PEANUTS AND PRESTIGE ON THE PERUVIAN NORTH COAST: 
THE ARCHAEOLOGY OF PEANUTS AT HUACA GALLINAZO (V-59) AND 
HUACA SANTA CLARA (V-67)

by

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ABSTRACT

This thesis explores the role that a single species of plant, the peanut (*Arachis hypogaea*), played in pre-Hispanic North Coast communities of the Andes. Through a literature review of ethnohistoric accounts, Moche iconographic interpretation, and nutritional analysis, I explore the symbolic importance of the peanut, as well as other special properties that may have contributed to peanuts’ luxury status in the pre-Hispanic North Coast. This study documents the peanut’s use not only as a comestible, but also as a prestige good used in competitive feasts and for veneration of the dead. I show how the peanut was used both practically and symbolically in order to create and reify status differences between elites and commoners, and how this trend extends into the South Coast. Finally, I provide evidence for peanuts’ prestige association through a case study of the archaeobotanical remains from Huaca Gallinazo (V-59) and Huaca Santa Clara (V-67), two important Early Intermediate Period sites located in the Virú Valley and that were part of the Virú polity.
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Archaeobotanical recovery at Huaca Santa Clara was conducted between 2002 and 2003 under the direction of Dr. Jean-François Millaire, and plant remains were identified and quantified by Estuardo La Torre Calvera, co-director of the project.

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To Mom, Dad, Erica, and Jonathan
THE SOCIAL HISTORY OF THE PEANUT: PRODUCTION AND CONSUMPTION IN PRE-HISPANIC PERU

Introduction

My research objective is to investigate the role that a single species of plant, the peanut (Arachis hypogaea), played in pre-Hispanic North Coast communities of the Andes. In particular, this thesis will show how the peanut was used as a status marker, especially during the Early Intermediate Period (200 B.C. – A.D. 800; Table 1), fuelled by the increasing socio-political complexity and dependence on irrigation agricultural during this time. Aside from a little-known MA thesis in French (Fournier 2004), hardly any attention has been given to the importance of the peanut aside from its use as one of the common crop species grown in pre-Hispanic North Coastal Peru, and frequent depictions on the well-known Moche ritual ceramics (AD 100 – 800). The use of peanuts as a luxury item has been suggested by archaeologists such as Gumerman (1994) and Hastorf (2003), although this has not been strongly established. However, archaeological evidence presented in this thesis suggests that peanuts did function as a high status food and symbol.

Through a literature review of ethnohistoric accounts, Moche iconographic interpretation, and nutritional studies, I will explore the symbolic importance of the peanut, as well as other nutritive and special properties that may have contributed to peanuts’ luxury status in the pre-Hispanic North Coast. This study documents the peanut’s use not only as a comestible, but also as a prestige good used in competitive feasts and for veneration of the dead. I will show how the peanut was used both practically and symbolically in order to create and reify status differences between elites and commoners, and how this trend extends into the South Coast. Finally, I will provide evidence for peanuts’ prestige association through a case study of the archaeobotanical remains from Huaca Gallinazo (V-59) and Huaca Santa Clara (V-67), two important Early Intermediate Period sites located in the Virú Valley and that were part of the Virú polity.

<table>
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<th>Time Period</th>
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Creating and Reifying Status Distinction: Previous Explorations in Food and Status Difference

The practice of food production and consumption has been of interest to social scientists for over a century, with differing focuses circulating in and out of vogue. First, differences regarding how a meal was consumed between the “savage” and the “civilized” – eating to live, versus living to eat, or the “cultured,” social act of dining, and the luxury of aesthetic cutlery, appliances, and table settings were of critical importance to the early investigation of food choices and mealtime ritual (Mallery 1888). Later, the adaptive nature behind “conspicuous consumption” to distinguish personal wealth became popular, as many social scientists such as Veblen (1899) began examining the leisure class’ ownership of the means of production, and how this translates to differential consumption among classes. Explorations of the functional nature of the production and consumption of foodstuffs as a social institution, by which groups and individuals increased solidarity on the household, community and inter-community levels, were popular among the emerging new anthropologists of the West, such as Malinowski (1935) and Richards (1995 [1939]). The notion of the practice of mealtimes and the creation of identity, such as manners and the savoir of upper classes (Elias 2000 [1939]), as well as the differential allocation of food (rank-preferred), which effectively worked to put commoners “[in] their place” (Codere 1957:481), followed from the previous functionalist approaches. The symbolic, and coded nature of foods, (and their preparation and presentation), was thoroughly examined by Levi-Strauss (1997 [1965]) and Douglas (1999 [1972]), to understand underlying structural hierarchies and social relations in society. While many of the previous social scientists had considered class relations as primary factors influencing food choice, the differential use of peanuts will be investigated here using Bourdieu’s (1984 [1979]) ideas on taste preferences and the creation and reification of status distinction, and how power (both economic and symbolic) (Goody 1982; Mintz 1985) perpetuates difference.

Food and Status Difference in the Andes

Many scholars have reported apparent differences in food consumption between elites and commoners at sites across the North Coast of Peru, and into the Andean highlands (Costin and Earle 1989; Cutright 2009; Dionne 2002; Gumerman 1997a; Hastorf 1990, 2003; Ryser 2008). In complex societies, hierarchies of rank result in different “needs, wants, and abilities to fulfill their goals” across differing segments of society (Gumerman 1997a:106). Food consumption is a social act in itself, and so food choices are often used to display status variations. For instance, the producers of agricultural foods likely had greater access to a diverse array of wild plants and animals which grew and lived nearby the fields which they tended (Gumerman 1997a:117). In contrast, the elites in a society are more apt to have consumed expensive and exotic foods (like llama, chili pepper, coca, and other luxury foods) (Gumerman 1997a). However, Gumerman (1997a:106) points out that it is not simply economic affordability which determines food choice between elites and commoners, but symbolic associations that may be attributed to certain goods, and may “embody wealth and power.”
Hastorf (2003:545) also points out that luxury goods are traditionally seen as items which are exotic, or difficult to produce, and reserved for elite consumption. However, this interpretation of luxury goods may over-emphasise an item’s economic value, and neglect the potential ideological and symbolic values that it may hold within a community. Even common foods may make an impressive feast, “given the right setting, timing, preparation and accessories” (Hastorf 2003:545). Rituals, (including feasts), are often remembered by the quality or quantity of the ingredient – not necessarily the item itself. However, Hastorf (2003) notes that the primary function of many rituals is to create and differentiate power hierarchies in society, which includes the presentation and consumption of certain foods, particularly beans, potatoes, maize, and peanuts in the Andes. The traditional definition of luxury goods hinges on differential consumption among hierarchical segments of society: commoners produce, and elites consume.

