaniola include the *Athene cunicularia*, *Asio flammeus*, *Asio stygius* and *Tyto glaucops* (Raffaele and Wiley 2014). The owl can be recognized by relatively large eyes, a small beak, and a round face (fig. 43). Character 12 shows resemblance with owls, as it is identified with a round face and relatively large eyes. Furthermore, the eyes of character 12 consist of an incised circle with an incision in the center, which bears resemblance to the eyes of the owl when they are narrowed. Additionally, the *Asio flammeus* and *Asio stygius* depict ears that appear on top of their head. These ears are possibly represented by the particular top head motif of character 12. Unfortunately, part of the head of the adorno from character 12 is broken off, which possibly included a beak.



Fig. 43: Asio stygius (flickr.com).

Furthermore, subtype 7B can be tentatively compared to the owl. The eyes of subtype 7B are represented by two large cavities, possibly referring to the darker spots

surrounding the eyes of the owl (fig. 43). A similar depiction of owl eyes can be seen on a pestle from the Dominican Republic (fig. 44). However, the beak of subtype 7B is significantly larger in comparison to the beak of an owl.



Fig. 44: Owl pestle from the Dominican Republic (Oliver 2008, 189).

Parrots

There are three genera of parrots that inhabited the Caribbean islands: parakeets, macaws and Amazon parrots. Parrots that can be found on Hispaniola include the Hispaniolan parakeet (*Aratinga chloroptera*) and the Hispaniolan parrot (*Amazona ventralis*) (Raffaele and Wiley 2014). Distinctive features of the Hispaniolan parrot are laterally located circular eyes, and a relatively short beak with nostrils placed at the top (fig. 45). These features can be observed on subtype 7C.



Fig. 45: Hispaniolan parrot (left) and Hispaniolan parakeet (right) (junglekey.co.uk).

Other birds

Two adornos from subtype 7A and 7B are identified as birds based on their beaks. However, it is difficult to identify what kind of birds these adornos possibly represent. It has been argued that subtype 7B may resemble the owl, but the beak of subtype 7B is significantly larger. Furthermore, for subtype 7A there are a multitude of bird types that may be represented. Distinctive features of subtype 7A are the significantly smaller neck in comparison to the head and the relatively small beak. These features can be observed on ducks (subfamily *Anatinae*), geese (subfamily *Anserinae*), herons (family *Ardeidae*), and rails or coots (family *Rallidae*).

4.5 Concluding remarks

In the iconographical analysis proper, adornos have been compared to particular animals, to determine which animal resembles an adorno the most. Within the group of mammals, eighteen adornos resemble bats, three adornos resemble rodents and one resembles a primate. Fourteen reptiles were identified, including twelve turtles, one crocodile and one lizard. Furthermore, two frogs seem to be present in the sample of adornos, belonging to the group of amphibians. Finally, four birds were recognized, including one owl and one parrot. Bats and turtles seem to be the animals that are best represented in the sample of adornos from the site of El Flaco. In the next chapter the possible meanings of these animals in the lives of the inhabitants of the site of El Flaco is discussed, based on the cosmology and creation narratives of the Taíno peoples.

5. Iconology

The third level of an iconographical analysis is called the iconological analysis, which aims to interpret the deepest level of meaning an image can convey, and its implications in a wider cultural system (Lavin 1993, 39; Moravetz 2005). The deepest level of meaning, or "intrinsic meaning", reflects the underlying principles which reveal the belief or mindset of a specific nation, period and religious or philosophical persuasion (Panofsky 1939).

The "preparatory equipment" necessary for an iconological analysis is "synthetic intuition", or an understanding of the fundamental tendencies of the human mind (Panofsky 1939; Moravetz 2005). These fundamental tendencies refer to universal concerns, such as immortality versus death, the meaning of human existence among a multiplicity of life forms, the origin of the world and human life, cosmic forces held accountable for the creation of the world and the expression of these forces in nature, and the dynamics and periodicities of the three realms (Helms 1995, 103).

Iconology has been largely debated and criticized, because there would be a risk of discovering "...more symbolic meaning in a work of art than was put in, or even known, by the artist" (Bialostocki 1965, 780 in Moravetz 2005, 34). To avoid this risk, it is essential to interpret the meaning of an image in its broader cultural context (Moravetz 2005). Therefore, the possible meanings of the images on the adornos are interpreted based on a comparison between the animals identified on the zoomorphic adornos from the site of El Flaco, as outlined in chapter 4, and the recurrent themes and concepts present in the lives and beliefs of the Taíno peoples, as outlined in chapter 2. However, iconological interpretations on the meanings of the animals remain speculative.

5.1 Bats

The bat has inspired fear universally throughout time (Varner 2007). They can be found hiding in dark and hidden locations, such as caves, trees or the ceilings of human habitations, providing an opportunity to closely observe the behavior of these animals,

which may have informed or modified elements in the cosmology and narratives of the Taíno peoples (Waldron 2010).

The bat shows resemblance with the *opías*, as described by the people from the Macorix village and recorded by Pané. The *opías* remained hidden during the day, and appeared only at night to transform the world of the living into the dwelling place of the dead (Pané 1999). In a similar manner bats emerge from their caves at dusk to rule over the night sky (Waldron 2010). At night, the *opías* eat a certain fruit called guava (Oliver 2008; García Arévalo 1997). The fruit-eating bats, *Artibeus jamaicensis* and *Brachyphylla cavernarum*, are common bat species in Hispaniola. These bat species have a particular preference for guavas as well, and probably informed the dietary preference of the *opías* in the cosmology of the Taíno peoples (Petitjean Roget 1997; Waldron 2010; Gannon *et al.* 2005).

