Talking sherds

Spanish ceramics in Caribbean context

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1 Introduction

Ceramic assemblages from Spanish archaeological sites provide a chronological framework for assessing change as well as a synchronic index for measuring social differences within a community. Deagan 1996: 338

Ceramics have an important role within a society and therefore in our archaeological record. Ceramic objects are and were one of the most used objects in societies all over the world (Rice 1987:7-25). This is also the case in the Caribbean and in Europe at the time of the conquest. In both societies pottery was present as a useful object for storage or cooking, but also as a luxury or ritual ware. Therefore it has been an object of trade for centuries in both areas. But the traditional roles of ceramic within these societies totally changed after the first contact between these cultures. Both the Spaniards and the Amerindians got in contact with new types of material culture and new forms of ceramics. With these new forms of material culture came a new system of trade, comprising ceramics as well.

In this thesis an attempt will be made to define the social meaning of Spanish historical ceramics within an indigenous Caribbean site. The first part will focus on the Spanish ceramics which were transported to the Caribbean. Written sources and archaeological sources combined give an overview on what ceramics were present on ships and in colonial towns in the Caribbean.

The second part of this thesis will use the case study of El Cabo to look at the social meaning of the colonial ceramics present in an indigenous Caribbean settlement. In what way did the inhabitants of such a settlement look at these ceramics and what did they mean for them. El Cabo will be studied on its own but will also be compared to other sites in the Greater Antilles during the first contact period. The first contact period in the Caribbean starts at 1492, by that time the Old World and the New World had their first interaction. Some of the case-studies have a habitation period until the end of the 15th century; therefore I've chosen to

stop the research period at 1600. This way all three periods of the conquest are covered; The Initial Euro-Indian contact period, The Conquest-pacification period and The Forced labour system period (Anderson-Cordova 1990: 106-116).
The focus on the Greater Antilles, especially Hispaniola, can be explained by the fact that most early interaction sites are situated at that island. Hispaniola was the island with the most early contact interaction, is well described in historical sources, and has been well investigated by historians and archaeologists.

1.1Research questions

The overall aim of this thesis was to study the social meaning of colonial pottery on a Native American site in the Dominican Republic.
How did the people of this site look at these non-local ceramics and how did they treat them?
Research questions that were posed are:

1) What kind of pottery was transported from Spain to the Caribbean?
    a. Which pottery can we expect on a native site in the Greater Antilles?
    b. Which Spanish pottery was the most common in the Greater Antilles?
2) What is the function of European pottery on a native site in the Caribbean?
    a. How can this function be compared to Spanish sites in the Caribbean?
    b. How can the European pottery of El Cabo be characterized?
    c. How did the European ceramics enter the site of El Cabo?
    d. Did the European and the Indian ceramics share the same life line?
    e. Has the European pottery of El Cabo been modified?
    f. How can the function of the European pottery of El Cabo be compared with other sites in the region?

2 Methodology

The next methodologies have been chosen to answer the research questions posted.

The third chapter of this thesis will give an introduction in the cultural settings of the Caribbean at the time of the European conquest. An overview of the historical backgrounds of both the Caribbean and Spain will be given as well as an introduction in the Spanish conquest of the islands.

Research question one: what kind of pottery was transported to the Caribbean will be discussed in chapter 4 and 5. Chapter 4 is an introduction on Spanish ceramics in Spain and the trade of ceramics within Europe. Chapter 5 is a study towards which ceramics were actually transported to the Caribbean. Historical and archaeological sources have been studied to answer this question. The Crown's list and the supply list for Columbus's household are very important in this study, but also previous archaeological studies like the shipwreck studies of Goggin (Marken 1994) and The Florida database contribute in this study.

The second part of this thesis is about the function of European pottery on a native site in the Caribbean. Chapter 6 will discuss La Isabela, Puerto Real and En Bas Saline and their colonial ceramics. These are two Spanish and one native sites on Hispaniola which will be compared to El Cabo, the case study of this thesis. This case study will be discussed in chapter 6. An introduction on the settings of El Cabo will be followed by a study towards the numerical features and the quantitative variations in the colonial ceramics of this site. This will be done according to the standard of the Leiden Ceramic code book, developed by Professor Corinne Hofman (Hofman 2005). This code book was developed for studying all indigenous ceramics in the Caribbean, but can also be used to study other ceramics because it is a good framework and guideline in studying ceramics. Comparing assemblages makes it easier if studied in the same way.

Because the El Cabo assemblage is a very unique assemblage in the Americas, representing one of the first interactions between the European and the Indians, as many aspects of the assemblage as possible will be studied.
Every sherd will be measured and weighted and the wall thickness will be taken. The wall thickness of a vessel can be related to the size of the vessel and is very dependent upon the clay being used and its conditions. Following the Ceramic code book it is essential to know the vessel shape to say anything about the pot itself. The classification of Sheppard (1963) with the additions of Hofman is very useful in this case, since it is used in both American and European archaeology. The classification of vessel shapes is based on two characteristics; the vessel contour and the vessel orifice. The vessel contour is a combination of the vessel profile and the symmetry of the vessel in the vertical line. The vessel orifice is mostly described in 'open', 'closed' and 'collared' vessels. This part is most important for this research because there is a relation between the vessel orifice shape and the function of the pot. This can not be taken as a 1 to 1 relationship; it is rarely the case that one vessel shape is used for one specific function. However some functional categories can be made. Vessels with an open orifice can be used for all activities with the use of hands inside the vessel, like mixing food, but also for displaying or drying what's placed inside the pot. Closed vessels can be used for storage or cooking. Collared vessels can be used for the storage of liquids, protecting the liquids from contamination (Hofman 2005:26).
To see how large the vessel has been the diameter has to be taken.
Decoration is a very distinctive factor in seeing what kind of pottery you're dealing with. Especially in this study since all the European ceramic sherds were identified as European during the excavation because of their glazing. Glazing and glazed pottery was something the Spaniards introduced in the Americas. The native inhabitants of the islands and the main land did not know any glazing techniques.

The suspicion of the excavators was that most sherds belonged to one or two pots. Therefore the decision was made to do a low tech fabric analysis on this sample.

This kind of analysis looks at the microscopic inclusions and pores in the clay (Rice 1987).

Another suspicion amongst the excavators was that the sherds might have been modified by the Taíno who lived in El Cabo, something that was quite common amongst the Taíno. A microscopic analysis will check whether modification has occurred.

In order to compare the life line of the colonial sherds with the local sherds it was necessary to look at trampling processes. Trampling processes are the processes that influence the archaeological record and in this case ceramics. Under normal conditions both sherds would break in the same manner if they were of the same quality. The hardness of the pottery is of a big importance here. The hardness of fired clay is influenced by several variables; the condition of the firing (temperature or firing atmosphere), the kind of inclusions, microstructure features and the surface treatment (Rice 1987: 354-357).

Softer material would break easier than harder material under the same trampling conditions. Thus one would expect the softer material to be smaller than the harder material (Nielsen 2011 and a personal conversation with E. Bult in 2010). In order to study this, a sample of local ceramics was taken. These sherds were found in the same squares and find layers as the colonial ceramics (see appendix 3). The sherds studied here (find number 2132, 2157 and 2189) are comparable with the rest of the local sherds. The hardness of both the colonial and the local sherds was tested by scratching the broken clay surface of the sherd according to the Moh's mineral hardness scale (Table 1) (Rice 1987: 354-357).

1	Talc	
2	Gypsum	
2,5		Fingernail
3	Calcite	Copper wire
3,5		Celestite
4	Fluorite	
4,5		Window glass, chabazite
5	Apatite	
5,5		Blade of pocketknife; willemite
6	Orthoclase	
6,5		File
7	Quartz	
8	Topaz	
9	Sapphire	
10	Diamond	

Table 1: Moh's mineral hardness scale from Rice 1987: 35

The last important feature to establish is the type of ceramics of the sherds. This was done after putting them next to the Florida database and comparing them with already identified types of colonial ceramics.

Interpretations will be made after these analysis interpreting them according historical, archaeological and spatial analysis. Using historical sources next to archaeological sources will give us more insight in how the Spaniards traded with the Indians and how they thought the Indians saw their pottery, but also about their influence on the region of El Cabo. The historical sources that can be used for this thesis are all written from a Spanish point of view, we always have to be very careful interpreting these written sources. It is necessary to put them next to archaeological sources to get a complete picture about this assemblage. Transculturation is a key word in looking at the archaeological sources.

We often see that objects from another culture have a different value and when used in another culture. Modifying objects is one example of this (Dongen 1955: 11-26).

Spatial analysis has been a major part in the El Cabo research, since the house trajectories were a focus in this excavation. A well established dataset about the settlement patrons and the household patters is present for this important site for this thesis (Samson 2010). It is therefore of great importance to interpret at the spatial distribution of the colonial material.

Chapter 7 will give a comparison between El Cabo and La Isabela, Puerto Real and En Bas Saline. And chapter 8 will discuss and summarize the results of this thesis.

3 Cultural settings at the time of the European conquest

In order to understand what happened after the first contact between the indigenous population of the islands and the Europeans in the Caribbean had been established, we have to understand the historical backgrounds of this area as well as the historical background of Spain. In this Chapter an introduction on the Caribbean will be given as well as an overview of its inhabitants at the time of the conquest.

3.1 The Caribbean

The Caribbean islands are located at the border of the Atlantic Ocean and the Caribbean Sea, off the coast of Central America (Fig 1). Due to the fact that the island group is situated in a tectonically active area, on the border of the Caribbean plate and the North American Plate, many islands consist of volcanic rock. But other islands are calcareous of origin.

The Islands can be divided in three areas; the Greater Antilles, the Lesser Antilles and the Bahamian archipelago. The Greater Antilles, comprising Cuba, Jamaica, Hispaniola, and Puerto Rico, constitute the biggest mass of land of the Caribbean. These islands are characterised by great differences in elevation levels, environment, climate and vegetation. North of Cuba and Hispaniola and east of the Florida shore is a large group of islands, known as the Bahamian archipelago. The third group are the Lesser Antilles, about 12.000 sq km of volcanic and calcareous islands. The Lesser Antilles can also be divided in groups. The Leeward Islands are the north western islands, starting with Guadeloupe and ending with the Virgin Islands. The Virgin Islands function as a transition between the Leeward Islands and the Greater Antilles. The south-eastern islands are the Windward Islands. The Lesser Antilles also include some islands just besides the mainland shore, comprising The Netherlands Antilles, Margarita, Coche, Cubagua and the Venezuelan archipelago. Due to the big geological and

environmental differences many islands differ in subsistence economy. Most of the islands are within sight of each other, enabling trade and travel between the islands possible (Rouse 1992 2-5; Wilson 2007: 12-15).

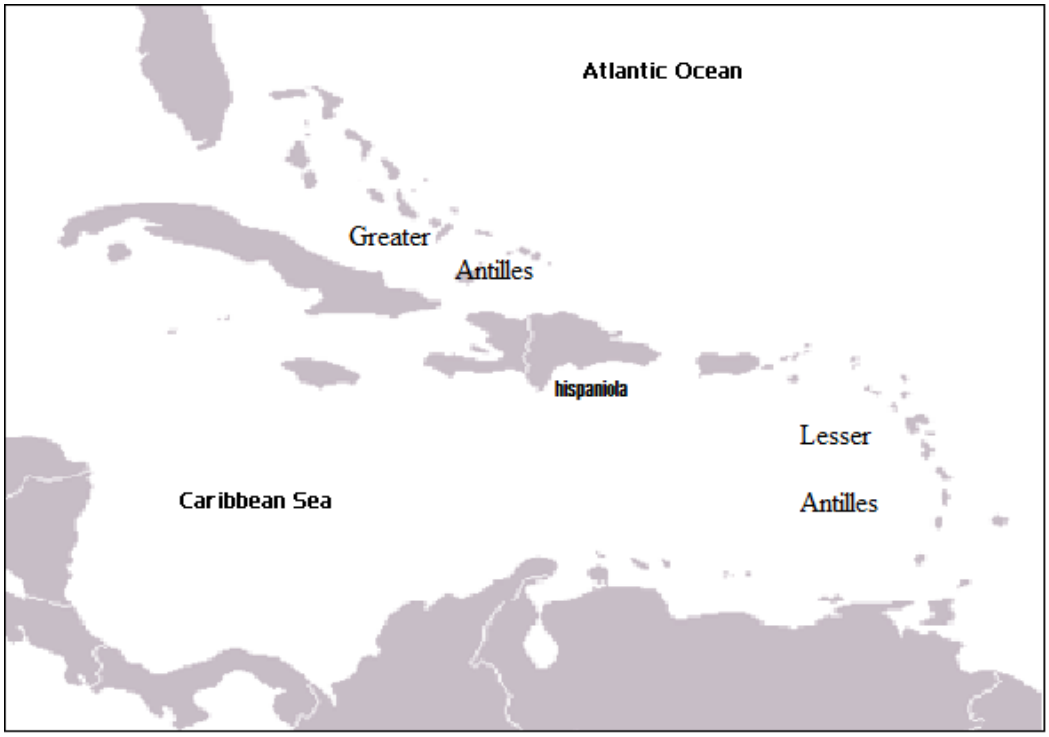

Figure 1. Map of the Caribbean after: http://en.wikipedia.org/wiki/File:Caribbean_map_blank.png

3.2 The Caribbean inhabitants at the time of the European discovery

Columbus didn't find the Islands to be uninhabited; for thousands of years before the European arrival the Caribbean had been occupied and exploited by indigenous societies. The societies Columbus and his companions found on the islands were a result of thousands of years of migration, interaction and cultural exchange. They had spread across the Caribbean islands and created their own ethnic groups as we know them from archaeological and historical sources today. Since interaction occurred on a regular base it is important to look, not only at the Indians who greeted Columbus, but also to look at their neighbours. `

At the time of contact the Caribbean was inhabited by three major cultural groups and several smaller ones. The best known are the Taíno, the Indians who made the

first contact. But also the Guanahatabey, the Island Caribs, the Macorix and the Lucayo were inhabitants of the Caribbean area Columbus entered (Rouse 1992: 18; Wilson 2007).

3.2.1 Taíno

The Taíno inhabited the Bahamas and the major part of the Greater Antilles, with the exception of the western part of Cuba. None of the 16th century chroniclers used the word Taíno in an ethnic or tribal way, they would normally just use the word Indios. The people referred to themselves by the names of the island they lived on. The term 'tayno' was mentioned in the account of Columbus' second voyage in a very specific way. 'Tayno', meaning good or noble, was spoken to Columbus to explain to him that the Taíno weren't Island Caribs, but good, prudent people. It was not until 1836 that Constantine Samuel Rafinesque used the word Taíno in a cultural way. Nowadays ethno historians and archaeologists use the term Taíno for the group of inhabitants of the Greater Antilles who shared the same linguistic and cultural traits (Oliver 2009: 24). Based on their material culture Rouse has made a distinction between the different Taíno groups. The Western Taíno are placed on the islands of Jamaica, most of Cuba and the Bahamian Archipelago. The Classic Taíno are identified in Hispaniola and Puerto Rico and the Eastern Taíno are identified on the small eastern and southern islands, including most of the Virgin and some of the Leeward Islands (Rouse 1992: 5-7). The Taíno that are the focus of this thesis are part of the Classic Taíno but there is still a large ethnic and cultural diversity. For the rest of this thesis I will use the term Taíno when I speak of the inhabitants of Hispaniola at the time of contact.

The Taíno were politically and socially organized into hierarchical, non-egalitarian chiefdoms each led by a chief, named *cacique*. Below the chiefs were the *nitainos* and the *naborias*, whom the Spaniards associated with nobles and commoners. The chief could be either man or woman and had political and religious power. Often the chief was attended by a religious specialist called the *behique*.