In a similar vein, others have explored the importance of Andean luxury foods such as maize, and the lima bean (Bourget 1994; Gumerman 1994; Ryser 2008). Ryser’s (2008) work, for example, focuses on lima bean use in the Moche and Chicama Valleys, from Moche iconography and archaeobotanical analysis. Her analysis focused on the transition of the lima bean, from a common comestible at archaeological sites along the Peruvian North Coast, into an object “restricted to use as a status symbol or in ceremonies” by the “political manipulation” of resources by elites (Ryser 2008:404). This socially constructed food preference, Ryser (2008) states, is linked to the association of the lima bean with notions of life and death, specifically, the depiction of Moche warriors as lima beans, and the developing Moche ideology.

While feasting activities are, indeed, one of the cultural settings in which elites use food to elevate their status, food is also used in similar ways for veneration of the dead (Hastorf 2003:546). Feasts (for the living or dead) are not solely the sum of the economic value of the ingredients, but rather the quantity, quality, and ideological significance of the foods also contributes to their success. Hastorf (2003) argues that all Andean luxury goods – peanuts, along with other staple foods like beans, potatoes, and maize – may be identified archaeologically by spatial analysis, associations, frequency data, as well as cultural and economic setting. In contexts where luxury foods are part of presentation rituals venerating the dead, many serving vessels (ceramic and gourd) will likely be present in graves, and these graves are likely to be quite elaborate (Hastorf 2003:549). Where luxury foods were used in competitive feasts, archaeologists are likely to find a high frequency of large, fine quality serving wares, evidence of chicha (maize beer) production and consumption, and a large amount of food remains – evidence of the preparation of food for a large number of guests (Hastorf 2003:22).

**North Coast Environment**

The northern coastal region of Peru is a true desert, flanked by the Andes to the east, and the Pacific Ocean to the west. The region is intersected by 52 river valleys, of which only 10 have enough
volume to drain into the ocean for the greater part of any given year (Towle 1961:4). These rivers are used extensively today, as in the past, for the irrigation of agricultural lands. The areas outside of the drainage basins where agriculture is not feasible are considerably more rugged and inhospitable, and are dotted with many travelling sand dunes. The climate of this region is cool and arid, and lacks significant temperature extremes. The average air temperature in the North Coast typically ranges between 18-22 °C, with an annual variation of ±6 °C (Moseley 1975:8). Rainfall is rare, and often is more destructive than beneficial as rains are usually torrential, and associated with the El Niño cycle. These arid climatic conditions contribute to the excellent preservation of archaeological materials, especially plants.

Like all of the river valleys on the North Coast, the Virú Valley lies in a rain shadow, influenced in part by the cool Humbolt current flowing northwards parallel to the coastline (Towle 1961:4). Although the environment would, to an outsider, be considered unforgiving, there are many species of wild animals for inhabitants to exploit, such as fish (marine and aquatic), crayfish, molluscs, sea mammals, birds, deer, and lizards (Netherly 1984:235).

The coastal region’s marine environment is exceptionally productive. In fact, the coastal waters of Peru contribute 8.3 percent of the world’s supply of commercial fish (SEAFOODPRINT, National Geographic and Sea Around Us Project UBC 2010). These conditions are likely to have been similar in the past, as they are also influenced by the Coastal Current and Under Currents, which, travelling in opposite directions, create an upwelling of nutrients from the sea floor (Moseley 1975:9-10). This upwelling of sediments, including large amounts of phosphates and nitrates, continue to float up to shallower waters. Upon contact with increasing sunlight penetrating the water line, these nutrients are used by microorganisms such as diatoms and phytoplanktons which thrive in this nutrient-rich water, where they may undergo photosynthesis (Moseley 1975:10). This phenomenon is the foundation of an impressive food chain, from invertebrates, to fish, seabirds and mammals, and finally, humans.

As are all ecosystems, this one is fragile, and particularly susceptible to the effects of El Niño. During El Niño events, a weakening of the regular trade winds causes warmer water to flood over the Eastern Pacific, allowing the offshore winds to push warm, moisture-laden El Niño air masses eastward towards the Andes. When these winds blow over the desert and cool over the mountains, their capacity to retain moisture is significantly reduced, thereby triggering massive rainstorms with great destructive power (Moseley 1975). One of the effects of El Niño’s moist, warm, westerly winds is to raise average coastal water temperatures by approximately 9° C, slowing the Coastal Current, and minimizing the upwelling of nutrients from the sea floor (Moseley 1975:11). As was the case in 1925, the lack of nutrients filtering up from the sea bed as food for phytoplankton resulted in a massive die-off of species up the food chain, including those most important to humans, such as fish, sea mammals, and birds. The multitude of dead organisms on the sea floor results in the expulsion of hydrogen sulfide, a foul, black gas, known as el pintor, for its ability to leave its black, oily mark on nearby boats, and buildings. Although El Niño events are not permanent and can be quite short in duration, it may take quite a while for homeostasis of the
coastal ecosystem to return. Needless to say, such events, though rare, likely had profoundly damaging impacts on agricultural production, including peanut crops.

**Irrigation Agriculture on the North Coast**

Irrigation of the fertile river valleys is a necessity for growing crops in the North Coast of Peru as rainfall is almost non-existent, aside from the periodic destructive El Niño events. If adequate water can be supplied, crops will grow year-round, but flow is dictated by the amount of rainfall in the highlands (Netherly 1984:237). Between the months of December and April, irrigation canals are inundated with water, however this is often not the case during the dry season from June to November.