The *opías* would preferably take the shape of an animal when they leave the world of the dead and enter the world of the living (Wilson 2007). The shape of an animal, such as that of the bat, was probably the intermediary phase through which the dead entered and left the world of the living (Waldron 2010). Because of the resemblance in behavior with *opías*, predominantly bats were probably perceived as the corporeal hosts of visitors from the world of the dead (Waldron 2010; McGinnis 1997). Such an animal that was thought to be united with a dead soul was respected and feared. The Taíno peoples were frightened to go out alone at night, as the *opías* would be roaming around the earth (García Arévalo 1997; McGinnis 1997). Furthermore, the artistic expression of the Taíno reveals an association between bats and the dead, as skull-like images, referring to death, regularly fuse with images of bats or owls in Taíno artistic expression, which is observed on the adornos from El Flaco as well (García Arévalo 1997).

Bats or *opías* can take on a human appearance as well (Waldron 2010; García Arévalo 1997). Additionally, bats nurse one offspring at a time and have the ability to stand upright, corresponding with human behavior. Furthermore, bats demonstrate simian behavior, such as the ability to climb trees (Waldron 2010). In line with these observations, identifying bats in the artistic expression of the Taíno peoples is often complicated as a result of a common tendency to fuse bat features with human or

simian features, which is reflected on the adornos from El Flaco and El Cabo as well (Waldron 2010; Oudhuis 2008). Additionally, in the creation narratives an association between bats and humans can be observed. One narratives tells about a cave called *Cacibahagua*, which is described as the origin place of the early ancestors of the Taíno peoples (Waldron 2010; Keegan and Carlson 2008). In the cave they hid from the sunlight, as they feared it would turn them into stone or animals. Similarly, during the day *opías* and bats hide in caves from sunlight (García Arévalo 1997).

Caves are associated with bats and owls, because these animals can be found entering and emerging from caves. For this reason bats and owls may be seen as holding the ability to enter the underworld or the world of the dead, because caves were perceived as a passage to the underworld. Additionally, bats and owls have the ability to fly into the sky, and can thus move freely through the three realms (Keegan and Carlson 2008). Furthermore, cave art from the Greater Antilles has revealed that the inhabitants of the islands probably practiced rituals in caves related to fertility and ancestor veneration, which highlights the significance of caves to the Taíno peoples and its association with ancestors (Roe 1999 in Waldron 2010; Waldron 2010).

Additionally, the creation narratives of the Taíno peoples reveal a relation between bats/opías and seduction/deception. The narratives made aware of potentially inappropriate attractions between the living and the dead. An *opía* would take on the appearance of a human, in which form he/she takes carnal pleasures in living with the living. The *opías* seduced living people, but disappeared in a split second when a living person would try to put their arms around them (McGinnis 1997). Subsequently, the deceived living individual came to their senses, which stopped the spiritual and physical afflictions caused by such an unnatural union (Waldron 2010).

For all their association with the world of the dead, bats may have had an opposite association with certain flowers and fertility, as bats pollinate flowers and distribute the seeds of certain plants (Waldron 2010). The observation of bats visiting plants, after which they grew fruit, and the observation of seeds sprouting from the guano of bats, possibly resulted in the association of these animals with fertility. This is, however, not

reflected in the accounts of Pané, but these records might be incomplete (Waldron 2010; Roe 1997).

Furthermore, according to Petitjean Roget (1997), the bat may represent the inverse of the frog. He argues that the frog belongs to moisture and possibly symbolized fertility, while the bat, which is a dry animal that lives out of water, symbolized masculinity.

5.2 Turtles/Tortoises

Turtles or tortoises have been universally attributed with many symbolic properties, such as strength, longevity, fertility, and protection (Biedenmann 1992 in Moravetz 2005; Varner 2007).

In the creation narratives of the Taíno peoples, the turtle was responsible for the gift of a fertile home for the brothers, after which they became permanent homesteaders (Moravetz 2005). The female turtle from the creation narrative can be held responsible for the acquisition of social and cultural knowledge necessary for the brothers to be human beings in the Taíno civilization, including working the soil and cooking with fire (Moravetz 2005; Arrom 1997, 68). In this manner, the turtle provides food and shelter for the Taíno peoples (Waldron 2010). The body of the turtle itself provided food for the Taíno peoples as well, considering sea turtles were eaten by the ancient Antilleans (Moravetz 2005). For these reasons, the turtle can be considered as the all-giving mother of the Taíno peoples (Waldron 2010; Arrom 1975). Additionally, the turtle cured the brothers from syphilis, and in this manner enabled the men to have sexual relations and reproduce, indicating an association with fertility (Stevens-Arroyo 1988).

In the creation narrative of the Taíno peoples, the female turtle provides shelter for the brothers. In relation to this is the observation that the carapace of the turtle seems to be related with communal houses (Stevens-Arroyo 1988; Boomert 2000). Oval dwellings were built by the Taíno peoples especially for *caciques*, or chiefs, which show resemblance with the shape of a turtle's carapace (Moravetz 2005; Stevens-Arroyo 1988). In particular the reconstruction of a house plan at the Saladoid site of Golden rock on St. Eustatius reveals a resemblance with the carapace and skeleton of a turtle. It is however not certain whether these similarities were intentional or not, but it remains

rather difficult to explain the decision for this particular floor plan in terms of constructional reasons (Versteeg and Schinkel 1992).