Not all chiefdoms were culturally the same, there were chiefdoms with their own way of living and their own language. But even though they acted as separate chiefdoms they interacted regularly with each other though trade. They lived in settlements that ranged from small hamlets to very large towns. According to Las Casas these were cities without any well-laid-out streets. The house of the chief was the most important one and was often the biggest on the settlement. In front of that house was the central plaza used for many social and public activities. There was no standardization within these plazas. The houses were made of wood and straw and were big houses for ten or more people (Pané 1999).
The Taíno economy was based on exploiting the sea and growing crops, mainly Manioc. They provided for their own household goods but also traded a lot. Amongst the trade goods were cotton, ground and polished stone beads and pendants, ornaments and tools of carved shell, bone, stone, wood, tobacco, foods and feathers. Next to that the elite also had its own trade chain and exchanged amongst each other. They exchanged scarce or luxury items to establish and enhance political relations (Deagan 2002: 30-40; Pané 1999: 21-22; Rouse 1992: 9-17).

3.2.2 Other cultures present on the islands.

Guanahatabey

In the western part of Cuba and Guacayarima Peninsula in Haiti lived the Guanahatabey. They are sometimes wrongly referred to as the Cinobey, a Cuban Taíno group, but they are of a different linguistic group than the Taíno. We know little of them from the historical chronicles, for they were extinct before their culture could be studied. The Taíno told the Spaniards that the Guanahatabey lived like ‘savages, because they have no houses or farms and villages, no cultivated lands and therefore they are subsisting on game captured in the mountains, or on turtles and fish’(Rodrígues Ramos 2008: 393-404) .
Archaeology has shown the remains of people living in the open or in caves, relying on shellfish, fishing and game. Their technology was based on chipping and grinding bone, stone and shell to make tools. The only ceramics that have

been found in this area are those of the Cayo Redondan style. It is generally thought that the Guanahatabey are the original, pre-Arawakan, inhabitants of Cuba and that the Taíno pushed them further and further back into the position they occupied in Columbus's time, but little is known from the contact they had with the Taíno or the other surrounding societies (Mol 2007: 60; Rodríguez Ramos 2008: 393-404; Rouse 1992: 20).

Macorix

Just like the Guanahatabey the Macorix are of a different linguistic group then the Taíno. They lived very close to the Taíno as they inhabited the northern part of the island of Hispaniola. The Macorix are only known from ethnohistoric sources, nothing is known about them through archaeology (Mol 2007: 61).

Lucayo

The Lucayo were the inhabitants of the islands of the Bahamas, or as the Spanish called them; the Islas Lucayas. They are thought to be a subgroup of the Taíno. The Lucayo spoke an Arawakan language and called themselves Lucayo, meaning 'small islands' in Taíno. The Lucayo were the first people to meet the Spaniards, since Columbus arrived in the Bahamas on his first voyage. The only thing we know about the Lucayo is what Columbus wrote about them in his journal. He found the Lucayo to be very different from the people living in the Greater Antilles. They did practice some horticulture but their main economy was based on marine resources. The reason we do not know more about these people living in the Bahamas is because the Spaniards thought the islands to be completely useless since there was no gold present. They exploited the islands by capturing the Indians and enslaving them elsewhere. Within two decades after the encounter, the entire population of these islands had disappeared as a result of the meeting with the Spaniards (Mol 2007: 60; Rouse 1992:5; Sauer 1966: 160).

Island Caribs

The Island Caribs arrived rather late in the Caribbean; they moved from the mainland to the southern Lesser Antilles in the 14th century. They were of an Arawakan linguistic group, but their language differs from other groups. The Caribs or Kalina, as they called themselves, have different languages for males and females. The female language consists of only Arawakan words and the male language consists of Arawakan and Carib words.

The Carib were known in the Caribbean as a ritual cannibalistic, warrior tribe, they often raided chiefdoms in the north. During such an attack men were killed and women were taken as wives and slaves (Boomert 1986; Mol 2007: 61; Rouse 1992: 21-22). Because of this tactic the Island Caribs constantly increased their numbers. The Caribs had little or no contact with the Spaniards after the colonization of the Caribbean, this has as a result that a Carib occupation is still present in the Lesser Antilles today (Mol 2007: 61; Wilson 2007: 163).

Igneri

The Igneri lived next to the Island Caribs in the southern and northern Lesser Antilles. Traditionally they were seen as relatives of the Taíno, but with a less 'complex' society. But some archaeologists have suggested that this traditional view on this society is result of a wrong reconstruction by using only historical sources. And that this culture was quite similar to the societies of the Greater Antilles, although the Igneri societies can be divided by ceramic styles with the Elenan Ostionoid in the northern Lesser Antilles and the Suazoid in the southern Lesser Antilles (Mol 2007: 61-62).

3.3 The Spanish conquest of the Caribbean

Medieval Spain had been the scene of the constant battles between Muslims and Christians, ever since the Muslims invaded Spain in the beginning of the 8th century. The *reconquista* is the period in which Christian Kingdoms slowly regained their power over the Muslim-controlled areas. The *reqonquista* ended in 1492 when Queen Isabella and King Ferdinand retook the last Muslim city, Granada (William 2010: 47-60).

3.3.1 Columbus 1st voyage

At the end of the 15th century many people adapted to the idea that the world wasn't flat and a lot of European countries started to expand their territory. The Portuguese had already made many expeditions in which they had discovered a lot of new areas and Asia had already been exploited by many countries. Columbus took notice of these messages from sailors and made his own conclusions about the world. He came to the conclusion that Asia could be reached by sailing westwards from Europe. He made plans for an expedition but had a hard time gaining financial support. In 1485 he presented his plan to the Spanish king and queen, but it was only after the Spanish victory against the Moors that he gained the support he wanted. He was appointed 'Admiral of the Ocean Sea, Viceroy of the islands and of the mainland discovered or to be discovered' and he was ready to prepare for his first journey (Lévine 1966: 16-17).

Columbus kept a detailed diary of his journey. Fortunately for us Las Casas copied this journal, so we can reconstruct this important expedition. In this diary he tells us his experience of his journey that commenced on the 3rd of august 1492. A small fleet of three ships, the Santa Maria, the Niña and the Pinta, all together with an eighty-seven man large crew left the harbour of Palos.

They left the Canary Islands on the 8th September and they would not see any land until 11 October when they first sighted land in the Bahamas. This was the longest any of the men had ever been without any sight of land. To keep up the morale of

the men Columbus kept the real number of miles for his diary, he always told the men they had travelled less than they actually did (Dunn and Kelly 1989).

3.3.2 The first landfall

It is still not clear on which island of the Bahamas Columbus first set foot ashore, but it must have been in the Lucayo area. The Spaniards called this island San Salvador. In the morning of the 12th of October the first meeting between the Europeans and the inhabitants of the New World occurred. Columbus wanted to keep the first contact as friendly as possible because that way it would be easier to gain their trust so it would be easier to trade with them. Therefore he offered them small gifts of little value. He saw that these people were almost naked but they were wearing golden plugs in their noses and he asked them where these metals came from. They told him to sail southwards so he decided to leave these islands behind and to continue his journey (Lévine 1992:30).

On Christmas Eve the Santa Maria foundered near the present day Cap Haïtien. The local Taíno chief Guacanagarí came to help, unloaded the ship and gave the Spaniards two houses to stay in. The chief quickly noticed that the Spaniards were interested in gold and offered them some golden goods to gain their trust and friendship. The Santa Maria could not be saved so the Admiral decided to establish a tiny settlement, La Navidad, and to leave the men of the Santa Maria behind to look and trade for more gold. The other two boats sailed off on 16 January 1493 and landed in Lisbon on 4 March (Dunn and Kelly 1989).

3.3.3 The 2nd voyage and the colonization

Columbus' second voyage was in contrast with his first expedition. Instead of consisting three small ships, his fleet now had seventeen ships with more than twelve hundred men. When he returned to Hispaniola in December 1493 he found the settlement of La Navidad to be completely destroyed and his men dead. It´s still not clear what happened to La Navidad but it caused a disruption of the relationship between the Taíno and the Spaniards. Columbus left the area of Guacanagarí and sailed on the north coast of Hispaniola and founded the town La

Isabela. After that many colonists continued to come to the New World and more and more towns were founded (Deagan & Cruxent 2002:1-4).

3.4 European and Indian perspectives

When two different cultures meet you always have to deal with different impressions about each other. The same happened when the Spaniards and the Indians met each other for the first time. The Spaniards already had some experience with non-European people since they had already been to many places in the world like Africa and Asia, but the people of the Caribbean were considered the most exotic people they had ever met. According to Columbus they were very gentle people who were kind and of good stature, they were almost naked in which he saw a great sign of poverty. His opinion was that the Indians were timid, peaceful and guileless (Pané 1999; Deagan 2002a: 13-14; Levine 1992:33).

Others put the emphasis on the fine appearance and the beauty of the inhabitants of the Caribbean (Deagan 1995: 73).

From the fifteenth-century Christian Spaniard perspective it was very striking that the Indians appeared to be non-religious. In one of his letters Columbus argues that the Indians 'will make good servants of good understanding, as I see they repeat promptly what is said to them and I think that they will easily become Christians'(Deagan 2002a: 13-14).

The Indian perspective on the Spaniards was completely different. It is difficult to know exactly what they must have thought about the Europeans since they have no written sources. What we do know is how Columbus interpreted the reactions of the Indians to the arrival of the Europeans.

According to Columbus the Indians saw Columbus and his men as the stranger king, coming from heaven. The cacique Cáicihy had foreseen this event and warned them about these clothed men (Keegan 2007: 42-47). After they lost their initial fear of the strangers the Indians approached the Spaniards and received many gifts like beads, hawk bells, redheads, etcetera. Soon they exchanged many goods to gain these foreign items.

This view on the Spaniard didn't remain like it was. After Columbus captured some Taíno so they could act as interpreters the attitude towards the strangers changed. The Europeans tried to fix the relationship by offering the natives gifts but it was a lost cause, a solid trade system couldn't be established anymore (Lévine 1992: 34; Deagan 2002a: 14).

4 Spanish ceramics

Since the Muslim Ummayad invasion of 711, Spain had been under an almost constant influence of the Arabic empire. Spanish material culture in the sixteenth century was a result of these centuries of Arabic occupation and influence. Little is known from the early Moorish Spain, but there is evidence of the local manufacture of ordinary, roughly painted pottery and of ceramics made in the Hispano-Roman tradition. The important changes within ceramics came in the tenth century, when through Middle Eastern pottery the basis for subsequent developments in Spanish pottery was established. From the 13th century onward the Christians began to re-conquer a lot of Moorish territories. As they moved south, the Christian conquerors maintained the economic fabric already existing and thereby ensured the continuity of pottery ceramics. But the development of pottery didn't stop. For years the Muslim and Christian kingdoms lived together, but this ended when Ferdinand and Isabele put an end to the Nasrid Kingdom, the last Muslim kingdom in Spain (Ray 2000: 3-21).

The years of Muslim occupation and the scarcity of wood resulted in a major focus on ceramic objects in Spain at the time they reached out to the world. These objects were integrated in almost every aspect of Spanish daily life, including food preparation and storage, sanitation, architecture and religion (Deagan 1995: 184-185).

4.1 Types of ceramics

Spanish ceramics are often categorized into utilitarian wares, majolicas and non-majolica tablewares.

Utilitarian wares include the common ceramics like cooking pots, shipping and storage containers, chamber pots and vessels that can be used for multiple things. They are often the most excavated ceramics at an archaeological site. The importance of these ceramics and how they were embedded within Spanish tradition can be seen by the fact that the same basic forms of these ceramics are still present in present day Spanish pottery.

Majolicas are tin-glazed ceramics which are typically made into tableware forms. Non-majolica tablewares can be divided into three categories: a honey lead-glazed ware (melado), orange miciaceous and feldspar inlaid (Deagan 1995: 184-185). Another categorization can be made; in the years before the discovery of The New World ceramics could have been divided into two major categories; the Nasrid Kingdom pottery and the Christian Kingdoms pottery.

In the Nasrid Kingdom manufacturing pottery became a major industry. All sort of types of ceramics were produced;

The Alhambra Vases: this name is given to a very large group of very tall, ovoid shaped vessels which taper to a narrow base and have a high flared neck. They have flat wing-like handles and their decoration is in tin-glaze, lustre glaze or a lustre and blue glaze and sometimes they have an inscription. They are not only highly decorative, but they also had a function. They were to provide water for honoured guests. They are considered as a luxury vase for local use and for export.

Málaga lusterware: this kind of pottery has a very large variety in decorative styles. There seems to be a development from complex designs to simpler, more repetitive motifs. The reverses usually have slanting false ornamental band accompanied by wavy lines or circles. The larger bowls are often decorated with four ‘pine-cone’ or ‘tree-of-life’ motifs. A lot of the bowls have a vertical rim, which is very typical for this kind of pottery. A lot of the decoration is done by a tin-glaze, lustre glaze and pale blue.

Green-glazed pottery: green glaze often appears on jars, often decorated with incised motifs.

Unglazed pottery: A lot of the vessels manufactured were vessels with impressed design. These were often utilitarian wares (Ray 2000: 90-170).

In the Christian kingdoms pottery was just as important but almost no ‘European’ motifs were introduced. The production was almost entirely in the hands of the Moors, often Moors who converted to Christianity, but the age-old beliefs remained.

It wasn't until the 16th century that the pottery in Spain showed new motifs and influences from the rest of Christian Europe (Ray 2000: 90-170).

4.2 Trade

The pottery in Spain in the 15th century wasn't just a result of local Spanish ceramic production. Even centuries before the 15th century Spain had been involved in a far expanding trade network. After the decline of the Roman Empire, trade networks within Europe began to flourish. From the eleventh century on, Europe began to develop the first version of their own world-economy. By the beginning of the 15th century Spain was a part of a large network which covered a large part of Europe (Fig. 2). The trade in this network did not only involve objects but also ideas. Because of this trade networks we have to keep in mind that the Spanish ceramic assemblage at the time of colonization of the Caribbean a mixture was of their own Spanish ceramics, European ceramics, Asian ceramics and even Spanish ceramics with foreign influences (Braudel 1992: 20-28; Hildyard 1999: 7-16).

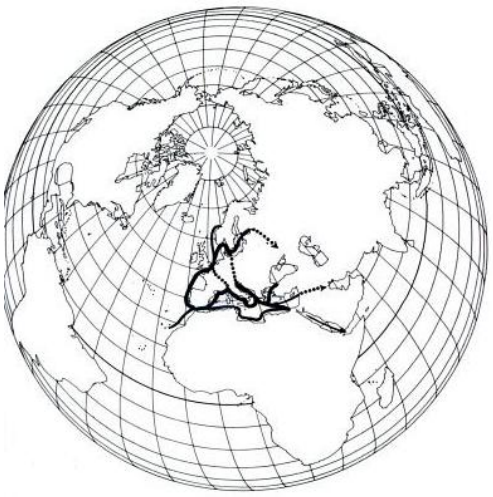

Figure 2: The European Trade network at the beginning of the 15th century (Braudel 1992: 28)

5 Spanish ceramics in the Caribbean

5.1 Historical sources

From historical sources we can reconstruct a part of the European material culture that went to the Caribbean and what the use of those objects was. Important sources are the supply list of ´The Crown´s list´ and the lists that registered what Columbus needed for his household in the Caribbean and what he received in the Caribbean. These lists probably do not tell us about the exact types of ceramics and about all the ceramics taken to the Caribbean but they do tell us what was important for the Spaniards to take with them to the Caribbean (for more information about the types of ceramics mentioned in the text see appendix 1). The things that are underlined are most probably ceramics.

In 1494 Antonio de Torres, one of Columbus' men, wrote a message to the Spanish Crown in which he requested supplies needed for the settlement of La Isabela.
The list mentions what Columbus thought was needed in order to maintain one thousand people for one year. These supplies had to be provided for the second voyage to the Caribbean.

From the Crown's memorial the factor, Don Juan de Fonsesca, on supplies needed to sustain approximately one thousand for one year in Hispaniola.