In the Lambayeque Valley, to the north of Virú, ancient agricultural fields were fertilized: tests have revealed that soils were high in phosphorus, potassium, calcium, magnesium, and sulfur, but quite low in nitrogen (Nordt et al. 2004). Low levels of nitrogen are likely the result of leaching into irrigation canals, and from normal uptake into crops (Nordt et al. 2004:36). While legumes (like peanuts and beans) may be able to fix small amounts of atmospheric nitrogen, this amount, according to Nordt et al. (2004:36), would not have been sufficient to supply the optimal amounts needed for domesticates like maize and cotton (based on modern requirements); “external inputs” would have been undoubtedly necessary. Ethnohistoric documents, such as Garcilaso de la Vega (1966:246-7), describe the use of bird guano from the offshore guano islands as manure in the coastal areas, and in some cases, the heads of small marine fish were also applied to the soil. However, recent studies indicate that bird guano was not likely used by the Early Intermediate Period Moche on their fields (Szpak et al. 2012). Other possibilities include llama dung fertilizer, as well as leaf litter from leguminous trees, like *Prosopis*, which both would have aided in replenishing nitrogen (Nordt et al. 2004:36).

The Moche have been the subject of the majority of Early Intermediate Period subsistence economics analyses. Pozorski (1979) states that there was a decrease in the use of shellfish and other marine resources, possibly due to changing climatic conditions or over-exploitation by pre-Moche peoples. Domesticated animals, particularly the llama (*Lama glama*), were the primary meat source, with the guinea pig (*Cavia porcellus*) making a minor contribution to the diet (Pozorski 1979:175). During the Early Intermediate Period, people became increasingly dependant on agricultural crops. Domesticated plants, such as cotton (*Gossypium barbadense*), gourd (*Lagenaria siceraria*), squash (*Cucurbita* sp.), corn (*Zea mays*), peanuts (*Arachis hypogaea*), and common beans (*Phaseolus vulgaris*) were the main plant resources (Pozorski 1979:176). Another trend during this time period is a decreasing reliance in the use of wild fruits. These aforementioned domesticates are easily storable, and contribute to the developing economic systems of the Early Intermediate Period, which was dependant on agricultural surplus (Pozorski 1979:176).
The Peanut Plant

The peanut (*Arachis hypogaea*), a member of the legume family (Rao and Murty 1994), is called *mani* in present-day Peru. This term, used by Spanish speakers, was derived from indigenous Caribbean terms for the peanut, and was first encountered by the Spanish conquistadors in Hispaniola. The local Quechua word for peanut is *inchis*, which is quite similar to the highland the Inca word, *ynchic* (Johnson 1964; Towle 1961).

In archaeological contexts, the shell is the only part of the peanut that is typically recovered. This might be due to different preservation potential between the shell and the kernel, and the fact that the shell is the refuse product, while the kernel is eaten. Peanut remains from archaeological sites in coastal Peru have been classified as either of two varieties. The most common variety, described by Towle (1961:43), has a long pod which is slender, yet reticulated. The pod has one or two “hump-like protuberances” present on its dorsal side. In contrast, the second, less commonly recovered variety, has a smaller pod, barely reticulated, and is without the humps on the dorsal side of the shell (Towle 1961:43).

The peanut plant is best suited to sandy, well-drained loam soils (Woodroof 1966:29). However, if the sandy soil is not fertile enough, it will result in poor yields (Woodroof 1966:63). For optimal yield, peanuts also require steady, warm temperatures and only a moderate amount of water, as well as a four to five month growing period (Woodroof 1966:29). The optimal growing ranges for the peanut in the Andes range from approximately 46 to 1,000 m (Moseley 2001:31).

Peanut Processing

Ethnohistoric accounts are an invaluable tool for understanding how peanuts were used in the pre-Hispanic Andes, helping us to make inferences about their uses and functions in pre-Conquest Andean societies. Garcilaso de la Vega, El Inca’s *Royal Commentaries of the Incas* provides insights into Inca lifeways after the Spanish Conquest. Garcilaso de la Vega was born in 1539 in Cuzco, the son of a Conquistador and an Inca princess. He wrote that peanuts were traditionally eaten toasted, or combined with honey in a marzipan-like fashion (Garcilaso de la Vega 1966:501). Another chronicler, Bernabé Cobo, a Spanish Jesuit missionary, who traveled extensively in Peru and lived there until his death in 1657, also mentions peanuts in his 1653 *Historia del Nuevo Mundo*. He noted that peanuts were eaten cooked and roasted, and that peanut milk (which is extracted in a similar fashion to almond milk) also could be used for medicinal purposes (Cobo 1890:360). Peanuts may be prepared and consumed in a multitude of other ways: roasted, fried, salted, boiled, and ground, mashed, used as additives in sauces, and even as a fermented beverage like “*chicha de maní*” (Bonavia 1991:131; Estrella 1990:113; Fernández y Rodríguez 2007:107; Gillin 1945:53; Nicholson 1960).
Peanut Use in Pre-Hispanic Peru

Peanut remains have been recovered from dozens of archaeological sites spanning most, if not all time periods since their introduction into Peru, perhaps as early as 6692 – 6486 cal B.C. (Dillehay et al. 2007). Although domesticated peanuts were not common in the Cotton Preceramic (3000 – 1800 B.C.), they have been identified in deposits from sites such as Los Gavilanes (Pearsall 2003:238\(^1\)). Peanuts are encountered in significantly higher frequencies in sites dating to the Initial Period (1800 – 900 B.C.): a single pod was recovered at La Galgada (Pearsall 2003:238; Smith 1988:128), and found in moderate quantities at Las Haldas (Pozorski and Pozorski 1987:26), Cardal (Pearsall 2003:238), and were abundant at Torquas (Pozorski and Pozorski 1987:51), and at Gramalote (Pozorski 1983). Pozorski and Pozorski’s (1987) work in the Casma Valley shows that peanuts were common by the Early Horizon (900 – 200 B.C.) at Las Haldas, San Diego, and Pampa Rosario. Similarly, in the Moche Valley, peanuts are present at the site of Gramalote (an Initial Period and Early Horizon site), and its strong relationship with the site of Caballo Muerto, the center of a local chiefdom, leads Pozorski (1982b:229) to believe that peanuts were also present there as well.

Peanuts are ubiquitous in many contexts during the Early Intermediate Period in the Moche Valley at sites such as Huacas de Moche and Galindo (Pozorski 1979). Similarly, subsistence analysis at Pampa Grande, a major urban Moche site in the Lambayeque Valley, reveals that while peanuts were not included as a main dietary plant staple (unlike maize, beans, and squash which were staples), they were frequently encountered along with other secondary crops such as tomatoes, chili peppers, avocados and lucuma (Shimada 1994:182). Pampa Grande held political dominance over the valley, and exacted tribute from farmers in the valley for redistribution purposes. Storage facilities were excavated in two sectors of the site, and maize and beans were found in large quantities (Shimada 1994:190). Peanuts are not reported among the contents of these storage pits, and thus, again they might not have been a large part of redistribution economies in this valley.