Furthermore, at the Saladoid site of Golden rock a cache was found in a midden deposit with the remains of a turtle, which was buried in anatomical position, but missed the skull (Versteeg and Schinkel 1992). Additionally, the people from the Saladoid regularly placed vessels, referring to turtle carapaces, over the deceased. For these reasons there might be a link between turtles and ancestor veneration (Moravetz 2005). In addition, the female sea turtle emerges during the night from the subterranean waters to return ashore to lay eggs, and new hatchlings from the eggs of a sea turtle generally emerge during the night (Moravetz 2005; Keen 1992). It is during the night that the spirits of the ancestors appear as well, preferably in the form of an animal (Moravetz 2005; Wilson 2007). An association between turtles and ancestors might be reflected on the adornos from El Flaco and St. Vincent as well, wherein turtles or tortoises appear with both zoomorphic and anthropomorphic features (Moravetz 2005). According to García Arévalo (1997, 112) recurrent isomorphic images in Taíno art served to evoke the human spirits of the dead and the animal into which the ancestor would transform.

Additionally, the turtle seems to be associated with the hallucinogen *cohoba* and shamanism. An association between the turtle and *cohoba* is reflected in the creation narratives of the Taíno peoples, where a female turtle emerges from the shoulder or back of *Deminán Caracaracol* after he had been hit with *aguanguayo*, a gourd filled with the hallucinogenic substance *cohoba* (Keen 1992, 157). This substance was inhaled in order to induce the ability to communicate with the ancestors, which is a central feature in shamanism (Rouse 1992, 14). Furthermore, some adornos from El Flaco depict features that are specifically observed on the leatherback turtle. Leatherback turtles differentiate themselves from other sea turtles, as they are not wary or easily startled when they return ashore, but seem to be in a shamanic trance, which supports the association between the turtle and shamanism (Waldron 2010).

5.3 Frogs/toads

The creation narratives of the Taíno peoples indicate an association between frogs, women, fertility and the rainy season (McGinnis 1997; Oliver 1998). During the third era

in the creation narrative, the children are left behind by their mothers and come together near a stream where they cry for their mothers "asking for the treat", as they cry "toa toa." Subsequently, the voices of the children become soft and they steadily transform into frogs. The meaning of the words "toa, toa" remain unknown (Waldron 2010). However, some suggest it refers to liquids, and in particular water (Pané 1999). Furthermore, the root word "oa" is used by both the Tukanoan-speaking Barasana and the Arawakan-speaking Baniwa to refer to the Pleiades (Hugh-Jones 1979). The root word "oa" forms part of other words referring to "Children of the Pleiades" and "Star People" (Waldron 2010). In a lengthier version of the narrative the frog-children, additionally, change into stars in the sky, referring to the arrival of spring rains and the start of the agricultural season (McGinnis 1997).

These observations support the hypothesis of Robiou-Lamarche (1984), who argued for a metonymic and synonymic correspondence between the crying children and the Pleiades. Robiou-Lamarche (1984) compares the narratives from the Gran Chaco south of the Amazon and the Orinoco, which tell about grief-stricken children who changed into the Pleiades, and suggests that the weeping children from the creation narrative possibly represent the Pleiades. Additionally, Robiou-Lamarche (1984) illustrates a link between the Pleiades and the beginning of the rainy season, because when the Pleiades disappears beneath the horizon, and it is not seen for a season, the rains commence.

In addition, Roe (1997) translates the name *Anacacuya*, of an actor in the frog narrative, to "Central star." In correspondence with this translation, Robiou-Lamarche (1984) associates *Anacacuya* with the Polaris or North Star, which is part of the Ursa Major constellation. From the Antilles this constellation can be seen disappearing below the horizon from April to August, which corresponds with the rainy season as well. When the Ursa Major constellation returns above the horizon, the hurricane or rainy season starts, whereas the Pleiades disappears beneath the horizon at the beginning of the rainy season (Roe 1997).

Furthermore, *Anacacuya* is tricked by *Guahayona*, on their voyage in a canoe, into falling in the ocean, as he exclaimed about the "cobo" in the ocean (McGinnis 1997).

Robiou-Lamarche (1984) recognizes a similarity between the spiral cross-section of the

"cobo" (*Lobatus gigas*), from the frog narrative, and the shape of a hurricane. Waldron (2010), additionally, notes that the *Lobatus gigas* is one of the preferred materials to manufacture frog emblems. Furthermore, the fall of *Anacacuya*, whose name has been translated to "Central Star", has been interpreted as a reflection of the descent of Orion into the sea. This annual event indicated the start of the rainy season as well (McGinnis 1997).

Knowing when the rainy season begins, which is signaled by the appearance and disappearance of stars, is relevant to the sowing and harvesting of crops (Roe 1997). Additionally, during the rainy season in the Caribbean, the nights can be more resonant than the days, as frogs and toads can be heard making constant noises from inland waters during their breeding cycle's apogee (Waldron 2010). The noises made by the frogs and toads thus indicate when it is time to plant manioc (Robiou-Lamarche 1984; Stevens-Arroyo 1988).

Stevens-Arroyo (1988), additionally, associates the frog with fertility, because of the total of eggs they lay in inland waters. Frog symbolism seems to be associated with human fertility in Taíno iconography on a petroglyph from one of the monoliths surrounding the Caguana ballcourt in Puerto Rico as well. On this petroglyph an anthropo-zoomorphic being called "La Dama-rana" is portrayed with flexed legs and feet resembling the position of frog motifs and women giving birth (fig. 46). Additionally, the being depicts a woman's vulva, linking her with fertility and female procreation (Oliver 1988, 151-153). Furthermore, according to Columbus and Las Casas the women from the Taíno revered frog-like cemís, if they desired to get pregnant (Stevens-Arroyo 1988).