Foodstuff	**Livestock and fowl**
Wheat, 600 cahices	Mares, 12
(Barley, 100 cahices	Asses, 12
Biscuit, 600 quintals	Sheep and goats
Wine, 12.000 arrobas (in casks)	Calves, 20
Vinegar, 2.000 arrobas (in casks)	Chickens, 400
Oil, 410 arrobas (in jars)	
Beans, chickpeas and lentils, 70 cahices	**People**
Bacon, 500 sides	Miners from those who are in Almadén
Beef, 100 carcasses (in casks)	Wool experts

Raisins and figs, 200 quintals	Spice and perfume experts
Unshelled almonds, hazelnuts and walnuts 30 quitals	Goatherds Peasants and labourers
Salted fish, 300 barrels	
Onions, 4.000 bunches	
Garlic, 5.000 strings	
Sugar, 50 arrobas	
Mustard, 6 flasks	
Honey, 9 arrobas	
Molasses, 10 jars	
Other seeds and vegetables	
For maintenance of people	
Medicines (60.000 maravides worth)	
Shoes and sandals	
Other items of clothing and footwear	
Nails of all kinds for houses and ships	
French saws, 1 dozen (1.500 maravedis each)	
Anujos for wine, 20	
Wine flasks of 2,3, or 4 azumbres	
Water casks, 500 dozen	
Strainers and *ajonarlos*, 10 dozen	
Sieves and stiflers, 10 dozen	
Glass lamps, 3 dozen	
Chamber pots in 6 straw boxes, 5 dozen	
Coarse cloth [*jerga*], 1.000 yards	
Measures for bread, wine and oil plus other glasses	
Lentuadas, 5 dozen	
Tallow, 59 quintals	
Soap, 2 quintals	
Wax, 2 quinalts	
Iron	
Steel, 20 quintals	
Lead, 15 quintals	
Quicksilver, 2 quintals	
Mangarras, 200	
Fishing nets, 4	

Harpoons and arrows, 5 dozen
Fish hooks of all types, 20 dozen
Fish hooks from Cardona, 2 dozen
For maintainance of ships
Oars for small ships, 12
Oars for boats [*bateles*], 100
Oars for caravels, 100
Pintles and hudgeaons, for rudders, 11
Mariner's compasses, 1 dozen
Mariner's watch glasses, 1 dozen
Medium-sized anchors, 10
Rigging of all kinds, 60 quintals
Rigging of all kinds made from *esparto* grass
Alonas for sail, 1200 wings
Gelisano thread, 6 quintals
Oakum, 30 quintals
Tar, 10 barrels
1 cahice = 12 fanegas, or about 18,5 bushels)
(1 arroba = approximately 4 gallons liquid, 25 pounds dry)
(1 quintal = 4 arrobas, or 100 pounds) (375 Spanish maravedis equal 1 ducat) (1 azumbre = about 4 pints)

Table 2: The Crown's list Deagan and Cruxent 2002b; 301-302

What you can see here is that ceramics are seldom explicitly mentioned when talking about supplies. That can be a result of the fact that ceramics were such a part of everyday life that it was not necessary to mention them. It could well be that when talking of taking oil it was clear to anyone that you would take it in a ceramic jar. Underlined are the things that are supposed to be ceramic. What´s interesting is that they do not mention cooking pots or any other ceramic objects on itself.

Required by the admiral and his household, 1494

For his kitchen

Tablecloths of 8 *cuarteles*, 5 yards each, 4 pairs
Small cloths, 6 dozen
Towels, 6
Tablecloths for cupboards and for his men when they eat, 6 pairs of 6 yards each
A pewter cutlery
Silver cups, 2
Jugs [silver?], 2
Salt cellar [silver?], 2
Spoons [silver?], 12
Brass candlesticks, 2 pairs
Copper pitchers, 6
Large pots, 2
Small pots, 2
A large cauldron
A small cauldron
Large frying pans, 2
Small frying pans, 2
Stewing pans, 2
A large copper pot with lid
A small copper pot with lid
A brass mortar
Iron spoons, 2
Graters, 1 pair
A grill to roast fish
Forks, 2
A colander
Kitchen towels of thick linen cloth, 12 yards
A large basin for cleaning
Large tapers, 12
Candles, 30 pounds
Candied citron, 20 pounds

Clothing and footwear for himself

A bed made of 6 mattresses of fine Brittany linen
Pillows of cambric, 4
Bed sheets of half cambric, 3 pairs
A light quilt
A blanket
Green and brownish serge silk cloth
A cushion
Cloth tapestries depicting trees
Door hanging of the same, 2
Coverings with his coat of arms, 4
Decorated coffers, a couple
Perfumes
Paper, 10 quires

For his household

Ordinary mattresses, 12
Thick bed sheets, 12 pairs
Ordinary blankets, 12
Green and brownish cloth, 80 yards
Shirts, 80
Leggings and jackets, 4
Vitre [coarse canvas], 100 yards
Ordinary shoes, 120 pairs
Black thread, 6 pounds
Fine yarn, 6 pounds
Black twisted silk, 3 ounces

Sweets without pine kernels, 50 pounds
All types of conserves, 12 jars
Dates, 4 arrobas
Quince preserve, 12 boxes
Rose-colored sugar, 12 jars
White sugar, 4 arrobas
Water scented with roses, 1 arroba
Saffron, 1 pound
Rice, 1 quintal
Raisins from Almuñecar, 2 quintals
Almonds, 12 fanegras
Good honey, 4 arrobas
Fine oil, 8 arrobas
Olives, 2 jars
Fresh pig's lard, 3 arrobas
Ham, 4 arrobas
Chickens, 50 pairs
Roosters, 6

Table 3: Required by the admiral and his household Deagan and Cruxent 2002b: 302-303

In this list you can see more of the supplies one household needed. Therefore more pottery is represented. Of course you have to keep in mind that this was not an ordinary household, one could imagine that Columbus was to get the best of the best taken on board. One could assume that a lot of the metal objects would have been ceramic in an ordinary household. But this list till gives us a good view on what would have been present in a Spanish household in Hispaniola in the first years of the colonization.

5.2 Shipwrecks

Pottery from Spanish shipwrecks is one of the sources we can use in order to find out which ceramics were present on ships sailing to the Caribbean. A lot of Spanish colonies were dependant on the supplies ships provided them in order to survive. Therefore shipwreck archaeology is an alternative for looking at what ceramics were transported to the islands than looking at historical sources. This is

a result of the fact that most shipwreck sites are like a time capsule, they are often closed sites and represent a short time frame.
Goggin has examined 17 shipwrecks in the Caribbean for his research which are published in Marken 1994: *Pottery from Spanish Shipwrecks, 1500-1800.* Not all of them are relevant for this research, so the decision was made to leave the ships that sunk after 1600 out of consideration (Marken 1994: 1-15).

The St. John's Bahamas Wreck (pre-1550)

This wreck is one of the earliest discovered wrecks in the New World so far. It was discovered in 1991 on the western edge of the Little Bahama Bank and excavated between 1991 and 1995 by the Mel Fisher Maritime Heritage Society (MFMHS).
The ceramics recovered from the wreck are the most common type of artefacts. The largest part of the ceramics are sherds from earthenware storage containers, but also many other more fine ceramics are present. The earthenware containers are also known as Olive jars (for types of ceramics mentioned in text see Appendix 1), thousands of pieces were excavated. From the rims that were collected an estimate of at least 71 jugs has been made. One of the Olive jars excavated was completely intact, providing a model for the shape and size of these jars. This type of Olive jar was only made in Spain, especially in the early contact period. Some of the body sherds were decorated with inscriptions. These inscriptions are possibly of Moorish origin, and probably contain a mark of letter, but the sherds are too small to interpret the inscription.
The second most common type of ceramics of this wreck are the majolicas. A lot of them were table wares and specific utilitarian wares. The majolicas of this wreck can be divided into Columbia Plain ceramics; composed into crude, brimless plates and drinking vessels, Whiteware; concave-based plates and pedestal –footed cups or bowls, Sevilla White and a drug jar.
The third group is the lead-glazed wares. There is a great variety within the paste type and vessel shapes of these wares, with glaze ranging from golden-brown to olive-green.

The rest of the ceramics are some burnished ware sherds, unglazed wares, bricks and clay pipes (Malcom 1996).

The Padre Island Wrecks (1554) also known as the flota

These are three 'Spanish treasure ships' wrecked in a hurricane in the Gulf of Mexico in 1554 (Marken 1994: 17).

Not many ceramics have been found in these wrecks, 961 sherds in total. The largest part of the assemblage consists of Olive jar sherds. Both early and Middle style Olive jar forms appear at this site, these differ from the early Olive jars by shape, size, lip form and the presence of handles.

The second most common group are the majolicas, this group falls into four categories: Spanish made, Italian made, unknown origin and unidentified. The Spanish made are Columbia plain plates and drinking vessels, Yayal Blue on White plats, Santo Domingo Blue on White jars.

Lead-glazed earthen-wares are present in both utilitarian and table wares in ranging glazes (Skowronek see www.sha.org/publications/onlinepubs_html/pubDetaols.cfm?filename=21-2-06pdf).

The Spanish Armada (1588)

Five of the ships sunk in the battle between Spain and England have been recovered; the Trinidad Valencera, El Gran Grifón, the Santa Maria de la Rosa, the Girona and the San Juan de Sicilia. Four of these wrecks yielded ceramics, although these ships were not sailing towards the New World we can take these ships into account in this research because of the 'offical nature'of the Indies trade and the fact that the Armada was supplied from the same ports as the ships travelling towards the New World.

The pottery of these ships consists mainly of Olive jars but also have majolicas and lead-glazed wares. (Marken 1994: 18-19)

The San Pedro (1596)

The San Pedro wrecked off the reefs of Bermuda in 1596 and was explored in 1950.

The ceramics of this ship include some Island Carib arrow heads and pottery, possibly for storage, so it is possible the ship was on its way back to Spain. Still some non American ceramics were present; one Chinese bowl and many pieces of glazed pottery. There were possibly some Olive jars but they have disappeared. (Marken 1994: 20-25)

What we see here is that pottery was present on ships in a fairly large amount, in contrary to the historical sources. Especially Olive jars represented a large part of the inventory of a ship, this may be due to the fact that Olive jars were important storage vessels on ships.

5.3 Florida database

The database of the FLMNH (the Florida Museum of Natural History) is an online database of historical ceramics in the Caribbean including Florida. The collection covers the period of 1492 up till 1850 and is available online. It includes hundreds of different ceramic types and has over thousands of pictures of the different sherds.

The database has been organized around the concept of 'ceramic type', a concept that can be used for identifying, classifying and comparing pottery.

Since this thesis is discussing the early contact ceramics the ceramics after 1600 were left out of consideration.

This database is very useful in studying the colonial ceramics present in the Caribbean. An overview is given of colonial ceramics that have been found in the

Caribbean. But also the colonial sherds of local production are displayed. This way you can easily compare your sherds with the already identified sherds. According to this database the possible colonial sherds present on a post-1492 site in the Caribbean are;

Andalusia Polychrome A (1575-1625)	Bizcocho (1500-1550)
Caparra Blue (1492-1600)	Columbia Plain (1490-1650)
Columbia Plain Green Dipped (1490-1665)	Columbia Plain Gunmetal (1490-1650)
Cuenca Tile-Type A and B (1500-1575)	Cuerda Seca (1490-1550)
Delftware, Polychrome (1571-1790)	Faenza Ploychrome, Compendario (1550-1600)
Faenza Polychrome, Isoriato (1550-1600)	Faenza White (1550-1600)
Fine White Majolica (1500-1650)	Green Bacin/Green Lebrillo (1490-1600)
Green Lead Glazed Coarse Earthenware (1490-1650)	Isabela Polychrome (1490-1580)
La Vega Blue on White (1525-1575)	Lead Glazed Coarse Earthenware (1490-1900)
Ligurian Blue on Blue (1550-1600)	Lusterware (1490-1550)
Melado (1490-1550)	Montelupo Blue on White (1500-1550)
Montelupo Polychrome (1500-1575)	Morisco Green (1490-1550)
Olive Jar. Early Style (1500-1570)	Olive Jar, Generic (1490-1900)
Olive Jar, Middle Style (1560-1800)	Orange Micaceous (1550-1650)
Pisano Style Tile (1575-present)	Porcelain, Kraak (1550-1644)
Porcelain, Ming Blue on White (1550-1644)	Porcelain, Ming Polychrome (1550-1644)
Porcelain, Ming Polychrome	Redware (1500-1750)

Overglazed (1550-1644)	
Romita Plain (1500-1600)	Santa Elena Mottled Blue in White (1500-1600)
Sevilla Blue on Blue (1550-1630)	Sevilla Blue on White (1530-1650)
Sevilla White (1530-1650)	Sixteenth Century Lead-Glazed Redware (1500-1600)
Slipware, Polychrome Sgraffito (1400-1600)	Spanish Storage Jar (1500-1800)
Stoneware, Rhenish Blue and Gray (1575-1775)	Talavera Tradition Polychrome (1550-1600)
Talavera Tradition, Blue on White (1590-1750)	Talavera White (1500-1700)
Unglazed Coarse Earthenware (Generic) (1490-1900)	Yayal Blue on White (1490-1625)

Table 4: types of colonial ceramics on Caribbean sites after the Florida Database: http://www.flmnh.ufl.edu/histarch/gallery_types/type_list.asp .

6 Caribbean sites in the contact time

It is important for this study to look at the ceramics of different sites in the Caribbean at the time of contact. My most important case study is El Cabo, situated in the eastern part of what is now known as the Dominican Republic. A comparison with equivalent sites is necessary. Therefore the choice was made to study not only El Cabo but three other sites from around the same time in Hispaniola. La Isabela, Puerto Real and En Base Saline have been the focus in important studies and are good comparable studies for this research. This way an overview will be given of two Spanish sites and their ceramics and two Native American sites with their colonial ceramics.

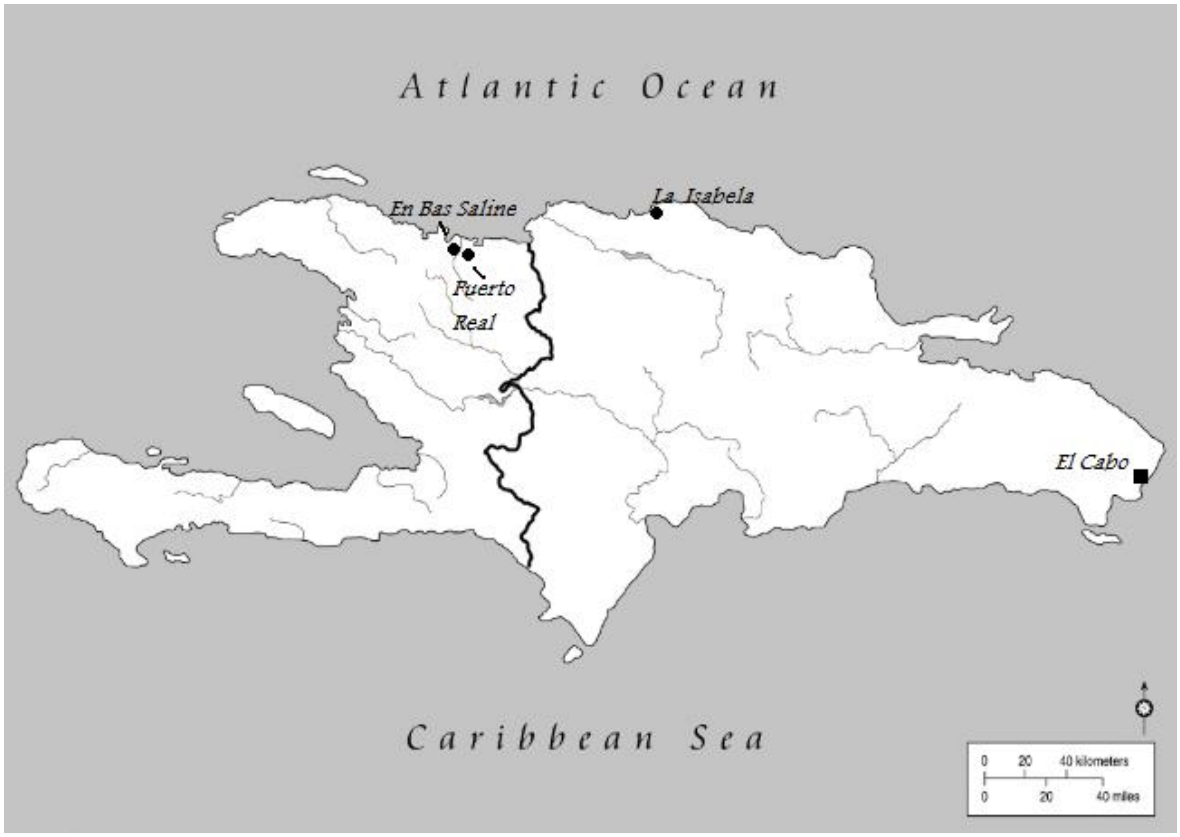

Figure 3. Map of Hispaniola with the four sites studied, El Cabo is pointed out with a square after: http://alabamamaps.ua.edu/contemporarymaps/world/americas/index2.html

6.1 La Isabela

La Isabela is one of the most important sites for historical archaeology in the Caribbean. It is known as the first town in the America's, the city that Columbus himself founded, and where he lived during his stay in the Dominican Republic. The settlement was built right in front of a local Indian village, right on the top of a rocky headland and at the shore of the sea. Although La Isabela was rather small (about 150 x 190 meters) and had a short occupation period of four years many architectural structures and objects have been recovered (Deagan & Cruxent 1993:78-80).