Peanuts were also identified at the site of Ancón, south of the North Coast valleys, in layers thought to be from the Early Intermediate Period and Middle Horizon (Kaulicke 1997). Kaulicke (1997:72-74) suggests that peanuts, at this site, were used primarily for making a fermented beverage, similar to a maize chicha, and that the liquid could have been held in the many large vasijas (jars) that were recovered, though he does acknowledge that there is no concrete evidence to support this.

By the Late Intermediate Period (A.D. 1000 – 1476) and Late Horizon (A.D. 1476 – 1532), and rise of the Chimú state, peanuts were less frequently encountered in the botanical record (Pozorski 1982a:194). While there still appears to be control exacted by elites over food producers (for example, in the form of animal protein primarily supplied by llama and guinea pig), there appears to be a decrease in

\(^1\) Pearsall (2003:238, 2008) provides an overview of peanuts, and other Andean domesticates in tabular format for comparison, including a list of sites through time period, although peanuts are likely to be more widespread in the archaeological record than reported here.
reliance on staple crops (mainly maize, beans, and squash, but also peanuts), and further decreasing reliance on marine resources. Rather, there is a new emphasis on fruits such as lucuma and guanabana (Pozorski 1982a:192). This trend is visible at sites like Chan Chan, Caracoles and Cerro la Virgen, with the exception of Choroval, which Pozorski (1982a:193) believes was still an agricultural centre.

**Summary**

This section has outlined early approaches to explaining food choices among differing segments of society, and the symbolic nature of consumption. It has also provided an introduction to the peanut plant, and the many sites at which peanuts have been documented (without the study of possible differential use) on the North Coast of Peru. Unfortunately, the reports and publications from the aforementioned sites generally do not include any spatial information for peanut remains. Most traditional archaeobotanical analyses focus on the presence, absence, and relative abundance of plants for inter-site comparisons, rather than intra-site distribution analysis, so we cannot be certain, in these contexts, how prolific peanuts may have been in domestic and non-ritual contexts in comparison to elite ones. However, my own perusal of archaeological literature makes it clear to me that, in most instances where peanuts are mentioned with any spatial or contextual information, they are associated with elite or civic-ceremonial activities, monumental architecture, burials, or other ritual or symbolic paraphernalia. These instances will be outlined in upcoming sections.

Previous studies in food and status difference in the Andes have centred on luxury foods, often used in feasts for the living and the dead. The following section will establish peanuts as a luxury food (possibly since their introduction into the North Coast) because of their high nutritional content, their symbolism in North Coast pre-Hispanic art and iconography, their potential for use in making *chicha*, and their various medical properties.
PEANUTS AND PRESTIGE

Peanut Domestication: Luxury Foods and the First Domesticates

Much of the recent anthropological literature concerning food consumption in the past has focused on luxury foods, and their importance in feasting and commensal politics. Some have even attributed luxury foods and their associated feasting activities as being the driving force behind incipient agriculture (Hayden 1990, 2003). Luxury foods, in the most conservative sense, are foods which are rare, sometimes extremely labour intensive to procure, and typically revered for being especially rich, sweet, spicy, succulent, or for their use in making intoxicants (Hayden 1996, 2003). These luxury foods, when situated in resource rich environments, and within the context of developing complex socio-political hierarchies, are used by highly competitive individuals (often called “aggrandizers,” see Clark and Blake 1994; Hayden 1996), during competitive feasting as a means to develop, extend, and maintain power (Hayden 1990). Luxury foods are a fundamental indicator of socio-political authority within societies, as the elite status of these aggrandizers is maintained by the control over economic, as well as symbolic resources (Hayden 1996, Goody 1982). Competitive feasts can be used as a way of creating debt relationships between aggrandizers and other community members, and they typically feature the use of luxury foods to attract interest and gain notoriety for the host (Hayden 1996). Feasting and food preference for luxury goods may, in some instances, have encouraged the development of agriculture as it would intensify the procurement of some wild plants that might have been considered “luxury foods,” leading to their eventual domestication. Some of these foods might eventually have become staple foods, as their luxury status becomes mundane (Hayden 2003).

Peanuts, as will be outlined in the following sections, are a good example of a luxury food due to their various nutritive, medicinal, and symbolic qualities. Differing spatial distribution at sites like Huaca Gallinazo and Huaca Santa Clara suggests that elites controlled the symbolic and physical consumption of peanuts, leading me to hypothesize their use as a luxury good. In fact, peanuts may have even been considered a luxury item since their introduction into the North Coast of Peru many thousands of years ago. The peanut species Arachis hypogaea is thought to have originated in the area bordering southeast Bolivia, northwest Argentina, northern Paraguay, and the western Mato Grosso region of Brazil (Dillehay et al. 2007:1890). Nuclear restriction fragment length polymorphism (RFLP) and cytogenetic analysis hints to the origin of this allotetraploid (signifying that both parental sets of chromosomes are present in the gametes) as being derived from the hybridization of the diploid species Arachis duranensis and Arachis ipaensis (Kochert et al. 1996), or possibly Arachis monticola with diploid Arachis batizocoi and another unknown wild species from Bolivia or northwestern Argentina (Pearsall 2008:107). Regardless of the exact progenitor species, it is clear to archaeologists and botanists alike that the origin of the domesticated peanut, Arachis hypogaea, remains a complex mystery.
The earliest archaeological evidence for the use of peanuts on the North Coast comes from charred peanut hulls from sealed Las Pircas phase house floor contexts, AMS dated to between 6692 – 6486 cal B.C., in the Nanchoc region of the Zaña Valley (Dillehay et al. 2007). These macrobotanical remains provide a snapshot of the peanut’s domestication process. Dillehay et al. (2007:1891) report that, morphologically, the hulls appear to be a wild type, though these hulls are present far outside the peanut’s natural growing range. To compound this issue, starch grain analyses from dental calculus on human teeth recovered from the site provide not only direct evidence of the consumption of peanuts, but the starch grains themselves appear more of a match to modern *Arachis hypogaea* than the associated wild-looking hulls do (Piperno and Dillehay 2008). However, other preceramic evidence of peanut use or cultivation in the North Coast is scant, and *Arachis hypogaea* does not appear, for instance, in any preceramic layers at sites with extensive stratigraphic deposition, such as Huaca Prieta (Bird 1985:230; Grobman et al. 2012). Evidence exists for the presence of peanuts at the Cotton Preceramic site of Los Gavilanes (2700-2200 B.C.) (Pearsall 2008), however these peanuts have not yet been directly dated, and might be intrusive materials from later Early Horizon occupations at the site. Other areas of extensive archaeobotanical analysis, such as the Moche Valley, lack evidence of peanuts in the archaeological record predating the Initial Period (1800 – 900 B.C.), coinciding with the rise of complex society in the interior regions of the coastal valleys, and the development of irrigation management systems and irrigation agriculture (Pozorski 1979:173-174).