Fig. 46: Petroglyph named "La Dama-rana" from Caguana, Puerto Rico (Oliver 1998, 152).

5.4 Crocodiles

There are no known narratives involving crocodiles from the Caribbean islands, which makes it difficult to discover the possible intrinsic meanings of the crocodile to the Taíno peoples (Waldron 2010). However, one of the adornos from the site of El Flaco clearly depicts a crocodile. Therefore, we have to rely on narratives from other regions in the Americas, involving the crocodile, to speculate about possible meanings of the crocodile to the peoples from the Taíno.

There is a long-standing hostility between crocodiles and heroes from oral traditions in the Lower Orinoco and Guianas. In a Guianian Carib version of a narrative, the Sun allows the Caiman to guard his fish, because he discovered that somebody had been stealing his fish (Roth 1970). However, the Caiman is quickly caught consuming the fish from the fishponds of the Sun. Subsequently, the Caiman is punished by the Sun through repeatedly slashing the reptile on his skin, of which the marks are still visible today. To stop the beating, the Caiman offers his daughter to the Sun, but the Caiman does not have a daughter. Therefore, the Sun demands the Caiman to provide him a bride. The Caiman quickly forges a woman from wild plum and wood, in the hope that the Sun will not recognize the difference (Roth 1970).

Comparable to a narrative from the Taíno peoples, the Caiman requests a woodpecker to create a genital cavity on the woman. The Sun spends some time with his bride who becomes pregnant, but eventually the Sun rejects her. The Bride is killed by a jaguar, who discovers a twin in her body (Roth 1970). In the creation narrative of the Taíno peoples, quadruplets are in a similar manner born from the body of a dead woman (Waldron 2010). The mother of the Jaguar, called Rain Frog Woman, advises the Jaguar to raise the children as his own, which he does. However, ultimately, the twins discover a jaguar killed their mother, and they kill him and his mother, to avenge the Jaguar. Afterwards, the twin leaves on an adventure to search for their true father. These twins are remembered in the constellations Orion and Pleiades (Roth 1970).

As discussed above, in the frog narrative from the Taíno peoples a reference is made to the Pleiades as well, which is related to the beginning of the rainy season. Additionally, for Amerindians from the Moruka River of Guyana, the noise a caiman produces can be a prophesy for rain, which is similar for the frog (Roth 1970). Furthermore, multiple rituals, which involve the use of the body parts of a crocodile to bring rain, have been reported (Waldron 2010; Thurston 2011). For example, Roth (1970) discusses a ritual in which the scrapings from a crocodilian tooth are washed in water to bring rain. The crocodile thus seems to have a possibly similar role to the frog in relation to rain. Additionally, Thurston (2011) interprets the meaning of the crocodile to the Maya, and concludes that the crocodile was related to the fertile earth or agricultural wealth and water symbolism.

5.5 Lizards

The scarcity of ethnographic evidence on the role of lizards throughout the Americas, and the relative infrequency of the appearance of lizards on adornos complicates the possibility to speculate about the possible meanings attributed to the lizard by the Taíno peoples (Lévi-Strauss 1983; Waldron 2010).

However, in the creation narrative of the Taíno peoples a being named *Mácocael* is interpreted by Keegan and Carlson (2008) as representing a lizard. He was the vigilant nocturnal guardian of the cave, who watched motionless and camouflaged against the walls of the cave. His name means "He of the eyes that do not blink". Similarly, lizards do not appear to close their eyes. Furthermore, at times, Taíno peoples would carve petroglyphs of lizards on the walls of caves, probably to symbolize *Mácocael* (Keegan and Carlson 2008).

Mácocael guarded the cave from which the first humans emerged, but one day he arrived too late at the mouth of the cave, after which the sun had carried off and turned him into stone (Arrom 1997). The being Mácocael shows similarity with the crocodile in a narrative from the Guianian Carib, as described above. In this narrative the crocodile is beaten by the Sun, and hides from the light of the Sun under water. In a similar manner Mácocael has to hide from the Sun, before it turns him into stone. Additionally, the skin of the anole is visibly affected by sunlight, as the skin-color of overheated anoles can transform to a pale color (Barlow 1993 in Waldron 2010). This remarkable ability has probably not gone unnoticed by the Taíno peoples.

Furthermore, the role of *Mácocael* in the creation narrative and the ability of the anole to change his skin-color reflects the theme of transformation present in the cosmology of the Taíno peoples. This is reflected in a narrative from the Xerente as well. In this narrative lizards are carried in a bundle attached to the belt of a hunter as back-up food. The bundle comes undone from the hunter's belt when he crosses a river, after which he fuses into a crocodile (Lévi-Strauss 1983). This narrative thus supports a possible relationship between the lizard and the crocodile.

5.6 Primates

There are no known narratives involving monkeys from the Taíno peoples. Therefore, we partially have to rely on narratives from other regions in the Americas to be able to reconstruct the possible meanings attributed to monkeys. In Amerindian narratives monkeys appear as trickster agents, who are informative alter egos, equivalents or rivals of humans. In South American oral traditions monkeys seem human, but regularly manage to provoke humans or detangle human culture, as they go up against humans for food and sexual partners, or culture overall (Guss 1990; Lévi-Strauss 1983).