The Spaniards tried to recreate a typical European city and lifestyle within the unknown New World. The city was a grid-plan town; a city plan which had been available in Europe for many centuries, and was mainly the standard for a fifteenth and early sixteenth century town in Europe and Spanish-America. And as Columbus had brought carpenters, masons and other building specialists who all brought their own building traditions with them the fort, church, hospital and houses all looked very Spanish(Deagan & Cruxent 2002b: 79-109).

In these first years of contact frequent transport between Spain and the New World had not been established yet. The inhabitants of La Isabela were dependant on local materials and cultivated crops to make the settlement work. At the site a lot of utilitarian ceramics, unglazed coarse ware, have been found that were made locally and not imported from Spain (Deagan 1988:208). But the majority of the artefacts found in the settlement consist of European imported objects like weaponry, clothing ornaments, coins, religious objects and many ceramics (Table 5) (Deagan & Cruxent 2002b).

Ceramic door pivot	1
Bizcozho	499
Caparra Blue	100
Columbia Plain	1,563
Columbia Plain/Blue	1
Cloumbia Plain/Green	66
Columbia Plain/Aqua	1
Columbia Plain/Gunmet	26

Cuerda seca	1
Isabela Poly	223
Stosomingo B/W	1
Yayal B/W	20
Majolica Aqua	5
Mojolica B/B	5
Majolica Blue	19
Majolica B/W	331
Majolica Green	19
Majolica Gr/wh	7
Majolica Italian	3
Majolica Morisco	134
Majolica Poly	23
Majolica White	24
Majolica	326
Melado	6127
Vitreos	4119
Green bacín	151
Sgraffito slipware	47
Loza Común	7056
Earthen ware	unknown

Table 5: Colonial ceramics present on La Isabela composed from Deagan 2002b.

The most common types of ceramics are Columbia Plain, Melado, Vitreos, Loza Común and many types of Majolicas. Most of these ceramics are utilitarian ceramics that were used in households, most of these ceramics were used for food consumption and not for cooking. Most of the cooking was done in locally produced ceramics. Another large ceramic category recovered from this site was ceramic building elements. Lots of bricks and roof tiles were imported from Spain in order to recreate a Spanish looking town for the inhabitants of La Isabela. Interesting enough no Olive jar is mentioned in the ceramic accounts of La Isabela, while the chapters stated above show us that Olive jar is one of the most common types of ceramics found on sites in the Caribbean. The publication does mention jars which could easily be Olive jars (Deagan 2002b; 100-183; Deagan 1988: 208).

6.2 Puerto Real

When the city of Puerto Real was discovered it appeared to be an outpost of the Spanish empire. The city was inhabited by Spaniards, Amerindians and even Africans between 1503 and 1578. It was one of the first towns to be established as a colony of the Crown to control and exploit the people and resources of Hispaniola (Sauer 1966: 151-155). Puerto Real is seen as a representative city in the New World in that it reflected the Spanish ways to exploit the local recourses and survive in the West.

During the first years of the settlement the inhabitants were involved in the gold trade, either taken from the Indians or through mining. The mineral sources of the area yielded no gold but they found a very important copper mine in the surroundings of Puerto Real.

Not only were Indians put to work for the Spanish, in the beginning of the 16th century the first African slaves in the Americas were put to labour in Puerto Real. The land surrounding Puerto Real was not suited for growing crops, therefore the citizens relied on trade for food supplies. But the city was built in an isolated place and after the great epidemic that decimated the Indian population in 1518 and the discovery of rich metals in Mexico and Peru many Spaniards moved away from Puerto Real. In the second half of the sixteenth century, due to local and external circumstances, Puerto Real ultimately became an abandoned city. (Deagan 1995:83- 110)

The buildings surrounding the church reflect the life-cycle of the town of Puerto Real. The first phase of the colonization is marked by temporary structures made of local materials and the design strongly influenced by the original Indian houses; a circular thatched structure. Indicating that Indian workers might have been put to work by the Spaniards to build their houses.

The typical Spanish layout of a town, the grid-town, was probably established in this phase of occupation around 1503. The second phase of the town is marked by

the rectangular, pole-supported and thatch-covered open structure, probably a chapel, next to the church.

The material culture from the site consist of a very homogenous record. Over 93 percent of the materials were ceramics. Most of the colonial ceramics were of Spanish origin, but also non-Spanish-European and Asian ceramics were present. All colonial ceramics fall under the broad categories of utilitarian wares, majolicas and nonmajolica tablewares.

A significant proportion of the ceramics at the site is Indian pottery (almost half of all the ceramics found). These vessels are thought to be used for cooking, and mainly food storage.

Glass, stone, metal and bone were also present within the artefacts but are not discussed here.

The Spanish material culture of Puerto Real seems to resemble the material culture of a Spanish town in Spain, but is also strongly influenced by the Indian material culture, reflected in the houses and the local ceramic present on this site (Deagan 1995).

ceramics	
columbia plain	9064
yayal blue/white	103
lihurian blue'white	7
UID polychrome majolica	128
UID blue/white majolica	6
Caparra blue	4
white majolica	13
UID unglazed coarse earthenwares	3107
UID green galzed course earthenwares	5
UID red filmed corase earthenwares	3
UID coarse earthenwares (honey/green)	11
Melado	664
Olive jar	7301
Olive jar (green glazed)	2032
Green galzed bacín	454

UID orange glazed coarse earthenwares	33
UID red glazed coarse earthenwares	12
feldspar inlaid	342
redware	564
orange micaceous	1101
Biscocho	17
Stoneware	3
Chinese porcelain	59
other porselain	1
faiance (post 16th)	38
lead-glazed coarsed earthenwares	1493
plain delft (post 16th)	16
pearlware (post 16th)	4
tabacco pipe (post 16th)	1
barbed wire (post 16th)	1
Bisque	309
columbia plain green	168
Cuenca tile	8
Ichtucknee blue/blue	12
Isabela polychrome	14
La Vega blue/white	3
Ligurian blue/blue	55
Lusterware	1
Montelupo polychrome	10
Puerto Real green/green	24
Santa Elena green/white	44
Seville blue/blue	1
Santo Domingo blue white	25
Fine white majolica	453
Uncalssified bue/white	417
Unclassified green	11
UID blue/blue	48
Cologne stoneware	40
UID thin-glazed wares	62

El Morro	49
slipped redware	59
Spanish storage jar	23
Total	28423
indian	26963

Table 6: Colonial ceramics present on Puerto Real composed from Deagan 1955

Puerto Real has a large variety of ceramic types, some of them more common than others. Columbia Plain, UID (Unidentified) unglazed coarse earthenwares and Olive jar are the types most present at this site. This is not unexpected since these types are typical household ceramics. Columbia Plain is a typical type of ceramic for food consumption, earthenwares are often for cooking and Olive jar are typical storage jars (Florida database).

The amount of Indian ceramics is almost as big as the amount of colonial ceramics, this can be explained by the fact that many Taíno were put to work in Puerto Real. Woman were to cook for the Spaniards of Puerto Real and brought their own cooking pots (Deagan 1955: 200-210; Deagan 2004).

6.3 En Bas Saline

En Bas Saline is a large Taíno site located on the north-eastern coast of present day Haiti. The site was discovered in 1997 and excavated between 1983 and 1988. The reason that the site was found is because the site is located about 12 km from the Cap Haïtien, the place where the Santa Maria sunk. In the search for the location of the fortress La Navidad, William Hodges of Limbé located En Bas Saline in 1977. En Bas Saline is now thought to be the town of the *cacique* Guancanagarí because of its massive size for a Taíno site and its prominence in the region.

The town was roughly oval shaped and had a boundary by a raised ridge. The town of En Bas Saline has a plaza between the ridge and the densest occupation

midden and has perhaps three elite occupation areas. The site was occupied between 1250 and the historical period, about 1600.
When you compare the European material with the local material you notice that there is little European material and that is it rather small and unrecognisable. Deagan proposes that there was a substantial post-contact occupation in En Bas Saline, but that the local Taíno community practice had few material alterations. The contact on this site was mainly a result of the annual labour draft, in which Taíno men moved to a nearby Spanish town for a part of each year to do work for the Spanish. The rest of the community remained in the village and kept their own culture alive (Deagan 2004: 10-31).

Columbia plain	1
Melado ware	1
Biscocho	7

Table 7: Colonial ceramics present on En Bas Saline composed from Deagan 2004.

7 Case study: El Cabo

7.1 Settings El Cabo

The site of El Cabo is situated in the Higüey region on the east coast of the Dominican Republic in the Province of Altagracia (see fig 3). It is set directly on the coast overlooking the Mona Passage towards Puerto Rico; this gives an excellent view on the coast and the neighbouring Peninsulas of the Parque Nacional de Este, the Cabo San Rafael, Caletón Blanco and Caletón Bobadilla. The islands of Puerto Rico and Isla de Mona are not in sight of the site. Just offshore is a coral reef crest, where the waves break on the shallow part of the coral. This forms a protective barrier against big waves and storms coming from sea.

Inland the site is encircled with limestone cliffs, sheltering many caves. The well chosen place of the site can also been seen in the fact that there is no direct access to the sea for people or boats. The nearest landing point is an inlet 4 km to the south, even though this is not the most convenient situation for fishing and seafaring it makes the site safer when being attacked by intruders.

The El Cabo landscape is a result of eroded limestone, this makes the environment of the site not very fertile but there were enough water basins present to make this area liveable.

The present day village is home to a few families and day labourers, and is set in an area close to the private resorts Cap Cana and Punta Cana. The villagers make a living out of cultivating *conucos* (kitchen gardens with mixed plants, kept fertile by slash-and-burn techniques), planting coconut trees, burning charcoal, extracting wood and keeping small herds of sheep and goats (Samson 2010: 70-86).

The Higüey region is important for archaeologists because it plays an important role in narratives of the origin of the Taíno. The region has been occupied since the 7th century AD starting with early Ostionoid settlements (AD 600-900) (suggestions have been made about the presence of pre-Ostionoid material, but

this needs further research). This was followed by late Ostionoid settlements (AD 900-1200) and ended with a Chicoid phase (AD 1200-1500). Saladoid material is present in this region (Hofman et al. 2007: Table 3; Samson 2010). The region has been a focus point is previous research by many researchers who have been looking at the *heartland of the Taíno.* El Cabo has not been ignored in these previous research but has always been characterized as 'one of the numerous coastal sites which occur along the coast at regular intervals between Cabo Engaño and Santo Domingo'. One group that did recognize El Cabo as an important site was the group of looters, collectors, local *buscadores* and foreign tourists. The northwest part of the site has been intensively looted and 25 looting pits were identified when the excavation in 2005 started (Samson 2010: 94-97).

The excavation of the site started in 2005 and took over 4 years, in which over 1000 m^2 was excavated. The field team consisted of members and students from the University of Leiden and the village of El Cabo and was under the direction of Dr Menno Hoogland and Professor Corinne Hofman and was in collaboration with the *Museo del Hombre Dominicano.* The aims of the research were to study the organization of settlement space and residence rules in a Taíno village community (field manual 2007)

The indigenous settlement was occupied from the 6th century to the beginning of the 16th century. Radiocarbon dates from five C14 samples in the main unit give dates between the early 12th to late 14th century. An extra date from shell gives a date in the 9th century and European material present on the site give an earlier and later date for this chronology.

At its primetime the site was occupied by half a dozen neighbouring groups, in clusters of three to five houses. The house structures in the occupation area of the settlement represent continuity in occupation from the 9th to the 16th century. Houses were rebuilt in the same way after they were dismantled.

The materials found on this site consist of many Taíno materials mixed with some European colonial materials. A very large part of the material found is ceramics, which mainly consist of Chicoid and Ostionoid and some European material. As on almost every other site in Hispaniola marine shell is the other large category of finds. The largest part has been interpreted as food residues such as molluscs. It is possible that the shell residue was used for tools but further analysis should tell us more about this. There are some shell paraphernalia present on the site El Cabo like beats and earplugs or shell teeth inlays. Stone and bone ornaments and tools are the last group of the indigenous materials found in El Cabo.

There are about a 100 pieces of European material, including 100 sherds of pottery, 5 glass beads a few pieces of glass and some unidentifiable iron fragments. All these materials were found within the main unit. Other objects related to the colonial period of this settlement were bone fragments of European animals, mainly pig, suggesting the introduction of these animals on this site. Caution has to be taken while interpreting these bone remains since it is not certain whether they are recent or dating from the colonial time.
At first this would seem a typical contact site in which European material is poorly represented indicating short or indirect interaction (Samson 2010: 273-288; Rojas, Samson & Hoogland in press: 8-10).

7.2 Ceramics

The distribution of the ceramics of El Cabo is not at all homogenous, in general there are less than 750 grams per square meter in the western part of the unit and there are more than 750 grams, and overall more than 2 kilograms per square meter in the eastern part, where the middens are situated.
The centre of this research is the European ceramics so I won't go into detail about the indigenous ceramics (for more details see Samson 2010).

7.3 Colonial Ceramics

From the roughly 100 sherds of colonial ceramics 45 sherds were studied for this research. The rest of the sherds are probably in the Dominican Republic, in the *Museo Del Hombre Dominicano*, and should be studied in further research. These 100 sherds represent a very small assemblage within the total ceramic assemblage since there are thousands of ceramics found at this site.

7.3.1 Analysis

For the database see Appendix 2

Size

First the measurements of the sherds were taken. It is not common to study sherds under the size of 5 cm, due to the fact that it is very difficult to say anything about the shape of the pot with such a small sherd. But because it is such a small sample of sherds with such a specific context and significance the decision was made to also study the sherds under 5 cm .
The sizes of the sherds differ from 1,3 to 5,1 cm long, with the majority of the sherds being between 1 and 2 cm.

Wall thickness

According to Hofman system the wall thickness has to be measured 2 cm under the rim. This could not be followed in this case. In order to study and compare all the sherds present I've chosen to take the average wall thickness of the sherd.
The thickness of the sherds does not differ that much; most sherds are about 1 cm thick, with some exceptions towards half a cm.

Weight

To do further analysis the sherds were also weighed; in total 199 gram. When you compare that with the total weight of all the sherds found on this site this weight is minimal.