The fact that evidence of peanuts was found at Nanchoc, far from its natural growing range in the lowland tropical forests and savannas on the eastern side of the Andes (Dillehay et al. 2007:1890), and considering its morphological ambiguity, has led many archaeologists to speculate whether these peanuts were cultivated in the valley, or if the archaeological evidence is reflective of a different scenario. The dates and presence of these early peanuts hulls and starch grains has been controversial since the paper’s initial publication, and Rossen et al. (1996) have even attempted to critically examine their validity. They offered an interesting “ancient wild assemblage alternative,” citing that it might be the case that the botanical assemblage, including the peanuts, may be a collection of wild specimens that were transported from the highlands to the settlement at Nanchoc. Following Hayden’s luxury food and feasting hypothesis, peanuts may have been a luxury good traded from an exotic locale, sure to garner interest and awe from community members – perhaps only a few of whom might have had the chance to taste them.

**Peanuts as a Luxury Food**

_Nutritive Qualities_

There are many nutritive properties of peanuts that contribute to their classification as a luxury food. Whether or not pre-Hispanic Andean communities were aware of these qualities, or their related effects, remains unknown. The nutritional content of peanuts is variable, based on growing conditions, type of soil, the variation of minerals distributed in the environment, and the variety of the plant that is
grown. The following data are averages or ranges of contemporary, commonly grown varieties. No data or analysis for ancient varieties of peanuts is available, to my knowledge.

Peanuts, given their small size and weight, are extremely calorie dense (Table 2). Woodroof (1966:117) states that 1 lb of peanuts, un-shelled and roasted, on average contains 1,961 calories, and has the equivalent energy value of, for example, 2 lb of beef, 9 pints of milk, or 36 medium-sized eggs. The high caloric content of peanuts is commensurate with their high fat and protein content.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Average %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>5.0</td>
</tr>
<tr>
<td>Protein</td>
<td>28.5</td>
</tr>
<tr>
<td>Lipids</td>
<td>47.5</td>
</tr>
<tr>
<td>Crude fiber</td>
<td>2.8</td>
</tr>
<tr>
<td>Nitrogen-free extract</td>
<td>13.3</td>
</tr>
<tr>
<td>Ash</td>
<td>2.9</td>
</tr>
<tr>
<td>Reducing sugars</td>
<td>0.2</td>
</tr>
<tr>
<td>Disaccharide sugar</td>
<td>4.5</td>
</tr>
<tr>
<td>Starch</td>
<td>4.0</td>
</tr>
<tr>
<td>Pentosans</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Peanuts are considered by Woodroof (1966:85) to be a “semiperishable” foodstuff. They may last up to 5 years in cool and dry environments with relatively low humidity. However, if they are not stored in optimal conditions they are prone to mould, rancidity, or staleness within a month (Woodroof 1966:85). Peanuts would store well on the dry coast, and this would be an advantage to “aggrandizers,” or high status social groups, who would have an interest in accumulating surplus foods for competitive feasts.

Applying heat to peanuts (such as toasting), while improving the kernel’s taste and texture, moderately degrades their protein and antioxidant component, especially if exposure is at a high temperature for a prolonged period of time (Woodroof 1966:9). Heat results in the loss of both thiamine and lysine, while other proteins and vitamins remain relatively stable during heat processing and blanching (Woodroof 1966:9,120).

Peanuts, while currently used as an animal protein substitute, are, in fact, not a complete protein. The primary limiting amino acids are lysine and methionine (Woodruff 1966:120), and many consider isoleucine to be in deficient quantity as well (Savage and Keenan 1994:185), (Table 3). Peanuts can be paired with cereal grains (such as maize in the Andean region), whose complimentary amino acids will help prevent serious protein energy malnutrition diseases, such as kwashiorkor in children (Savage and Keenan 1994:194). Whether peanuts and maize were paired in the Virú Valley to use as a meat replacement is unknown, but it is unlikely considering the small quantities of peanuts recovered, and the large amount of animal and fish bones recovered from Huaca Gallinazo.
However, one nutritional property of the peanut might have been especially helpful in the North Coast environment: the peanut’s high niacin content. Savage and Keenan (1994:200) state that in dryland areas, residents may have tryptophan deficiencies (an essential amino acid). Niacin, when present in sufficient quantity in the body can provide tryptophan for the synthesis of proteins, if necessary. In addition, niacin deficiency causes skin lesions, a condition known as pellagra. In this regard, peanuts are helpful for preventing pellagra, as well as other nervous system and digestive problems associated with inadequate niacin intake (Estrella 1990:114). Other vitamins present in significant amounts (Table 4) include the B vitamins (especially thiamine, for which peanuts are among the best plant sources), as well as fat-soluble A, E, and K vitamins (Savage and Keenan 1994:200).

### Table 3. Essential Amino Acid Composition of Peanut Protein
(Savage and Keenan 1994:186).

<table>
<thead>
<tr>
<th>Essential amino acid</th>
<th>Quantity (g/100 g kernels)</th>
<th>FAO pattern of amino acid requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isoleucine</td>
<td>1.86-4.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Leucine</td>
<td>6.12-7.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Lysine</td>
<td>3.0-4.27</td>
<td>4.2</td>
</tr>
<tr>
<td>Methionine</td>
<td>0.79-1.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Phenylalanine</td>
<td>4.60-5.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Threonine</td>
<td>2.43-2.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Tryptophan</td>
<td>0.60-2.0</td>
<td>1.4</td>
</tr>
<tr>
<td>Valine</td>
<td>2.55-4.5</td>
<td>4.2</td>
</tr>
</tbody>
</table>