In a narrative from the Tupi-speaking Aruá, a woman is seduced by the spirit of a monkey. This spirit takes her to the world of the monkeys where she is taught simian ways (Mindlin 2002 in Waldron 2010). In a similar manner, in a Munduruku narrative a man falls in love with a female monkey, who seems human. The man wishes to marry with the female monkey (Roth 1970). Eventually, his wife is pregnant with his child. His wife then has an incestuous relation with her child, as a consequence of his wrongdoing. This narrative results in the existence of the howler monkey as known today (Lévi-Strauss 1983). In this manner, the narrative warns for bestiality (Roth 1970).

In both narratives the monkey allures humans into inhuman or antisocial behavior. The monkeys can be described as an inversion of humanity, or as opposites of a civilized human society (Waldron 2010). The behavior of monkeys in the narratives shows similarity with bats, as described above. Both animals can appear human, and seduce the living into a union that is perceived as unnatural. It is interesting that the bat adornos from the site of El Flaco portray simian features as well.

5.7 Birds

Birds have the ability to move freely from land to sky, and some can even enter water (Keegan and Carlson 2008; Waldron 2010). Therefore, birds were excellent intermediaries between the three realms (Waldron 2010). For this reason birds were largely associated with shamanic activity. The owl, in particular, was perceived as a spirit helper in shamanic traditions, and held many special powers. A shaman could transform into an owl, and take on these special powers, such as the ability to reach the world of the dead (Eliade 1972 in McGinnis 1997).

If one became a bird or was accompanied by a bird, he/she would acquire the power to move freely to the celestial realm (Eliade 1972 in McGinnis 1997). These man/animal transformations are a significant aspect of shamanism (Furst 1976 in McGinnis 1997). After return from these journeys, both the shaman and the bird would bring sacred tools and cultural knowledge to humanity from outside the ordinary world. In a similar manner, in many narratives, birds are important benefactors of humanity who bring sacred tools and cultural knowledge from faraway places that are only accessible through flight (Waldron 2010). Furthermore, in the creation narrative of the Taíno peoples the woodpecker fashions women from creatures who lack female genitalia (Keegan and Carlson 2008).

Additionally, Eliade (1960, 137-138) argued that ornithomorphic attire played an important part in healing rituals, because birds are essential for the *behique* to be able to fly into another realm. For this reason García Arévalo (1997) argues that the *behiques* possibly integrated items referring to owls into their ceremonial attire. This is supported by stone pestles with ornithomorphic depictions that were used to produce medicinal beverages and crush *cohoba*, which was induced in order to be able to communicate with numinous powers (fig. 47) (García Arévalo 1997).

Furthermore, in Caribbean folklore the owl was seen as a bird of bad omen which signals the end of a human life (García Arévalo 1997). The Taíno peoples thought of the owl as the messenger of the lord of the World of the dead, called *Coaybay*, and were frightened of the owl's nocturnal call as it was seen as a message of the proximity of death (Arrom 1988, 23-24 in García Arévalo 1997).



Fig. 47: Pestle depicting an owl from the Dominican Republic (García Arevalo 1997, 122).

5.8 Rodents

Fitting with the scarcity in rodent imagery, there are no recorded narratives from the Caribbean archipelago involving these animals (Waldron 2010). Similarly, rodents are rare in South-American narratives (Lévi-Strauss 1973 in Waldron 2010). However, rodents do seem to appear on the adornos from the site of El Flaco, which questions the reason for a potter to make the choice for a subject that seems to have little cosmological status. Nonetheless, rodents regularly occur in the natural environment of Hispaniola, and were a significant food source throughout the Caribbean islands, which may be the reason for the depiction of rodents on the adornos (Rosenberger *et. al* 2011; Rouse 1992).

6. Discussion

In the interpretation of an image, subjectivity can be a major issue, as the interpretation will differ according to subject position of the person who looks at the image (Moxey 2008). The images analyzed in this research have probably been attributed with many meanings by a diversity of viewers. In this, subjectivity is always in flux, and although all knowledge is 'situated', it is not fixed (Haraway 1988). A correct identification of the meanings of the adornos to the inhabitants of the site of El Flaco cannot be guaranteed, and interpretations remain speculative. The adornos were made in a different time, place and culture by people living in a different reality. Although it may be impossible to reveal part of this reality through iconography, because of our subject position, as Waldron (2010) argues, we cannot cower from the attempt to reconstruct some part of it.

Zoomorphic iconography and cosmology

The zoomorphic iconography on the adornos prove to be a significant source of information, concerning cosmological concepts, including the creation of the universe and the possible roles of particular animals to the creators of the adornos. It has been revealed that animals in particular hold a prominent role in the narratives and the cosmology of the Taíno peoples. Most of the animals that have been identified on the adornos have a significant role in the creation narratives and cosmology of the Taíno, which include the bat, turtle/tortoise, frog/toad, lizard and bird. The bat and the turtle/tortoise appear most frequently on the sample of adornos, and probably had a significant role in the lives of the inhabitants of the site of El Flaco.

Because there appears to be a profound connection between cosmology and animal imagery, the cosmology and creation narratives of the Taíno peoples form the basis for the interpretations on the meanings that were possibly attributed to the animals depicted on the adornos. A significant source of knowledge on the roles of animals in the cosmology of the Taíno peoples are the accounts of Ramón Pané. However, these documents are incomplete, secondary sources affected by bias, and one must remain critical in reviewing them.

Nevertheless, there are a few animals that seem to be represented on the adornos, but do not appear in the known creation narratives and cosmology of the Taíno, as recorded by Pané, which includes the crocodile, monkey and rodents. The choice to portray these animals on the adornos is possibly related to oral traditions from other areas in the Americas, narratives or cosmological views that were not recorded by Pané, or related to completely different meanings attributed to these animals (e.g. food source).