The average weight is 4,4 gamr.

Shape

Of the 45 sherds only 4 pieces are parts of rims, 1 is a handle, 3 of them are pieces of handles (2 of them fit together) and the rest are wall fragments.
The rim pieces were too small to identify the vessel shape of the original pot
The handle has been identified by the system of Neal French as a Vertical handle (French 2004: 25).
5 Sherds were identified as pieces of plates and the rest are pieces of a number 5 type vessel. This type is described as an independent restricted vessel with a composite contour.
It was impossible to reconstruct the diameter of the vessels.

Decoration

The decoration of the sherds was very distinctive. Most sherds are glazed with a green tin glaze but 5 pieces are of a white/gray paste. None of the ceramics are further decorated or have multiple types of glazing.

Fabric

The result of the microscopic low tech fabric analysis is that there are two different kinds of fabric. One is correlated with the green tin glazed sherds and the other with the white glazed sherds.
Also the clay and the temper are very homogenous, al the clays are of a white baking paste and all are tempered with sand or fine sand. The ones with the fine sand are also the ones with a different glaze.
Further analysis of the rest of the sherds in the *Museo Del Hombre Dominicano* is needed to really say something about whether it really were one or two pots but it is a real possibility. The fabric of the sherds studied was so homogenous that at least the sherds studied are likely to be of two pots. It might be that some of the sherds in the *Museo Del Hombre Dominicano* are of a different fabric but taking

the homogeneity of the record which was also noticed in the field, it is more likely that they are of the same fabric as the sherds studied here.

Hardness

The hardness was tested according to the Moh's hardness scale. Scratching the sherds with a fingernail was not enough to make a mark. The problem with the next step on the Moh's sale was what Copper wire to use; there are many different thicknesses. Therefore I've started with a thin 0,8 mm wire, but that also didn't make a mark. A 1,4 mm wire made a small mark on the ceramics.

All the colonial ceramics appeared to be of the same harness 3, which can be considered to be rather hard for ceramics.

Modification

There was a suspicion amongst the excavators that the sherds might have been modified by the Taíno who lived in El Cabo, this possibility has been tested as well by looking at surface and the plane of the cracks under a microscope. None of the sherds had any sign of holes that could have been made in a sherd after the fabrication of the pot, neither had they any traces of abrasion. I do not think that modification occurred.

Type of ceramics

The type of ceramics is also good to establish.

After putting all the sherds next to Florida database, two types of ceramics could be identified.

The green glazed sherds are pieces Olive jar and the white glazed sherds are pieces of Majolica or Columbia plain.

Olive jar

The Olive jar is an amphorae-shaped vessel and is considered to be the most common type of ceramic found in Spanish colonial sites. They were used to store olive oil, liquids and other bulk materials. The shape of the jars is very suitable for

storage and shipboard transport over rough water in order to supply the colonies. This is not the only reason why there are enormous amounts of olive jar material is uncovered in the Americas. The jars were also very robust and available to be used in the homes of the colonists in the form of structural supports in roof vaults and for building and supporting entire walls (Deagan & Cruxent 2002b: 289; Goggin 1960; Marken 1994: 41-42).

A typology has been made by Goggin in 1960 which still counts as the best typology of olive jars nowadays. He classified the olive jars according to three broad time periods; Early, Middle and Late. The Early style olive jar begins to appear around 1500 AD extending to about 1575. The shape of the early style vessel can be described as a rounded bowl with an out flaring neck. This style is the only one with handles.

The Middle style olive jar ranges from around 1560 to 1750-1800. This style has been divided into three sub styles; Middle style A, B and C. The shape A vessel is a large vessel with an elongated egg-shape. Shape B is smaller, more medium sized and has a more compressed egg-shape. And shape C is the smallest and has a pointed egg-shape. All middle style vessels have a short neck and a doughnut-like ring mouth.

The Late Style ones range from 1780 to 1850 and later. This style is the most elongated model but still has the distinctive doughnut-like ring mouth (Goggin 1960; Marken 1994: 42-51).

It is rather easy to identify the sherds of the El Cabo assemblage, even though the exact shape of the pot is not identifiable. Since there are handles amongst the sherds there is almost no other possibility than the sherds being of an Early style olive jar. But there is another way of identifying the olive jars and that is by rim profile. The rim of this assemblage has been identified as a Type 1 rim, which also correlates with the Early style olive jars (fig. 4, 5 and 6).

Majolica/Columbia Plain.

Majolica is a kind of tin-glazed pottery. The body is of a porous soft earthenware paste and is covered with a hard surface cover of transparent enamel named

opaque. The opaque is made by adding tin oxide to a lead glaze, and it is this quality of opaqueness that distinguishes Majolica from other glazed pottery. The enamel can be coloured by adding different minerals to the opaque.
The production of Majolica was originally a Moorish ceramic tradition. But even after the decline of the Moorish empire in Spain, it became a very important tradition. Majolica was such an integrated part of Spanish life that the Spaniards funded Majolica production centres in the New World, in Mexico. The most important one was Puebla where Puebla Majolica was produced, but many other cities produced Majolica as well (Goggin 1968: 1-8).

Columbia Plain is a part of the majolica group and is directly associated with the Spanish majolicas produced in and around Seville in the 16th to the 18th century. Columbia Plain is often of a buff-white paste with fine minerals and is characterized by its white tin-glazed enamel. It is very easy classify Columbia Plain as white majolica but there is a distinction between the two. Columbia Plain served as common utilitarian pottery so slight imperfections and thicker walls are common. Little attention was paid to the aesthetic details. This was in contrary with the sophisticated majolicas.
The most common forms of Columbia Plain are plates and drinking bowls. The plates are thick-walled flaring plates with rims coming from a consistent angle from a countersunk base. These plates were produced in large quantities and therefore very common in every household (Goggin 1960: 126; Marken 1994: 139-142).
The white glazed sherds from El Cabo are most likely to be Columbia Plain sherds from a plate. The sherds have all the characteristics of Columbia Plain; a light white paste with fine minerals as inclusions, rather thick walls, some imperfections and the flattened shape of a plate with no flattened rim.

This assemblage can be summarized as rather small pieces of mostly Olive jar and some Columbia Plain sherds. 4 Pieces are parts of rims, 1 is a handle and 3 are pieces of handles. The sherds are most possibly sherds of one Olive jar and one

Columbia Plain plate. The sherds are of a hard homogenous paste in which no modifications have occurred.

Figure 4: Olive jar handle
Find number 3099
Photo by Marlieke Ernst

Figure 5: Columbia Plain rim sherd. Find number 2188
Photo by Marlieke Ernst

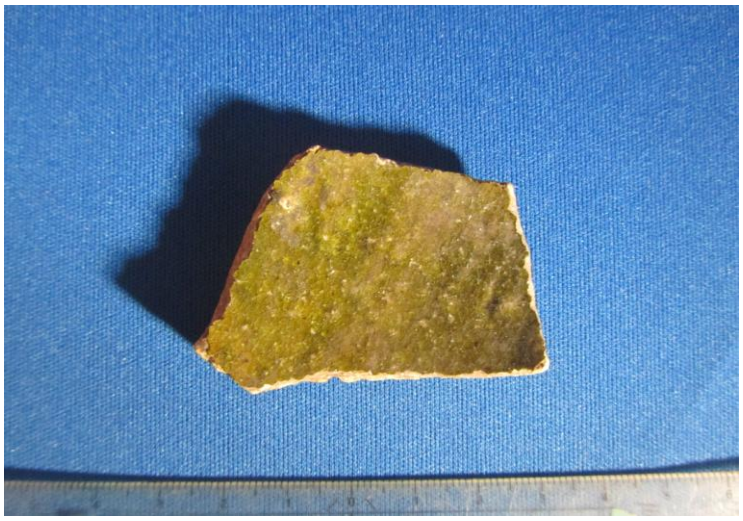

Figure 6: Olive jar sherd. Find number 3111
Photo by Marlieke Ernst

7.4 Interpretations

So how did the colonial ceramics end up in El Cabo and what did it mean to the inhabitants of this site? Historical sources, archaeological sources and spatial analysis combined give a better insight in this question.

7.4.1 Historical evidence

As said before El Cabo is situated in a naturally well protected area on the east coast of the island Hispaniola. The type of contact between the inhabitants of El Cabo and the Spanish encounters is difficult to establish. El Cabo is not named in the familiar historical sources. Looking at a map of Hispaniola from the beginning of the 16th century one can see where the Spanish towns are situated (Fig 7).

Figure 7: Historical map of Hispaniola 1535
http://jcb.lunaimaging.com/luna/servlet/detail/JCB~1~1~2371~3930001:Isola-Spagnuola

This map shows no Spanish settlements present on the island and clearly shows no towns near to El Cabo. The closest settlement is Santo Domingo about 200 km away from the site. Santo Domingo was founded in 1498 by Bartholomew Columbus and no solid trading system is known to have been present between Santo Domingo and El Cabo.

Deagan states that the most important relationship between the Taíno and the Spanish after the initial contact period was the organization of labour exploitation. This *encomienda* meant that Indians were forced to exchange their labor for instructions in Christianity and 'civilization'. The Indians had to work in Spanish towns for four to six months per year, the rest of the year they were free to spend at their own village. The Spanish recognized the importance and had respect for *caciques* so they were privileged from *encomienda* duties. It were mostly the non-elite men and woman that were put to work in the nearby Spanish towns (Deagan 2004:602-610). Some sources even state that Taíno towns were moved in order to make the *encomienda* easier, but according to the Crown's rules an *encomendero*, the Spaniard, could not relocate an Indian from his or her proximate geographical area for he was only given the right of labor and not the right of land (Yeager 1995:843).

It is easily assumable that Indians who were put into labour took some objects from Spanish towns and took them with them to their home town. This could explain a small colonial assemblage on an Amerindian site, like the assemblage of colonial ware in En Bas Saline (Deagan 2004:610-611).

However as stated above, El Cabo was not situated near a Spanish settlement where *encomienda* could occur. In the case of En Bas Saline there was a large Spanish town, Puerto Real, less than 5 km away from the settlement. The characterization of contact must have been totally different

Initially the Higuey region wasn't exploited as an *encomienda* region. The initial contact in the region was mainly due to the fact that the Spanish established a trade of Manioc between Santo Domingo and Isla Souna (Fig. 7). It is therefore very likely to have Spanish presence in the Higuey region but it wasn't on a

regular basis. At least not until 1503, when a conflict between the Spaniards and the Taíno of the Isla Souna was the trigger for the start of a battle in the region. The Spanish started to enslave the population of the Higuey region after they had won the battle (Oliver 2009: 191-198).
No evidence of *encomienda* has been found in and about El Cabo. So the option of the sherds ending up in El Cabo like they ended up in En Base Saline is not likely. The assemblage of El Cabo seems more a sole trading moment. Either as a result of direct trading between the Spanish of El Cabo in a rare contact moment. This could have been a colonist on a travel through the country. Or as a result of indirect trading within local trading networks.
So other options should be explored in order to make a reasonable assumption to why the colonial sherds are present on El Cabo.

In 1493 wrote Columbus a letter to his friend Luis de Sant Angel announcing his discovery of the New World. In this letter he talks about the initial trade with the Indians, he tells how satisfied the Indians are with everything the Spaniards give in return. 'And whether it be a thing of value, or one of little worth, they are straight ways content with whatsoever kind may be given them in return for it.' Then he gives an impression of what thing of little value was used by the Spaniards as trade objects; 'I forbade that anything so worthless as fragments of broken platters, and pieces of broken glass, and strap buckles, should be given them; although when they were able to get such things, they seemed to think they had the best jewel in the world, …' (http://content.wisconsinhistory.org/cdm4/document.php?CISOROOT=/aj&CISOPTR=4407). This quote shows us how different the Spanish and the Indians view the value of different objects. Little and useless things for the colonists were of great value for the inhabitants of the islands. He even tells something of great importance for this thesis; fragments of broken plates were seen as something of high value by the Indians. Pieces of pottery and sherds were officially forbidden by Columbus as trading materials, but it is likely that sherds were still used within the system of exchange. Why wouldn't people exchange their waste if the other

values it so much? It happened more often that use-objects or trash was used for other purposes then they were originally meant for (see Dongen 1995).

7.4.2 Archaeological evidence

In the case of El Cabo it could easily be that a Spanish colonist came by on a travel through the country or on an inspection of the region and left his pottery, whether it were sherds or not, behind. Without studying the other sherd of this assemblage it is difficult to tell whether it have been a whole olive jar and plate or whether it were already incomplete ceramics when being discarded. The other option is that the sherds ended up in El Cabo after an indirect exchange network within native exchange networks.

Another example of the importance the Indians gave to Spanish ceramics is the fact that sherds of majolica have been found in Taíno burial contexts. It is likely that these sherds were meant as funeral offerings; the Taíno believed in the supernatural life and buried their dead with their most personal possessions (García Arévalo 1990:271).

None of the burials of El Cabo had colonial ceramic grave gifts. But without explicit dates of the burials ensuring them to the colonial time this is impossible to state anything about this.

One way of establishing how the inhabitants of El Cabo saw the colonial material is looking at how the material was treated before and when discarded into the ground.

One possibility that needed to be explored was the modification of the sherds after the exchange. Several examples of modifications are known in the Americas; spoons being remodeled into pendants, forks being used as hair pins (Dongen 1995). Some specific are known from the Caribbean. In the eastern part of Puerto Rico (sites CE-11 and CE-33) sherds were modified in such way that they could be used as spindle whorls (Torres and Carlson conference paper 2011). Roe and Montañez examined a number of small miniature vessels. A lot of these vessels had lids which were made of abraded and reused broken potsherds, both local and

colonial. These ceramic discs had been previous interpreted as being ceramic ‘testers’ or game pieces (Roe and Montañez conference paper 2011). Another striking example is found on Cuba on the Loma del Convento site. A piece of Columbia Plain had been shaped and notched in order to hang it. The most astonishing piece found on this site is one-half of a navigator’s compass that had been turned into a pendant (fig 8). Rodríguez argues that the grooving has been added by a Tainan artist ‘to emulate stylized anthropomorphic pendants of tabular shell’ (Knight 2010: 9).

These examples show two kinds of modification; one is the modification of an object into an utensil and the other is a more esthetic or even ritual one.

No modifications of the sherds have been seen on the ceramics of El Cabo, this might mean three things. The first option is that the ceramics were seen as too luxury to alter them in an article of use. The second option is that the sherds were already seen as something ritual and they weren’t allowed to be modified. And the last option is that the sherds weren’t seen as something special at all or at least not valuable enough to modify them.

Fgure 8: modified navigator’s compass Knight 2010:9

Comparing the colonial ceramics with the local ceramics is the last way of trying to understand how the Indians treated the, for them, out of the ordinary ceramics.

The first way of comparing these ceramics is looking at the trampling processes. This way you can establish whether both the Indian ceramics and the European ceramics were treated in the same way before and after disposal. The colonial ceramics had a hardness of 3 on the Moh’s hardness scale, while the scratching of the local ceramics had a harness of 2,5 on the Moh’s hardness scale. Striking is

that the local sherds aren't smaller then the colonial wear as you would expect with softer sherds in a normal trampling process. The sherds have an average weight of 3,6 gr.; a little bit lighter then the colonial sherds and the wall thickness is a bit thinner.
All these physical aspects should lead to smaller sherds then the colonial ware, but this is clearly not the case.
This indicates a different treatment of the colonial sherds by the Indians then their own ceramics. Three possible explanations can be put forward here. The first one is that the colonial sherds were already this small when entering the site of El Cabo. Historical sources clearly state that sherds were used as trading objects. The second option is the option of the colonial sherds being left at the surface while the local pottery was buried in the ground. People would have directly walked on the colonial sherds trampling them way more than the buried local pottery. This option is not very likely to be the case. First of all because we are dealing with a sweeping area. The garbage was probably not disposed by burying in this area. Secondly because of the importance that was apparently put to these sherds. People normally don't walk over their luxury goods.
The third option is the deliberate breaking of the pottery or sherds before disposal. This is an acceptable explanation since the Indians of El Cabo also had closure rituals for their houses. After the use period of the house, posts were removed and post holes were ritually closed. Samson proposes that the house was vested with personhood in the sense that is also has to go through the stages of life; birth, death and then rebirth (Samson 2010: 265-266). Oliver shows us that a lot of objects also had personhood (Oliver 2009). The ritual breaking of objects was not uncommon amongst the Taíno. This might have been the case with the El Cabo ceramics.