### Table 4. Significant Vitamins in Peanuts

<table>
<thead>
<tr>
<th>Vitamin</th>
<th>Amount present (mg/100 g kernels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin A</td>
<td>26 (IU)</td>
</tr>
<tr>
<td>B Vitamins:</td>
<td></td>
</tr>
<tr>
<td>Riboflavin</td>
<td>1.1-1.6</td>
</tr>
<tr>
<td>Thiamin</td>
<td>8.5-14.0</td>
</tr>
<tr>
<td>Niacin</td>
<td>16.7-21.7</td>
</tr>
<tr>
<td>Pantothenic acid</td>
<td>25.0</td>
</tr>
<tr>
<td>Pyridoxin</td>
<td>3.0</td>
</tr>
<tr>
<td>Biotin</td>
<td>0.34</td>
</tr>
<tr>
<td>Inositol</td>
<td>1800.0</td>
</tr>
<tr>
<td>Folic acid</td>
<td>2.8</td>
</tr>
<tr>
<td>Vitamin E (tocopherols)</td>
<td>93.0</td>
</tr>
</tbody>
</table>

*Vitamin A is not specified as either retinol or β-carotene in Woodroof (1966), so accurate conversion into mg is not possible.*
Peanuts also provide many dietary minerals, including exceptional amounts of copper and chromium (Table 5). The amount of copper in 100 g of roasted peanuts is equivalent to the recommended daily intake (RDI) for an adult (Savage and Keenan 1994:201). Roasting increases the relative amounts of minerals, when volatile substances are lost through heating, with the exception of sodium (Savage and Keenan 1994:201).

Table 5. Predominant Minerals Present in Peanuts

<table>
<thead>
<tr>
<th>Mineral</th>
<th>Raw (mg/100 g kernels)</th>
<th>Roasted (mg/100 g kernels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium (Ca)</td>
<td>44.0-87.8</td>
<td>55.2-91.0</td>
</tr>
<tr>
<td>Magnesium (Mg)</td>
<td>157.0-200.0</td>
<td>174.3-196.0</td>
</tr>
<tr>
<td>Phosphorous (P)</td>
<td>137.0-470.3</td>
<td>288.2-538.2</td>
</tr>
<tr>
<td>Sodium (Na)</td>
<td>5.8-66.0</td>
<td>4.2-8.5</td>
</tr>
<tr>
<td>Potassium (K)</td>
<td>618.2-890.0</td>
<td>643.5-734.1</td>
</tr>
<tr>
<td>Iron (Fe)</td>
<td>1.2-2.0</td>
<td>1.3-2.1</td>
</tr>
<tr>
<td>Copper (Cu)</td>
<td>0.74-1.60</td>
<td>1.3-1.7</td>
</tr>
<tr>
<td>Zinc (Zn)</td>
<td>3.3-6.2</td>
<td>4.4-6.7</td>
</tr>
<tr>
<td>Manganese (Mn)</td>
<td>1.7-19.0</td>
<td>1.9-2.2</td>
</tr>
<tr>
<td>Chlorine (Cl)</td>
<td>5.8-10.1</td>
<td>5.7-6.4</td>
</tr>
<tr>
<td>Chromium (Cr)</td>
<td>0.2-0.4</td>
<td>0.3-0.5</td>
</tr>
</tbody>
</table>

Peanuts’ goitrogenic effects when consumed in large quantities, particularly in areas with prevalent iodine deficiency, are a known dietary drawback (Savage and Keenan 1994:204). However, roasting peanuts reportedly eliminates the phenolic glycosides which cause these effects (Savage and Keenan 1994:204). This might be of particular significance since many Andean highland regions are lacking in iodine (although coastal regions are not as effected, as populations consuming foods from marine sources are typically not deficient) (Aufderheide and Rodríguez-Martín 1998:338-339). Perhaps cultural practices such as roasting helped improve the nutritional status of peanuts and at the same time improved their storability.

**Symbolic Qualities**

The symbolic value of the peanut is demonstrated by its representations in Moche fineline painting and naturalistic representation on ritual and funerary ceramics. The subjects of these artistic vessels are reflective of the cosmological paradigm of the Moche administrators, who used art as an invaluable aspect of their “politico-religious power structure” (Benson 2008:1). Regardless of how realistic the subject depicted in Moche art appears to be, Benson (2008:1) argues that everything – even basic representations of staple crops – have some associated “symbolic, ritual, and/or mythic significance.” Jackson (2008:37) shows how ceramic vessels, because they are a mobile art form, played an important role in communicating ideological meaning (as compared to permanent, monumental art); “portable arts conceptually bridged the gap between elite temple activities and ritual enactments at the personal or
community level […] reiterating shared beliefs.” Local elites and commoners both use these ceramics to reinforce religious and social ideologies through both symbology and ritual performances. However, Jackson (2008:38) points out that iconographic meaning requires a knowledgeable individual to mediate the dissemination of information, to provide the “religious narrative” for the ordinary person without such “visual literacy.” During funerary rituals, the transfer of information is usually focused on the status and social affiliation of the deceased, as well as those involved in the ritual performance (Jackson 2008:38,40).

Bourget (2006) provides the only symbolic interpretation of peanuts available in the literature on Moche iconography. He argues that peanuts were part of a larger complex of agricultural crops associated with not only fertility, but death and the underworld. This primarily entails tubers, such as potatoes, yucca, and camote (Bourget 1990), but Bourget (2006) includes peanuts as the pods develop underground as well, therefore they carry the same subterranean connotations.

The symbols themselves need to be well defined and recognizable in order to effectively convey meaning. However, it is through their association with other symbols that they acquire true social meaning (Bawden 1996:117). Similarly, it is not simply the properties of the peanuts themselves that provide archaeological information: their quantity, location, and association with other artifacts and features are equally important. Analysis of peanut iconography may help us to better appreciate the peanut’s positionality within the greater scheme of Moche symbolic ideology. For instance, peanuts are often depicted in the clutches of copulating rodents, thereby linking this plant food to images of destructive agricultural pests. This might allude to the dangers of overabundance, as extremely favourable growing seasons will also result in a thriving pest population, which could potentially be quite destructive, yet a process that, Bourget (2006:146,150) argues, reflects the duality of life and death. Peanuts are, quite literally, rooted in notions of the fragility of agricultural harvests, and the special importance, and reliance on agricultural products for the people on the North Coast.