Therefore, for the decipherment of the meanings that were possibly attributed to the crocodile and monkey, of which there are no known Caribbean narratives, Amerindian narratives from other areas were studied. The oral traditions, that have been studied here, from outside the Antilles, show structural and cosmetic similarities with the conquest era narratives from the Antilles (Waldron 2010). According to Waldron (2010) it seems that during Pre-Columbian times people across the Amazon and Caribbean shared related narratives and similarities in their narrative construction of meaning. Nevertheless, there are certainly major differences.

Ancestors

Bats were possibly associated with *opías* or ancestors, which has been argued by García Arévalo (1997), McGinnis (1997), Petitjean Roget (1997), Gannon *et al.* (2005), Oliver (2008), Keegan and Carlson (2008), and Waldron (2010). Additionally, according to Moravetz (2005), the turtle/tortoise was possibly related to ancestors as well. Bats and turtles are portrayed on the adornos from the site of El Flaco with both zoomorphic and anthropomorphic features. In a similar manner turtles are portrayed with anthropomorphic features on the adornos from St. Vincent, and bats appear with anthropomorphic features on the adornos from the site of El Cabo in the eastern Dominican Republic (Moravetz 2005; Oudhuis 2008). The shape of an animal was probably the intermediary phase through which the dead entered and left the world of the living (Waldron 2010). Therefore, the anthropo-zoomorphic features of the turtle and bat adornos possibly depict an animal that is united with a departed ancestor.

Additionally, nocturnal animals are generally associated with the spirits of ancestors, who emerge from their hideouts at night to roam around the earth, which include the sea turtle, the bat, the owl, the frog and rodents (Moravetz 2005). All of these animals

seem to be portrayed on the adornos from the site of El Flaco. García Arévalo (1997) argues for an association between the owl and ancestors as well. Such an animal that was thought to be united with the spirit of a departed ancestor was feared and respected by the Taíno peoples (García Arévalo 1997; McGinnis 1997).

Transformation and shamanism

Another theme reflected on the adornos from the site of El Flaco is transformation. For the Taíno peoples persons are constructed, deconstructed, maintained, altered and transformed during social practices in life and death. Furthermore, they believed an individual is a divisible or split entity because its parts or substances belong to other human beings, ancestors, non-human beings or objects and vice versa (Oliver 2008). Many animals depicted on the adornos from El Flaco, alongside the turtle and the bat described above, have the ability to transform themselves, including the frog and the lizard as well.

Furthermore, the animals that have the ability to transcend the three realms may have had a role in maintaining a balance over the three realms and the practice of shamanism, which includes the bat, turtle/tortoise, frog/toad, crocodile and bird. The Taíno peoples aimed to maintain a balance between the three realms, which was done by means of ceremonies, often through animal actors or culture heroes. In these ceremonies, communication occurs between the three realms (Oliver 1998).

Furthermore, the shaman or *behique* has the ability to transform into a spiritual creature or animal by means of an altered, or shamanic, state of consciousness. Such a human/animal transformation provides the power for the shaman or *behique* to move freely through the realms, and communicate with the spirits to request for guidance or knowledge (VanPool 2009). As already discussed, the bird was one of the animals into which a shaman or *behique* would transform, or be accompanied by, in order to have the power to move freely to the celestial realm (Eliade 1972 in McGinnis 1997). Eliade (1960), García Arévalo (1997), Keegan and Carlson (2008), and Waldron (2010) argued that the bird was possibly perceived as an intermediary between the three realms, and was connected to shamanism. Additionally, the turtle/tortoise was possibly associated with shamanism, which has been argued by Rouse (1992), Keen (1992) and Waldron

(2010). The leatherback turtle in particular acts as if he or she is in a shamanic trance (Waldron 2010). Therefore, the Taíno peoples may have perceived this particular animal as being a shaman who transformed into a turtle. Furthermore, Roe (1997) even argued that Taíno shamans or *behiques* were regularly related to such native, mainly small fauna, as the bat.

Provision and fertility

Throughout the creation narratives, animals were the ones who provided cultural knowledge, such as the use of fire and cooking, to the Taíno peoples (Roe 1997). Arrom (1975), Stevens-Arroyo (1988), Moravetz (2005) and Waldron (2010) describe the turtle/tortoise as the bringer of food and shelter. For this reason the turtle is described as the all-giving mother of the Taíno peoples by Stevens-Arroyo (1988). Furthermore, Eliade (1974) in McGinnis (1997) and Waldron (2010) argued that birds were possibly thought of as providers of sacred tools and cultural knowledge, who know the secrets of nature and the celestial realm. Additionally, in the creation narrative of the Taíno peoples, the woodpecker fashions women from creatures who lack female genitalia (Keegan and Carlson 2008).

Furthermore, as already discussed, many animals were probably associated with the provision of human or agricultural fertility, which includes the bat, turtle/tortoise, frog/toad, and crocodile. Waldron (2010) argued for a relation between fertility and bats, while Stevens-Arroyo (1988) and Moravetz (2005) argued for a relation between fertility and the turtle/tortoise. Furthermore, a possible association between the frog/toad and agricultural or human fertility has been argued by Robiou-Lamarche (1984), Stevens-Arroyo (1988), Oliver (1988, 1998), Roe (1997), McGinnis (1997) and Waldron (2010). In a similar manner as the frog/toad, the crocodile was possibly seen as a prophesy for rain and subsequently fertility, which has been argued by Roth (1970), Waldron (2010) and Thurston (2010). In both the frog narrative from the Taíno and the crocodile narrative from the Guianian Carib there appears to be a possible relation with the Pleiades. Both human and agricultural fertility is essential to the survival of a society. Therefore, it is likely that these animals had a notable significance to the Taíno peoples, and were chosen to be portrayed on the adornos. The representation of these animals

on the adornos possibly was thought to provide fertility. In a similar manner, cemís were often buried in the ground to ensure a successful production of fruits or manioc crops (Rouse 1992).