7.4.3 Spatial analysis

In order to establish how the inhabitants of El Cabo saw the colonial pottery we have to look closer into the find context of the sherds.

The excavation procedures of El Cabo were excavations of 2x2m units of arbitrary layers across the site and the excavation of a larger main unit in the habitation area of the site. Almost all European sherds were found in the habitation area in Sector 50 and 51, together with the other colonial material of five glass beads and a hand blown ornamental piece of glass. Four sherds form the exception to this, two sherds (1 olive jar and one Columbia plain sherd) were found right next to the main (85-41) unit and two olive jar sherds were found 60 m north of the main unit in 85-27 (Fig 9). It is possible that there are more colonial pieces present in the northern part of the site since that is the most under-explored area of the site. It is, however, highly remarkable that the European materials have been found in a very small distribution area within the unit.

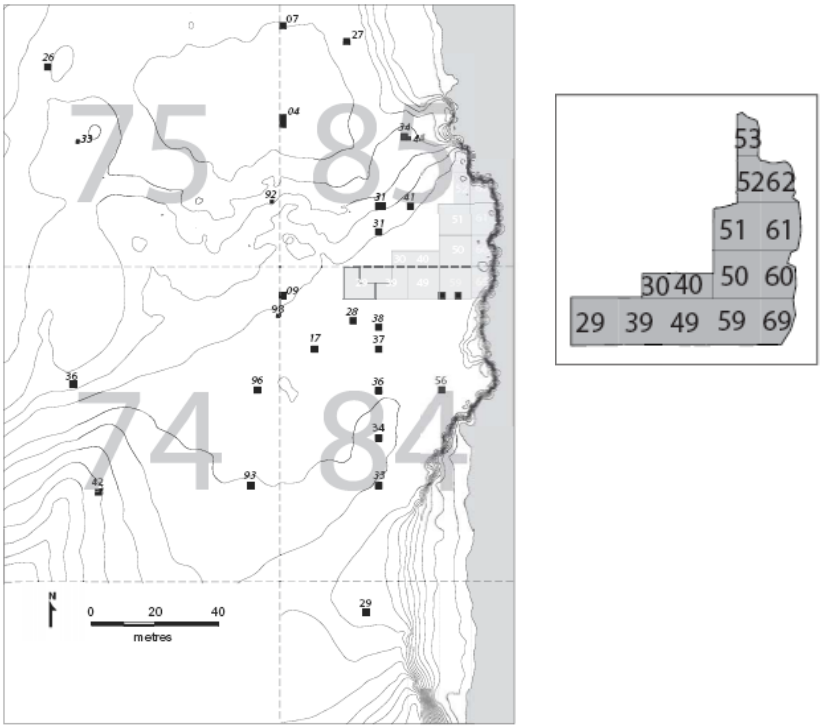

Figure 9: site plan of El Cabo Samson 2010:n126 and 135

The assemblage is found in an area with a lot of sweeping accumulations, with possible incidences of primary context finds. The deposits in the main unit are so shallow that they probably don't represent the main or final dumping areas of this site. Waste was swept aside from the living area and created an accretion around an individual or a cluster of individual structures.

The distribution area of the colonial material can therefore be directly linked to a house trajectory in the habitation area. In this particular case the colonial sherds can be associated with house trajectory 2 (Fig. 10). The material is clustered at the back of the last house of this trajectory; structures number 21 and 38, as has been noticed during the excavation. One could suggest that a part of the material might belong to house trajectory 1, since a piece of colonial bottle glass was recovered from a posthole from one of the structures belonging to this trajectory. But the fence between house trajectory 1 and 2 acts as a barrier between these houses securing us that the colonial finds actually does belong to trajectory 2.

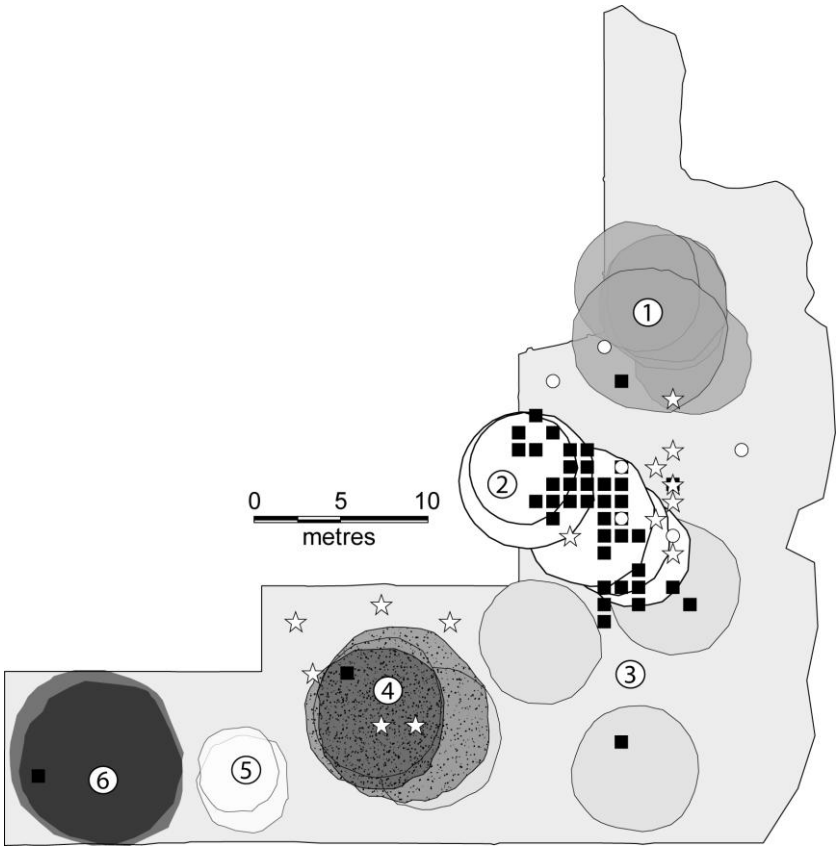

Figure 10: colonial finds in relationship with the house trajectories. The squares indicating the Olive jar sherds and the stars indicating the Columbia Plain sherds. Samson 2010.

House trajectory two consists of the structures 1, 20, 21, 34, 38 and maybe 40. It has its origin in the 11th century and goes on until the early 16th century. This trajectory is associated with some of the most elaborate finds in the main unit. Next to the colonial material this trajectory was fitted with the most elaborate

Chicoid material and ceramics, the largest trigonolith and a shell *guaíza*. Only two *guaízas* have been found and this was the most ornamental one. We can never be entirely sure whether these actually belonged to trajectory two but the trigonolith and the *guaíza* were found in natural hallows in the bedrock, suggesting artifact traps and/or deliberate deposition of these objects next to this house(Samson 2010: 151-281). This indicates that it might have been the residence of an elite member or members of society living in the houses of this trajectory. It might even be the residence of a *cacique.* The image that we get of a *cacique* through the historical sources is mostly a male actor who represents the village; he is the one who has the most contact with the Spanish colonial agent. He was well respected by the Spanish and by the people of his own village. Even though the existence the *cacique* is still an issue of debate within archaeology, the existence of an elite within Taíno culture is well accepted (Deagan 2004: 601-601; Oliver 2009; Samson 2010: 47).

This is an important factor in understanding how the people of El Cabo viewed the Spanish ceramics at their village. As said before these ceramics were considered to be of high value by the Taíno Indians of Hispaniola, the statement could even be made that it was considered to be a luxury. A luxury item is something that is considered an inessential which has a higher value than the normal goods present. It might even have been considered as a part of the supernatural world since some people were buried with colonial sherds.

It would be reasonable to state that the elite part of the society would gain the products that were considered to be a luxury. The elite were the ones who had direct access to the Spaniards and they would have the first contact with the Spanish if a Spanish agent came by.

Another comparison between the local and colonial ceramics can be made. This comparison looks at how the ceramics were discarded. The local ceramics seem to resemble a typical sweeping distribution without any clear positioning. Interesting is that the colonial ware does have a clear position within the disposal. The olive jar was placed in the middle and is flanked by two pieces of Columbia plain. One

is placed on the coastal side and the other more to the west. The beads and the glass ornamental piece are placed to the east of the olive jar cluster. This can be done on purpose or it can be translated into dispersal in small enclosed time 'capsules'. If this kind of placement was done on purpose it would indicate is was done with a reason. Placing objects into the ground within a curtain pattern often indicates ritual disposal. Also the dispersal in small enclosed time capsules' might indicate a ritual disposal, but it can also mean that the sherds couldn't be used or lost their value and were thrown away at different times.

The historical, archaeological and spatial analysis show us more about the meaning of the colonial sherds at the El Cabo site. About how they ended up at El Cabo in the first place and about what happened to them after arrival.
The sherds in El Cabo are probably no result of the inhabitants being forced into *encomienda* by the Spaniards. There are no signs of a regular direct trading system between the Spaniards and the Indians in this settlement. Since it are sherds of only two pots it is more likely to be the result of a sole trading moment. Either through direct exchange by a Spaniard traveling through the area or through indirect exchange by local Indian trading systems. Exclusion between these two options can't be made.
It is very likely that the sherds found at El Cabo were already sherds when they entered the settlement. Historical sources show us that many Indians saw these sherds as something of high value and that they were wanted as a trading object. It could even be that they didn't see these sherds as pottery waste but as an object of its own.
The colonial sherds are associated with house trajectory 2. Taking the other findings along this house trajectory in consideration these houses could well have been the houses of the elite or even the *cacique* of El Cabo. These elite would have been the ones to have contact with the Spaniards or the trading operators of other Indian settlements and therefore they would have been the first ones to gain these objects. Especially since they were considered to be luxury items.

None of the sherds of El Cabo were modified. I think this wasn't done because the sherds were already seen as something of high value, so there was no need to add even more value to the sherds my modifying them.
The high value of the sherds is also seen in the fact that they had a different life cycle then the local ceramics. Studying the trampling processes has shown us that the sherds were possibly deliberately broken before discarding them. Amongst the Taíno this usually meant that the object might have had personhood and the object had come to the end of its lifeline. And unlike the local ceramics these sherds were discarded in a non-random way but within a clear positioning. Even after disposal these sherds were treated differently than their own local sherds.

8 Comparison to the other sites

Four important contact sites have been described in the chapters above. In this chapter an attempt will be made to make a comparison between these sites.
La Isabela, Puerto Real, En Bas Saline and El Cabo are all early contact sites on the island of Hispaniola. La Isabela an El Cabo are situated on the present day Dominican Republic and Puerto Real and En Bas Saline on the present day Haiti. La Isabela and Puerto Real are both early Spanish towns build next to a Native American settlement. En Bas Saline and El Cabo are both Native American settlements which have European materials present in their archaeological records.
The biggest difference between El Cabo and the other sites is that El Cabo is not close to another early contact site. Many early contact sites have not been recognized in the past due to the fact that some early contact sites don't have recognizable European material present in the archaeological record. Deagan shows us that when soil samples of excavations are consequently sieved, many more early contact sites will be recognized by European faunal material and tiny fragments of glass, metal and earthenware (Deagan 2004: 603). Further research in this area might show us more early contact sites around El Cabo.

In order to compare the ceramics of these sites it is best to first compare the Spanish sites with the Spanish sites and the native sites with the native sites before comparing them with each other.

La Isabela and Puerto Real are both very important historical sites in studying the colonization of the Caribbean. La Isabela is the first town in the Americas and Puerto Real was one of the first towns established as a colony of the Crown to control and exploit the people and recourses of Hispaniola.
Both were built after the example of a typical medieval town in Spain, but had many local Indian influences.

When looking at the ceramics at both sites one can state that there is much more colonial pottery present at La Isabela then at Puerto Real. This can also be stated for the Indian ceramics present at both sites. Both La Isabela and Puerto Real had a significant amount of local Indian ceramics present on the site. Puerto Real even has a fifty-fifty rate in colonial and local ceramics. This is the result of the previously named *encomienda.* Puerto Real had many Indian workers present in the village, doing all kind of labour for the Spaniards. Men had to work in the mines and women had to work in the households of the Spaniards, cooking en cleaning for them. These women took their own cooking pottery to Puerto Real (Deagan 2004: 613-620). This could also explain the amount of local ceramics present at La Isabela.

The colonial ceramics of Puerto Real have much more variety in types of pottery identified then La Isabela has. This difference in variety can be a result of biggest difference between the two sites; La Isabela had a habitation period of four years and had was inhabited in the first four years of the Spanish colonization, while Puerto Real had a habitation period of 75 years and was inhabited at the time that the island could be well supplied by the exchange network between the Caribbean and Spain. This way La Isabela was supplied with only the necessary items, while Puerto Real could have been supplied with every type of pottery that was wanted in the settlement.

The most striking notification that can be made in this comparison is the absence of Spanish Olive jars in La Isabela. Olive jar is seen as the type of ceramic most present at sites in the Caribbean and therefore it is extraordinary to see that just this type is missing at this important site. Especially when considering that olive jar was present at almost all ships going to the Caribbean and that these jars are requested by Columbus himself for his household in La Isabela. The absence of Olive jar in La Isabela is not a result of no Olive jars at the site but is a result of no explicit notification in the publication. The publication does mention jars, which will most probably be Olive jars.

Furthermore both villages resemble the material culture of a typical Spanish village, but they are both strongly influenced by the Indian material culture (Deagan 1995; Deagan 2002b).

When comparing El Cabo and En Bas Saline one has to keep in mind that En Bas Saline would have had much more direct contact and influence from the nearby Spanish town Puerto Real. But this is not reflected in the ceramics when comparing the assemblages of En Bas Saline and El Cabo. Only 9 sherds of colonial ware were found at En Bas Saline while you would actually expect much more sherds than the 100 sherds in El Cabo. It seems like the people of En Bas Saline actually refused the colonial ceramics instead of seeing it as a luxury. This can be seen as a part of resistance against the Spanish and holding on to your own traditions.

It would be interesting to see whether the sherds of En Bas Saline were modified and in what kind of find context they were found. After that conclusion could be drawn about the social meaning of the colonial sherds on that site and compare them with the social meaning of the colonial sherds of El Cabo. But comparing them with the limited sources that there are present on the En Bas Saline sherds it seems likely that the sherds of En Bas Saline would have had some luxury status as well. Seen that there are only 9 sherds from 3 different types of ceramics it is very likely that these sherds entered the site as sherds as well.

Over all it is clear that both the Indians and the Spaniards took and used material culture from the other. The material culture might have been used in a different social setting but both cultures didn't resist the material culture of the other. Comparing the function of the non-local ceramics at both the Spanish sites and de native sites there is one big difference that stands out. The Taíno ceramics present on a Spanish site were most definitely seen as a use object, often used by the Taíno men and women that were put to work in these Spanish sites. While the colonial ceramics present on a native site were far from a use objects. These ceramics were seen as an object of high value and might not even been seen as a ceramic object.

9 Discussion

Since the first contact between the Spaniards and the Indians of the Greater Antilles, ceramics have played an important role in the exchange of objects. Many types of colonial ceramics can be expected to be excavated on a Taíno site in the Caribbean.

The Spanish material culture at the time of contact wasn't entirely homogeneous since it was an accumulation of Arabic influences and trade with other European countries. Ceramics were integrated in almost every aspect of Spanish daily life and are therefore well represented on sites in Caribbean which were either colonial villages or contact sites.