On the North Coast, many ceramic vessels dating to the Early Intermediate Period depict anthropomorphic peanuts combined with birds, usually owls. Bourget (2006:149) suggests that the owl is one of the most frequently depicted animals in Moche iconography, and tends to be associated with death. The owl’s importance as a rodent predator is well known on the North Coast, and they are a blessing for farmers. Their anthropomorphic combination with peanuts on ceramic vessels suggests that peanuts are also associated with death along the coast, and were highly valued in these communities.

Peanuts are also found commonly in association with toads on vessels (Figure 1). The toad (which is often depicted with feline ears) is thought to be of the genus *Bufo*, a species whose activities are often linked with agricultural production (Bourget 2006:140). During the dry season they bury themselves deep in the ground, and remain inactive until the dry season is over and the increasing humidity, or, especially torrential rains, trigger their reproductive behaviours. Their frequent depiction alongside peanuts (as well as other plants like maize, chili pepper, yucca, and lima beans), may represent the similarity between the toad’s life cycle and that of agricultural production (Bourget 2006:140).
Figure 1. Moche vessel from the North Coast depicting a toad with peanuts, corn, and chili peppers on its body.
Photo credit: Museo Larco, Lima – Perú, catalogue # ML009782.

Chicha de Maní

The use of peanuts in making chicha de maní (a fermented alcoholic beverage) (Bonavia 1991:131; Fernández y Rodríguez 2007:107; Gillin 1945; Nicholson 1960) is another factor which lends to their luxury distinction. There are many depictions of peanuts on serving vessels (Figure 2), and it has been proposed that chicha de maní was stored in large vasijas at Ancón (Kaulicke 1997) – though there is still very little direct archaeological evidence to support the peanut’s use in chicha production and consumption. Chicha’s association with feasting and other ceremonial and ritual activities is potentially significant, as feasts perpetuate status distinction through the aggrandizers’ displays of competitive generosity (Clark and Blake 1994). Also, it may be the case that its use for making chicha might have helped to instigate the intensification of peanut cultivation in the Andes, similar to the scenario that Smalley and Blake (2003) propose for maize stalk alcohol and maize chicha.
Medicinal Qualities

Garcilaso de la Vega, writing in the early 1600s, warned that while peanuts were considered to be a healthful food, they are “bad for the head” when eaten raw (1966:501). Conversely, peanuts also possess some medicinal properties, especially the peanut oil, however he does not relay the supposed medicinal effects. Nearly a half-century later, Bernabé Cobo (1980:359) also attested to the peanut’s purportedly toxic nature when eaten raw, causing headaches and dizziness. He also stated that peanut milk (extracted in a similar fashion to almond milk), when combined with Lagenaria seeds causes drowsiness, and works well as a soporific (Cobo 1890:360). Further, he wrote that peanut milk also has medicinal properties when combined with almond milk, helping to prevent jaundice, and cleanse the kidneys. Estrella (1990:113) states that further north, in Ecuador, peanuts are also traditionally seen as having many medicinal properties. First, its oil is known to cure alopecia, and the juice from its leaves is an apparent antiscorbutic (protective against scurvy). Further, the peanut is also seen as an aphrodisiac (Estrella 1990:113). Thus, the specific use of peanuts in treatments for numerous ailments also provides evidence for their luxury status.

Summary

This section has established that peanuts may have been a luxury good for various nutritive, symbolic, and medicinal reasons, and that they might have had a luxury association even during their domestication process, from their earliest use on the North Coast at Nanchoc. Peanuts may have been highly valued for their high fat and protein content, rendering them an extremely calorie dense food. They also contain many important vitamins and minerals, particularly niacin, copper, and chromium. They have a wide range of medicinal properties: from aphrodisiac to soporific, and system-cleaners, even known for
curing jaundice, alopecia, scurvy and pellagra. Their potential for long-term storage would also have been advantageous for aggrandizers who were accumulating surplus foods for feasts. Based on their presence on a wide variety of Moche ritual vessels, peanuts were an important crop in North Coast ideology, and carried connotations of death and agricultural fertility.
THE RITUAL AND SYMBOLIC CONSUMPTION OF THE PEANUT

As previously outlined, peanuts are especially well preserved in the arid coast of Peru, and should they have been a prominent component of archaeological assemblages from domestic or non-ritual contexts, we would expect the archaeological literature to reflect this. Instead, many instances in which peanuts are mentioned with any detail or provenience information provide us with inferential evidence to suggest peanuts were associated with ritual or elite activities. This includes their connection with civic-ceremonial and monumental architecture, feasting activities, presentation rituals, and personal adornment. The contexts described herein depict the use of peanuts as a luxury good controlled by aggrandizers likely in order to reaffirm their high status in society.

Peanuts and Civic-Ceremonial Activity in the Andes

Archaeologically, evidence exists for the inclusion of peanuts in association with civic activities in the Initial Period (1800 – 900 B.C.) in the Casma Valley. At the site of Pampas de las Llamas-Moxeke, dated to 1600 – 1200 B.C., which includes architectural remains of a temple, administrative buildings, as well as low and high-status residential buildings, Pozorski and Pozorski (1995:274) excavated a plaza structure, what they describe as an I-shaped court, similar in nature to the Mesoamerican ballcourt. This I-shaped court, according to Pozorski and Pozorski (1995:279), was thought to be a ritual activity centre, such as an arena for processions or sporting events, or as a collection or redistribution centre. They infer this civic-ceremonial function of the court in part due to the lack of domestic features, and the relatively few artifacts found. One of the most curious aspects of the I-shaped court was the presence of peanut shells concentrated around the northeastern portion of the feature (Pozorski and Pozorks 1995:277). Pozorski and Pozorski (1995:77-78) infer that the peanuts might have been the refuse from persons seated on a low bench, the peanuts shells the remains of a “spectator’s snack.”

Ethnohistoric accounts from Bernabé Cobo also provide an insightful account of the role peanuts played in civic offerings to the gods. In the highlands, where the ceremonial calendar mirrored the agricultural one, peanuts were included in the ceremonial offering to Viracocha (the creator) in Kamay (January) (Rowe 1946:309). According to Cobo, during the new moon in Kamay, a ceremony constituting a mock battle between boys in the Great Square, dances, and llama sacrifices took place. On the sixth day of the ceremony, ground llama bones from the previous Kamay ceremony were mixed with various plants, like coca, flowers, chili pepper, and burned peanuts, in addition to chicha and salt; the concoction was then tossed into the river, to be swept by the current and taken to Viracocha (Rowe 1946:309).