Seduction/deception

Some adornos from the site of El Flaco, which have been interpreted to depict a bat, have a simian aspect. Herrera Fritot and Youmans (1946, 69-83) argued that these images portray humanized bat faces, which highlight the isomorphism between bats and the souls of the dead. However, these images may portray a relation between bats and primates. Seduction and deception is a theme that was possibly associated with both bats and primates. McGinnis (1997) argued for a relation between bats and seduction or deception, while Roth (1970) and Waldron (2010) argued for such a relation with primates.

7. Conclusion

By means of an iconographical analysis, as developed by Panofsky (1939), a sample of 43 adornos from the site of El Flaco in the northwestern Dominican Republic has been analyzed. The main interest of this research is to discover the cultural meaning of the animals, depicted on the zoomorphic adornos, in the known creation narratives and the cosmology of the Taíno peoples. It should be acknowledged that a correct identification of these animals cannot be guaranteed, and any attempt to interpret the cultural meanings that were assigned to these animals remains speculative. Nevertheless, we cannot cower from an attempt to reconstruct some part of the meanings that were possibly assigned to the adornos.

The animals identified on the adornos are the bat, turtle/tortoise, frog/toad, crocodile, lizard, primate, bird and rodent. Most of the animals that have been identified on the adornos have a significant role in the creation narratives and cosmology of the Taíno, indicating a connection between cosmology and animal imagery. The bat and the turtle/tortoise appear most frequently, and both animals have been associated with departed ancestors. Similarly, nocturnal animals as the owl and the frog/toad were possibly associated with the spirits of ancestors. Furthermore, the animals that have the ability to transcend the three realms may have had a role in maintaining a balance over the three realms and the practice of shamanism, which includes the bat, turtle/tortoise, frog/toad, crocodile and bird. Additionally, the bat, turtle/tortoise, frog/toad and crocodile were probably attributed with the provision of human or agricultural fertility, which is essential to the survival of a society. Finally, seduction and deception is a theme that was possibly associated with bats and primates.

There is still an enormous amount of information the zoomorphic iconography of the pre-colonial communities can reveal. Future research will hopefully bring more systematic studies on adornos, which are necessary for an understanding of the cultural relevance of adornos and the animals represented. Further research is expected to offer the possibility of a comparison of adornos across the Caribbean, to discover whether patterns can be observed. The Saladoid adornos from St. Vincent, studied by Moravetz

(2005), and the Taíno adornos from the site of El Cabo in the eastern Dominican Republic, studied by Oudhuis (2008), already appear to show resemblance with the depiction of particular features on the adornos from the site of El Flaco.

Summary

A sample of zoomorphic adornos, unearthed at the site of El Flaco (13th - 15th century CE) in the northwest of the Dominican Republic, has been iconographically analyzed, based on the three-stage model as developed by Panofsky (1939), to discover the cultural meaning of the animals identified on the adornos in the known creation narratives and cosmology of the Taíno peoples. This is expected to contribute to the generally unknown cultural relevance of adornos to the pre-colonial communities in the Caribbean archipelago. The iconographical analysis has revealed a close association between the adornos, and the known cosmological views and creation narratives of the Taíno peoples, as recorded by Ramón Pané. A diversity of animals have been identified on the adornos, which include bats, turtles/tortoises, frogs/toads, primates, crocodiles, lizards, rodents and birds. These animals appear to be associated with the spirits of departed ancestors, seduction/deception, fertility, shamanism and the maintenance of a balance between the three realms of the Taíno cosmos.

Samenvatting

De zoömorfische adornos, die zijn gevonden op de site van El Flaco (13^{de} - 15^{de} eeuw) in het noordwesten van de Dominicaanse Republiek, zijn geanalyseerd door middel van een iconografische analyse, zoals deze is ontwikkeld door Panofsky (1939). Het doel van deze analyse is om de culturele betekenis van de dieren, die zijn geïdentificeerd op de adornos, te achterhalen in de bekende orale tradities en kosmologie van de Taíno. Dit zal, naar verwachting, een bijdrage leveren aan de algemeen onbekende culturele relevantie van adornos voor de pre-koloniale gemeenschappen in het Caribische gebied. De iconografische analyse onthulde een relatie tussen de adornos, en de kosmologie en bekende orale tradities van de Taíno, zoals deze zijn gedocumenteerd door Pané. Een diversiteit aan dieren zijn geïdentificeerd op de adornos, waaronder vleermuizen, schildpadden, kikkers, apen, krokodillen, hagedissen, knaagdieren en vogels. Deze dieren werden mogelijk geassocieerd met de geesten van overleden voorouders, verleiding/misleiding, vruchtbaarheid, sjamanisme en het behoud van een evenwicht tussen de drie rijken van de Taíno kosmos.