Historical sources like The Crown's list and the list with supplies for Columbus' household show us the different ceramic vessels that were needed by the Spaniards on Hispaniola. Olive jars, flasks, storage pots, small jars, cooking pots, pans, basins, etcetera. were considered to be indispensable for Spanish people away from home. Especially the amount of Olive jar requested in The Crown's list is striking.

Known types of pottery from excavations are presented in Table….and can be seen in Appendix 1. All these types of ceramics can be come across when excavating a contact site in the Greater Antilles.

Not all of them are equally common. The shipwreck excavations and contact site excavations have given us an overview of which Spanish pottery was the most common in the Caribbean. By far the most present type of ceramics on land and on ships was the Olive jar. This is of no surprise since the Olive jar was used for many storage purposes like, olive oil, liquids and bulk materials. The Olive jar was very convenient for storage on board and in households. The second most common type is the category of majolicas and then especially the type of Columbia Plain. Sometimes you see the more luxurious type of majolica, Sevilla White, but overall are the common tableware majolicas that are well represented in the archaeological record.

The third most common group is the group of lead-glazed and unglazed earthen wares. These are common cooking and tableware forms and therefore expected to be present in village and ship contexts.

El Cabo fits very well into this representation of colonial ceramics in the Caribbean. The types of pottery present on this site are Olive jar and Columbia Plain. With the majority of the sherds being Olive jar.
The presence of these sherds in El Cabo is a result of a sole trading moment in time, either by direct trading with a Spaniard travelling through the region or by indirect trading through native trading systems in which the Taíno of El Cabo traded the sherds with other Taíno villagers. From the letter of Columbus to Luis de Sant Angel we know that Spanish ceramics were seen as a luxury and that even just the sherds of a Spanish pot would have been an object of trading. Whether this was the case in El Cabo could only be said after the study of the rest of this assemblage, but seen the sherds that were examined here it is a very plausible option.
The colonial sherds on El Cabo were treated in another way by the inhabitants of the village then their own local pottery. That they were seen as an item of higher value is confirmed by the fact that almost all sherds can be linked to one particular house trajectory, possibly the house of a *cacique*. They were found between some of the most elaborated finds of the whole site.
No modifications have been done to these sherd; the sherds were already seen as something of high value, so there was no need to add more value by modifying them.
The European ceramics most definitely did not share the same life line as the Indian ceramics. The trampling processes of the local material and the colonial material show an extraordinary high trampling within the colonial sherds. Either the sherds were already this small when entering the site or this indicates the deliberate breaking of the sherds before disposal. This is seen more often amongst the Taíno when the lifecycle of an object had to be ritually closed and is an indication that the sherds might have been seen as something other than just

ceramics. The process of ending a life cycle by deliberately breaking often indicates that personhood was assigned to, in this case, the sherds. Looking at the pattern of the way they were discarded clear clusters are noticed. This is probably intended, since there was no pattern visible within the local ceramics in the same area.

The function of the European pottery in a native site in the Caribbean like El Cabo, and also En Bas Saline, is clearly different then the function of Taíno pottery in a Spanish site in the Caribbean. The colonial ceramics in a native site were clearly seen as being of a higher value than the local ceramics. The sherd on its own was seen as something valuable and not as something that was waste of a whole pot. This is in contrast with the way the local ceramics were seen on a Spanish site. These local ceramics were brought to the site by Indians working for the Spaniards and were seen as and used as use objects, mainly cooking pots. These pots had no value or what so ever like the colonial ceramics in El Cabo.

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Abstract

Ceramics have been an object of trade since the Spanish first set foot ashore at the Caribbean in 1492. Many types of ceramics have been transported to the islands, for personal use of the Spaniards and as exchange objects to trade with the Indians. Colonial sherds have been found at many early contact sites. A comparable study of historical and archaeological sources tells us about the characteristics of this early contact exchange of pottery. Olive jar and Majolicas are amongst the most distributed types of pottery, this is due to the practical aspects of this pottery.

Indirectly these sources can also tell us something about the social meaning of the colonial ceramics on a Native America site. They show us how the indigenous inhabitants of the island of Hispaniola experienced these European sherds and how they treated them.

A study of the sherds of Olive jar and Columbia Plain at the site El Cabo on the island of Hispaniola reveals us more about this social meaning.

Interpretations of the sort of colonial contact, find context of the sherds in relationship with the house structures and other findings of the site, possible modification, the distribution of the sherds and trampling processes give us an insight in the way the Taíno saw the colonial pottery and sherds as a luxury item and how they treated this luxury.

Samenvatting

Sinds de Spanjaarden in 1492 hun eerste voet aan land van de Caraïben gezet hebben is aardewerk een handels object geweest. Voor het persoonlijk gebruik van de Spanjaarden en voor de handel met de indianen zijn vele soorten typen aardewerk zijn naar de eilanden getransporteerd. Op vele vroege contact sites zijn dan ook koloniale scherven gevonden. Een vergelijkende studie van historische en archeologische bronnen vertelt ons meer over de karakteristieken van deze vroege contact handel in aardewerk. Onder de meest wijd verspreidde aardewerk soorten zijn de 'Olive jars' en 'Majolicas'. Dit komt door de praktische aspecten van deze soorten aardewerk.

Indirect kunnen deze bronnen ons ook iets vertellen over the sociale betekenis van het koloniaal aardewerk dat op lokale Caraïbische sites gevonden wordt. Ze laten ons zien hoe de inheemse bevolking van het eiland Hispaniola de Europese scherven beleefden en hoe ze ze behandelden. Een studie naar de 'Olive jar' en 'Columbia Plain' scherven van de El Cabo site op Hispaniola onthult ons meer over deze social betekenis.

Interpreaties van het soort koloniale contact, vondst context van de scherven in relatie met de huis structuren en andere vondsten op de site, mogelijke modificatie, de distributie van de scherven en trampling processen laten ons zien hoe de Taíno het koloniale aardewerk zagen als een luxe object en hoe ze met deze luxe objecten om gingen.

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Appendices

Appendix 1

Ceramics mentioned in the text according to the Florida database

BIZCOCHO - TYPE INDEX

Type Name:	BIZCOCHO
Category:	UNGLAZED COARSE EARTHENWARE
Production Origin:	SPAIN
Production Date Range:	1500-1550
Defining Attributes:	Thin (2-7mm), cream or off-white color compact, chalky paste. Smoothed surface, no glaze. Molded decoration on vessel bodies and rims.
Vessel Forms:	BOWL CUP PLATE VASE
Comments:	Bizcocho can appear like a bisque firing for majolica (before the glaze is applied and fired), however the surface of bizcocho usually smoothed and finished, and the paste is normally harder than majolica bisque. Although it continued to be produced and used in Spain until at least the nineteenth century, it's occurrence in the circum-Caribbean region seems restricted to the first half of the 16th century.
Published Definitions:	Deagan 2002: 43

Type Name: COLUMBIA PLAIN

Category: MAJOLICA

Production Origin: SPAIN

Production Date Range: 1490-1650

Defining Attributes: Light cream to buff paste color, with a soft, chalky clay texture. Occasionally pink.

Off-white, cream, or grayish-white tin enamel, usually covering both sides of the vessel. The quality of the enamel varies widely among vessels, from thin, irregular and shiny, to thick, matte and smooth.

Appliquéd appendages sometimes occur on early examples, most often vertical I-shaped handles or everted, scalloped lugs.

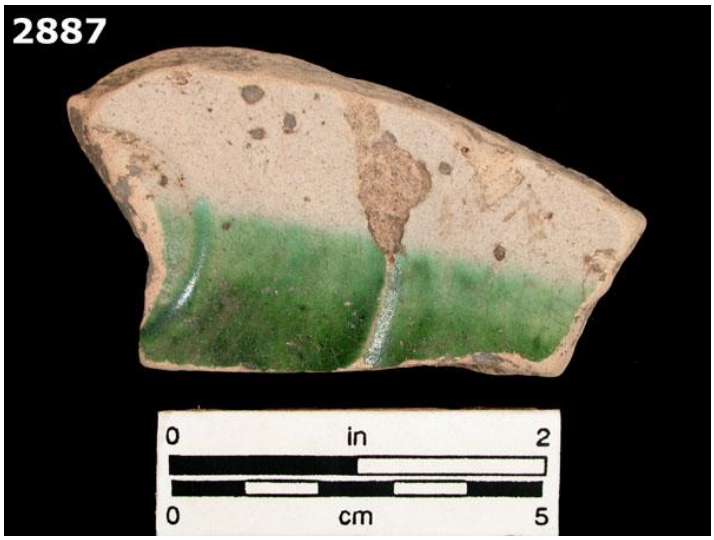
Vessel Forms: BOWL
CHAMBER POT
ESCUDILLA
INKWELL
JAR
PITCHER
PLATO

Comments: Columbia Plain is part of the "Morisco" (Christianized Muslim) ceramic tradition of fifteenth century southwestern Spain, centered around Seville. It is the most frequently encountered majolica type on New World sites of the sixteenth and early seventeenth centuries. It’s paste and

background enamel characteristics are shared by all of the commonly-occurring decorated Morisco tradition majolica types found in the Americas, including Yayal B/W, Santo Domingo Blue on White, Isabela Polychrome, Santa Elena Mottled). Certain formal characteristics sometimes help distinguish between "early" (pre-1550) and "late" (post-1550) Columbia Plain, such as a raised "dimple" in the center of a concave base, and variously shaped appliqued appendages. Ring feet are more common after 1550, although not exclusive to that period.

Published Definitions: Deagan 1987; Fairbanks 1973; Goggin 1968; Lister and Lister 1982, 1987, 1991; Boone 1984

COLUMBIA PLAIN GREEN DIPPED - TYPE INDEX



Type Name: COLUMBIA PLAIN GREEN DIPPED

Category: MAJOLICA

Production Origin: SPAIN

Production Date Range: 1490-1565

Defining Attributes: Light cream to buff paste color, with a soft, chalky, spongy clay texture. Occasionally pink.

Off-white, cream, or grayish-white tin enamel, over which a light green, grass green or turquoise green lead glaze has been applied (usually through dipping).

Appliquéd appendages sometimes occur most often vertical I-shaped lug handles .

Vessel Forms: BOWL
ESCUDILLA
JAR
PLATO

Comments: Columbia Plain Green Dipped is essentially Columbia Plain with a portion of the vessel covered with a green lead glaze. Small fragments may be totally covered in the green glaze, and care should be taken not to misidentify these as a lead-glazed ware.

Published Definitions: Deagan 1987; Fairbanks 1973; Goggin 1968; Lister and Lister 1982

COLUMBIA PLAIN GUNMETAL - TYPE INDEX

Type Name: COLUMBIA PLAIN GUNMETAL

Category: MAJOLICA

Production Origin: SPAIN

Production Date Range: 1490-1650

Defining Attributes: Light cream to buff paste color, with a soft, chalky clay texture. Occasionally pink.

Medium to dark grey or blue-grey tin enamel covering the vessel, produced by the addition of iron oxide or manganese to the tin glaze. Otherwise undecorated.

Vessel Forms: ESCUDILLA
PLATO

Comments: There has been some debate among archaeologists about whether the dark blue-grey of Gunmetal Columbia Plain was an intentional attribute, or one that occurs as a post-depositional consequence on sherds submerged or buried in substances high in iron or manganese. Some cross-mended archaeological examples show that this latter situation does, indeed occur (see Columbia Plain Type Index Specimen # 2885), however the presence of Spanish museum examples with this kind of coloration (see Lister and Lister 1987:109),

suggests that the gunmetal enamel also comprises an intentional variety of Columbia Plain.

Published Definitions: Deagan 1987; Lister and Lister 1982,1987

LEAD GLAZED COARSE EARTHENWARE - TYPE INDEX

Type Name: LEAD GLAZED COARSE EARTHENWARE

Category: LEAD GLAZED COARSE EARTHENWARE

Production Origin: UNKNOWN

Production Date Range: 1490-1900

Defining Attributes:

Coarse earthenware paste, usually with some sand temper, ranging in color from buff to red.

Coated with a lead glaze with a smooth reflective finish. Clear glazes allow the paste color to show through, and pigmented glazes impart a different color to the surface. Colored glazes are most frequently green or brownish-green.

Some examples can be decorated under the glaze with hastily-applied lines or loops, often in manganese-brown.

Vessel Forms: BACIN
BOWL
JAR
LEBRILLO
PLATO

Comments: This is a generic category of lead-glazed coarse earthenware pottery that encompasses all those varieties that are not described at the type level. It is found on Spanish colonial American sites dating from the sixteenth century to the twentieth centuries, and is not a particularly useful category

for dating. Utilitarian glazed earthenwares were probably among the first products made at New World pottery production centers in a number of places and variability in this category is considerable. These are normally described during classification by paste, glazing and vessel form characteristics, and considerable taxonomic work still remains to be done in this category.

Published Definitions: Deagan 2002: 47-53

Melado

Type Name: MELADO

Category: LEAD GLAZED COARSE EARTHENWARE

Production Origin: SPAIN

Production Date Range: 1490-1550

Defining Attributes: Cream-colored, soft chalky (majolica-like) earthenware paste on tableware forms; buff to reddish lightly sand tempered paste on large utilitarian forms.

Surface is covered with a thick, tin-opacified lead glaze, with color ranging most frequently from honey to amber to mustard brown. The surface is most commonly matte or low-gloss.

Designs consisting of simple broad lines are occasionally painted in manganese brown .

Vessel Forms: ALBARELO
BACIN
ESCUDILLA
JAR
PITCHER
PLATO
SAUCER

Comments: Melado ware differs from similarly-colored lead glazed wares in its majolica-like paste, and its thick, opaque glaze. On the earliest Spanish sites in the Caribbean, Melado occurs is a wider variety of paste types, glaze colors and vessel forms than it does after ca. 1520. These varieties are detailed in Deagan and Cruxent 2002b:160-166. Decoration is rare in later examples.

Published Definitions: Deagan 1987:48; Goggin 1968:227

OLIVE JAR, EARLY STYLE - TYPE INDEX

Type Name: OLIVE JAR, EARLY STYLE

Category: UNGLAZED COARSE EARTHENWARE

Production Origin: SPAIN

Production Date Range: 1500-1570

Defining Attributes: Paste is compact and coarse with abundant mineral particles as temper. Color is usually light to dark terra-cotta red, well-fired examples are buff-colored.

Distinctive form characterized by a globular body, a raised everted mouth, and two crude handles below the neck.

Vessel walls are typically about 7 mm. in thickness.

A thin white firing effluvium that appears like a very thin slip is often present on the exterior of vessels. Green lead glaze is frequently present on the interior.

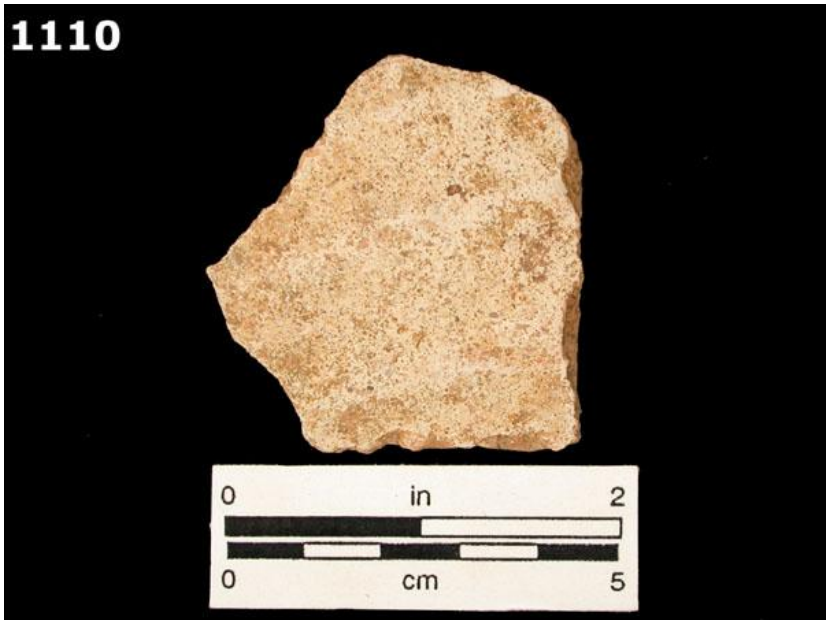
Vessel Forms: STORAGE JAR

Comments: Olive jars, also referred to as tinajas, peruleras or botijas, were the ubiquitous storage and shipping containers for the

Spanish American colonies, and evolved in shape and manufacturing technique over four centuries. Early Style Olive Jar is derived from the Spanish cantimplora, or canteen, form. The sides are thrown in two longitudinal halves, so that wheel ridges and marks, when present, are parallel to the height of the vessel, rather than horizontal and parallel to the circumference. Early Style vessels are the most readily identifiable from sherds due to its globular form, thin walls, ridging direction and distinctive flared neck and the presence of handles. It was replaced in the Americas by middle style Olive Jars by about 1570.

Published Definitions: Goggin 1960: 8-11, Deagan 2002: 33-34; Marken 1994; Avery 1997

OLIVE JAR, GENERIC - TYPE INDEX



Type Name: OLIVE JAR, GENERIC

Category: UNGLAZED COARSE EARTHENWARE

Production Origin: SPAIN

Production Date Range: 1490-1900

Defining Attributes: Paste is usually buff to tan to light orange with heavy sand or grit tempering

Unglazed exteriors range from off-white to tan

Vessels can have a green lead glaze covering a portion of the vessel

Vessel Forms: AMPHOROIDAL JAR

Comments: This is a generic category of Olive Jar sherds which cannot be identified as being of Early, Middle, or Late Style. Olive jars, also referred to as tinajas, peruleras or botijas, were the ubiquitous storage and shipping containers for the Spanish American colonies, and evolved in shape and manufacturing technique over four centuries.

Published Definitions: Deagan 1987; Goggin 1960; Marken 1994; Avery 1997

OLIVE JAR, MIDDLE STYLE - TYPE INDEX

Type Name: OLIVE JAR, MIDDLE STYLE

Category: UNGLAZED COARSE EARTHENWARE

Production Origin: SPAIN

Production Date Range: 1560-1800

Defining Attributes:

Paste is coarse with complete compaction and medium sand temper. It ranges in color from light to dark terra-cotta. Well-fired examples are buff-colored.

Vessel wall thickness ranges from 10 to 12mm. Wide, smoothed throwing ridges are often evident on the interior surfaces.

Exterior surfaces are poorly smoothed, with a pale firing effluvium on the surface, and a “freckled” appearance created by the mineral temper.

Lead glazing, usually green, can be present on the interior and/or exterior. Yellow, white, and "gunmetal" blue glazing have also been recorded

Form varies, but is typically a round bottomed, elongated

oval with variously-shaped “doughnut ring” neck applied. No handles are present.

Vessel Forms: STORAGE JAR

Comments: Middle-style Olive Jars are the most widely distributed and frequently occurring Olive Jar form. John Goggin distinguished three basic body types for the middle-style jars. "A" type have a height ranging from 52 to 58 cm and a diameter of 22 to 29.5cm. "B" type have a height of 23 to 29cm and a diameter of 20 to 23cm. "C" type are apparently uncommon; the only example measured by Goggin was 26.6cm high and 12.6cm in diameter. In 1985, Stephen James added a new body type not previously described. "Form III" is distinguished by a globular body, flat concave base, and a ring neck with a pronounced lip. Other chronological refinements based on form can be found in Marken (1994) and Avery (1997)

Published Definitions: Goggin 1960: 11-17, James 1985: 25-26, Deagan 2002: 33-34; Marken 1994; Avery 1997

Type Name: SEVILLA WHITE

Category: MAJOLICA

Production Origin: SPAIN

Production Date Range: 1530-1650

Defining Attributes: Creamy yellow or sometimes rosy yellow compact paste.

Thick, white, glossy enamel glaze that often has fine crazing, fine black specks, pinholes or firing marks.

Italianate-style, ring-footed vessels

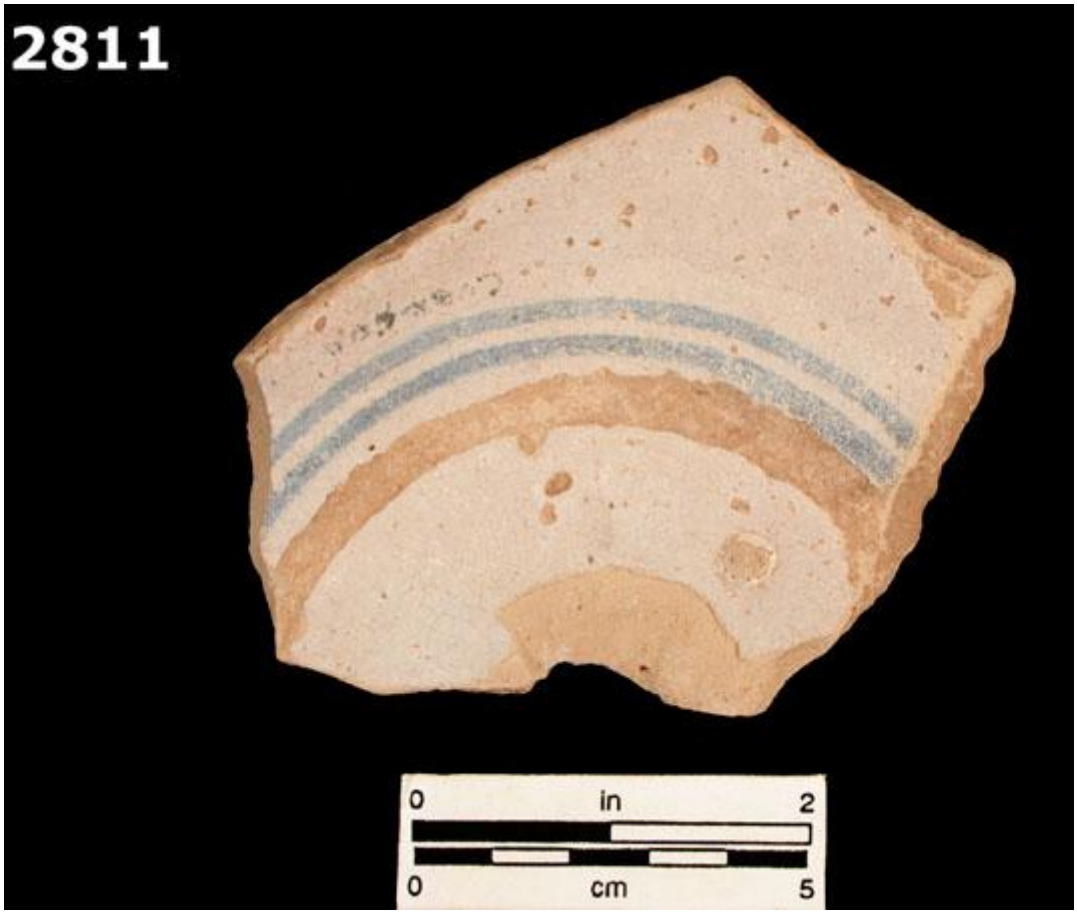
Vessel Forms: BOWL

BRIMMED PLATO

Comments: Sevilla White is thought to have been produced in and exported from Seville, probably inspired by the Italian ware, Faenza White.

Published Definitions: Deagan 1987; Lister and Lister 1982

YAYAL BLUE ON WHITE - TYPE INDEX



Type Name: YAYAL BLUE ON WHITE

Category: MAJOLICA

Production Origin: SPAIN

Production Date Range: 1490-1625

Defining Attributes: Light cream to buff paste color, with a soft, chalky, spongy clay texture.

Concentric blue bands encircle the interior of the vessel

Occasionally a crude central medallion design based on a palmette, parallel crisscrossed lines, and inscriptions

Vessel Forms:	BACIN BOWL ESCUDILLA JAR PLATO
Comments:	Early examples generally have a lighter color of blue than that on late examples. Although Yayal Blue on White existed during the early seventeenth century it appears to have reached a peak of popularity around 1550.
Published Definitions:	Deagan 1987; Fairbanks 1973; Goggin 1968; Lister and Lister 1982

Appendix 2

Database colonial ceramics El Cabo

findnumber	size (cm)	thickness (cm)	weight (gr)	shape	glaze	clay	temper	decoration	hardness	type	modification
3532	4,2	0,9	7	body	white/gray	white backing	fine sand	none	3	majolica/columbia plain	none
3234	2,9	0,7	3	body	green	white backing	sand	none	3	olive jar	none
3246	2,2	0,5	1	body	green	white backing	sand	none	3	olive jar	none
2161	1,5	0,5	1	body	green	white backing	sand	none	3	olive jar	none
2184	2,2	0,6	2	body	green	white backing	sand	none	3	olive jar	none
2705a	2,7	0,5	1	body	green	white backing	sand	none	3	olive jar	none
2704b	2	0,5	2	body	green	white backing	sand	none	3	olive jar	none
3268	3,5	0,7	7	body	green	white backing	sand	none	3	olive jar	none
3089a	3,4	0,7	10	body	green	white backing	sand	none	3	olive jar	none
3089b	2,8	0,6	4	body	green	white backing	sand	none	3	olive jar	none
3089c	2	0,6	2	body	green	white backing	sand	none	3	olive jar	none
3089d	1,6	0,6	2	body	green	white backing	sand	none	3	olive jar	none
3089e	2,3	1,2	5	piece of handle	green	white backing	sand	none	3	olive jar	none
2188a	4,9	0,6	15	body	green	white backing	sand	none	3	olive jar	none
2188b	2	0,6	3	body	green	white backing	sand	none	3	olive jar	none
2188c	2,3	0,6	1	body	green	white backing	sand	none	3	olive jar	none
3590	2,5	0,5	1	body	green	white backing	sand	none	3	olive jar	none
3263	2	0,7	8	body	green	white backing	sand (and organic?)	none	3	olive jar	none
3099	5,1	1,1	21	handle	green	white backing	sand	none	3	olive jar	none
3250a	2,9	0,6	3	body	green	white backing	sand	none	3	olive jar	none
3250b	2	0,6	2	body	green	white backing	sand	none	3	olive jar	none
3116	1,3	0,7	1	rim	green	white backing	sand (and organic?)	none	3	olive jar	none
3589	2,6	0,6	2	body	green	white backing	sand	none	3	olive jar	none
3120	2,3	0,7	2	body	green	white backing	sand	none	3	olive jar	none
3588	2,8	0,6	3	body	green	white backing	sand	none	3	olive jar	none
3086	1,4	0,5	1	body	green	white backing	sand	none	3	olive jar	none
3254	4,8	1	14	rim	white/gray	white backing	fine sand	none	3	majolica/columbia plain	none
3111a	4,4	1	11	rim	white/gray	white backing	fine sand	none	3	majolica/columbia plain	none
3111b	2,3	0,8	3	body	white/gray	white backing	fine sand	none	3	majolica/columbia plain	none
3356	3,6	0,9	6	rim	white/gray	white backing	fine sand	none	3	majolica/columbia plain	none
3244	3,2	0,6	6	body	green	white backing	sand	none	3	olive jar	none
3088	3,2	0,7	3	body	green	white backing	sand	none	3	olive jar	none
3251	1,7	0,7	3	body	green	white backing	sand	none	3	olive jar	none
3100a	3,2	0,7	4	body	green	white backing	sand	none	3	olive jar	none
3100b	2,2	0,5	1	body	green	white backing	sand	none	3	olive jar	none
3100c	3,2	0,7	4	body	green	white backing	sand	none	3	olive jar	none
2550	4,2	0,6	10	body	green	white backing	sand	none	3	olive jar	none
2549	2,5	0,6	3	body	green	white backing	sand	none	3	olive jar	none
3428	1,7	0,6	3	body	green	white backing	sand	none	3	olive jar	none
2199a	1,9	0,7	1	body	green	white backing	sand	none	3	olive jar	none
2199b	2,2	0,6	1	body	green	white backing	sand	none	3	olive jar	none
3243a	3,4	0,7	5	body	green	white backing	sand	none	3	olive jar	none
3243b	2,2	0,6	1	body	green	white backing	sand	none	3	olive jar	none
3591	2,6	1,1	5	piece of handle	green	white backing	sand	none	3	olive jar	none
3265	2,4	1,2	5	piece of handle	green	white backing	sand	none	3	olive jar	none

Appendix 3

Database local ceramics El Cabo

VONDST_NR	VONDST_VC	AANTAL	GEWICHT	PUT	SQUARE	COL_TYPE	VONDSTNR_2	VONDST_VC	VONDST_SC	AANTAL_2	GEWICHT_2	AVG SHERD WEIGHT
2161	CECO	1	0	85-50	58	OLI	2132	SRD	CEU	692	2913	4
2184	CECO	1	0	85-50	74	OLI	2156	SRD	CEU	537	4130	8
2188	CECO	1	0	85-50	65	OLI	2157	SRD	CEU	351	1544	4
2199	CECO	2	0	85-50	54	OLI	2189	SRD	CEU	437	1918	4
2549	CECO	1	0	85-50	54	OLI	2189	SRD	CEU	437	1918	4
2550	CECO	1	0	85-40	00	OLI	1878	SRD	CEU	154	480	3
2704	CECO	2	0	85-51	04	OLI	2700	SRD	CEU	226	512	2
3086	CECO	1	0	85-51	24	OLI	2709	SRD	CEU	122	419	3
3088	CECO	1	0	85-51	20	OLI	2707	SRD	CEU	311	1065	3
3089	CECO	5	0	85-51	31	OLI	3087	SRD	CEU	423	1442	3
3099	CECO	1	0	85-51	91	OLI	3095	SRD	CEU	282	984	3
3100	CECO	3	0	85-51	42	OLI	3097	SRD	CEU	314	708	2
3111	CECO	2	0	85-51	93	WHI	3108	SRD	CEU	146	452	3
3116	CECO	1	0	85-51	33	OLI	3115	SRD	CEU	281	804	3
3120	CECO	1	0	85-51	33	OLI	3115	SRD	CEU	281	804	3
3234	CECO	1	0	85-51	30	OLI	3232	SRD	CEU	442	1630	4
3243	CECO	3	0	85-51	10	OLI	3122	SRD	CEU	456	1374	3
3244	CECO	1	0	85-51	41	OLI	3235	SRD	CEU	458	1255	3
3246	CECO	1	0	85-51	50	OLI	3248	SRD	CEU	296	1900	6
3250	CECO	1	0	85-51	61	OLI	3240	SRD	CEU	927	3523	4
3251	CECO	1	0	85-51	21	OLI	3241	SRD	CEU	197	667	3
3254	CECO	1	0	85-51	90	WHI	3238	SRD	CEU	711	4089	6
3263	CECO	1	0	85-51	32	OLI	3260	SRD	CEU	176	566	3
3265	CECO	1	0	85-51	43	OLI	3259	SRD	CEU	145	509	4
3268	CECO	1	0	85-51	03	OLI	3264	SRD	CEU	61	326	5
3356	CECO	1	0	85-51	91	WHI	3095	SRD	CEU	282	984	3
3428	CECO	1	0	85-51	04	OLI	2700	SRD	CEU	226	512	2
3532	CECO	1	0	85-51	96	WHI	3332	SRD	CEU	69	147	2
3588	CECO	1	0	84-59	66	OLI	1277	SRD	CEU	463	1520	3
3589	CECO	1	0	85-50	69	OLI	2133	SRD	CEU	463	1698	4
3590	CECO	1	0	85-50	78	OLI	2099	SRD	CEU	582	2757	5
3591	CECO	1	0	85-51	67	OLI	3337	SRD	CEU	83	193	2