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Appendix

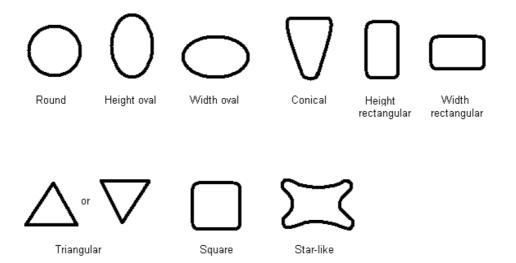
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Appendix 1: Basic information of the zoomorphic adornos

Leading number	Findnumber	Unit	ZSS	Layer	Feature
1	1226	-	63-55-/	Surface find	-
2	1651	34	63-47-20	2	-
3	1451	34	63-47-98	2	-
4	176	7	63-74-25	5	-
5	1499	34	63-47-61	2	-
6	1246	12	63-86-70	-	-
7	1050	16	63-66-67	-	-
8	1351	34	63-47-43	1	47-01
9	1301	34	63-47-40	1	-
10	1210	30	63-56-86	Comb layer	-
11	1048	13	63-56-87	-	-
12	1208	30	63-56-76	-	-
13	2110	52	73-05-57	2	-
14	2371	67	63-45-51	2	45-16
15	1156	30	63-56-83	Comb layer	-
16	1336	34	63-47-22	1	47-01
17	1315	34	63-47-01	1	47-01
18	1542	34	63-47-16	2	-
19	1382	32	63-82-58	4	82-17
20	1100	27	63-82-39	1	-
21	1100	27	63-82-39	1	-

Leading	Findnumber	Unit	ZSS	Layer	Feature
number					
22	214	8	63-85-/	Surface find	85-12
23	1313	34	63-47-21	1	47-01
24	1324	33	63-83-61	2	-
25	82	2	63-74-44	1	-
26	2287	61	63-45-/	6	45-07
27	2316	63	63-44-/	2	44-02(1)
28	2217	57	63-67-47	6	67-20
29	1303	34	63-47-/	1	47-01
30	252	11	63-64-45	4	-
31	1250	34	63-47-53	1	-
32	1203	30	63-56-75	Comb layer	-
33	1250	34	63-47-53	1	-
34	807	13	63-56-/	2	-
35	1946	44	63-55-96	1	-
36	2156	57	63-67-38	2	-
37	-	8	63-74	-	-
38	1311	34	63-47-41	1	-
39	1511	34	63-47-51	2	-
40	1665	37	63-36-70	1	-
41	820	12	63-86-90	-	-
42	2316	63	63-44-/	2	44-02
43	1126	31	63-76-38	1	-

Appendix 2: Frontal head shapes (after Oudhuis 2008, 92)



Appendix 3: Motifs and techniques used on the adornos (Oudhuis 2008, 90)

Technique	Incision	Moulding	Punctation
Incision	1.0 1.1 1.2 1.3 1.6 1.6 1.7 1.8 1.9		1.4.4
Moulding	22.0 23.0 23.1 22.1	2.1 2.2 2.3	224 234 31.4 124
Punctation			₹2 € € 4.1 4.2

1.0	straight incised line of any size and orientation	2.3.0	moulded circle with straight incised horizontal line in centre
1.1	multiple straight incised lines next to each other, of any size and orientation	2.3.1	moulded circle with straight incised horizontal and vertical line in centre
1.2 1.3	wavy incised line of any size and orientation incised circle with incised horizontal line in	2.2.1	moulded horizontal oval with multiple straight incised vertical lines
	centre	2.2.4	moulded horizontal oval with two small punctations horizontally in centre
1.4 1.5	incised circle incised oval with incised horizontal line in	2.3.4	moulded circle with two small punctations
1.6	centre incised half circle with incised horizontal	3.1.4	horizontally in centre moulded round knob with one large
	line in centre	3.2.4	punctation in centre two moulded round knobs bound together,
1.7 1.8	incised wavy line encircling the eyes incised wavy line encircling the eyes and		with one large punctation in the centre of both knobs
1.9	nose incised wavy line encircling the face	4.1	one large round punctation
1.4.1	incised circle with one punctation in centre moulded vertically oval knob	4.2	two small round punctation next to each other, in any orientation
2.2	moulded horizontally oval knob		
2.3 2.4	moulded round knob moulded hollow circle		
2.5 2.2.0	moulded hollow horizontal oval moulded horizontal oval with straight incised		
2,2,0	horizontal line in centre		

Appendix 4: Characters and adornos (after NEXUS1492)



Subtype 1A; adorno 34 (left) and 24 (right).



Subtype 1B; adorno 29 (left) and 36 (right).



Subtype 1C; adorno 40 (left) and 39 (right).







Subtype 1D; adorno 35 (left), 20 (middle) and 21 (right).



Subtype 1E; adorno 41.



Subtype 2A; adorno 13 (left), 15 (middle) and 33 (right).



Subtype 2B; adorno 27 (left), 12 (middle), 42 (right).



Character 3; adorno 28 (left) and 4 (right).



Subtype 4A; adorno 8 (left) and 9 (right).



Subtype 4B; adorno 16 (left) and 17 (right).



Subtype 5A; adorno 7.



Subtype 5B; adorno 10.



Subtype 5C; adorno 22.



Subtype 5D; adorno 37.



Character 6; adorno 23 (left), 19 (right).



Character 6; adorno 32.

Character 7



Subtype7A; adorno 14.



Subtype 7B; adorno 18.



Subtype 7C; adorno 3.



Character 8; adorno 2.



Subtype 9A; adorno 38.



Subtype 9B; adorno 30.



Character 10; adorno 31.

Character 11



Character 11; adorno 5.

Character 12



Character 12; adorno 1.



Character 13; adorno 6.

Character 14



Character 14, adorno 43.

Character 15



Character 15; adorno 26.

Character 16



Character 16; adorno 25.

Character 17



Character 17; adorno 11.