Elite Consumption of Peanuts

In the lower Jequetepeque Valley during the Late Moche Period (550 – 800 AD), Swenson (2006) reports the inclusion of peanuts in feasting activities on ceremonial platform mounds at the sites of San
Ildefonso, Catalina, and Portachuelo de Charcape. In all three cases, hearths and a diverse array of plant and animal remains were excavated in close proximity to ramps, ceremonial platforms, and patios (Swenson 2006:132). Food remains included “llama, guinea pig, dog, sea lion, peanuts, beans, squash, chili pepper, and shell” (Swenson 2006:133). Swenson (2006:131) speculates that it is likely that these were the remains of “feasting spectacles” which were “performed” on these mounds for the community to see. In addition, the evidence, including hearths and ceramic vessels, suggests that the feasting foods were not simply consumed in this location, but also prepared there (Swenson 2006:133).

In the Virú Valley, during the Early Intermediate Period at the site of Huancaco, Dionne (2002) noted a marked difference in the consumption of plants between elites and commoners. Relative to the occupations of the Gallinazo Group site and Huaca Santa Clara, some (Jean-François Millaire, personal communication 2012) have theorized that the elites ruling over the Virú polity from Huaca Gallinazo may have left and founded Huancaco. Dionne (2002) sampled botanical remains recovered from both the Castillo (V-88), which included public architecture, elite residences, and kitchens (containing hearths and refuse deposits), and a small mound west of the castillo, V-317, a domestic area (lacking any fine wares), containing a significant quantity of food refuse. Analysis of the botanical remains from these two distinct areas showed that maize and gourds were the most abundant plant resources on the castillo, and compounded with the large amount of llama bones, Dionne (2002:121) suggests that elite feasting activities took place on V-88. In comparison, wild plant resources like Ambrosia sp. and Phyla canescens, among many others, were predominant in domestic V-317 (Dionne 2002:96). While peanuts are more ubiquitous in samples from V-317 (75 percent of samples) versus V-88 (65 percent of samples), their relative frequency (standardized by count per litre) comprises far more of the botanical remains recovered from V-88 (6.8 percent) than V-317 (only 0.3 percent). In fact, peanuts are the most important legume at V-88 (Dionne 2002:101), while at V-317 the most common legume is algarrobo, now often used as livestock feed, (although it is edible for humans), and its wood is used as construction material (Dionne 2002:109). Although Dionne (2002:110) is hesitant to make any inference based on peanuts’ spatial distribution at Huancaco, she states that there is a “[clear] association of peanuts with monumental architecture,” a pattern that I would suggest is the result of class differences in food choice.

Peanuts and Moche Vessels

On the North Coast, peanuts are commonly found depicted on Moche stirrup spouted vessels (sculpted and painted), pitchers, and pots. Hastorf (2003:549) has observed that, “given that these well-crafted pots were made for and used by the elite classes, we can assume that the foods displayed [on these vessels] were important in their symbolic and political world.” While the majority of these vessels are found in Early Intermediate Period contexts in the Moche, Santa, and Chicama Valleys, all of which were under a certain degree of Moche hegemonic control, these vessels, and their peanut depictions, appear in the Virú Valley as well. Ritual vessels with sculpted peanuts have been recovered from Middle Horizon
sites in the Nasca and Chincha Valleys on the South coast as well (Figure 3). Peanut depictions continue well into Late Intermediate Period on Chimú vessels in the North Coast, and Late Horizon Inca sites on the South Coast (Figure 4), although they are stylistically different from the earlier Moche vessels.

![Middle Horizon vessel with sculpted peanut handles from the Nasca Valley.](image)

**Figure 3.** Middle Horizon vessel with sculpted peanut handles from the Nasca Valley. Photo credit: Museo Larco, Lima – Perú, catalogue # ML039023.

![Late Horizon Inca pitcher with sculpted peanut handles from the South Coast.](image)

**Figure 4.** Late Horizon Inca pitcher with sculpted peanut handles from the South Coast. Photo credit: Museo Larco, Lima – Perú, catalogue # ML038351.

*The Presentation Scene in Moche Iconography*

A particular fineline drawing which is noteworthy, is called the “presentation of plates” as explained by Jackson (2008:140), (Figure 5). This scene displays food sitting on stacks of gourd plates, waiting to be presented to an elite figure, in what Donnan (1976:67) believes is a feasting ceremony.
Peanuts were often similarly depicted as placed on stacked gourd plates on Moche stirrup spouted vessels (Figure 6). Peanuts therefore are depicted as having been part of feasting activities during Moche times; in fact, Hastorf (2003:550) interprets these gourds as feasting dishes for the deceased. Following this line of thought, and the fact that peanuts are one of the few plants depicted on Moche funerary vessels (other common plants include maize and tubers), peanuts likely possessed an important symbolic association in Moche ideology, particularly in death-related cosmologies. This will be explored further in the fifth section.

Figure 5. “Presentation of plates” scene, depicting foods presented to elites on stacked gourd plates. Illustration credit: Donna McClelland.

Figure 6. Early Intermediate Period stirrup spout vessel from the Virú Valley depicting an offering of peanuts and maize on stacked gourd plates. Photo credit: Museo Larco, Lima – Perú, catalogue # ML006429.


**Other Peanut Iconography**

There are many instances of fineline drawings that possess symbols quite similar in shape to the outline of peanuts (refer to Donnan’s [1973: Figs. 240-242] catalogue of design elements on Moche vessels), although they are often not interpreted as such (Fournier 2004). It is possible that peanuts might be under-represented in the ceramic assemblage merely because archaeologists have yet to definitively label these symbols as peanuts. For example, Donnan (2008:71) illustrates a scene on a Moche ceramic vessel depicting the deity Wrinkle Face hunting a deer. On the front of Wrinkle Face’s headpiece there are three distinct peanut shapes (Figure 7). A similar depiction occurs on another fineline painted vessel: a coca-taker and a high-status warrior, seated across from one another, and placed in front of them a stirrup-spouted vessel showing the same peanut symbol (Uceda 2008:157). Figure 8 shows its presence again on a portrait head bottle. Peanut pod designs like this appear on many other vessels depicting supernatural beings, such as a unique sculpture of Wrinkle Face, who holds a conch shell to a supernatural being’s ear, and kicks her (Quilter 2010:135).

![Peanut pod design](image)

**Figure 7.** Moche fineline scene of Wrinkle Face deity hunting a deer, with a peanut pod design on his headdress.

Illustration credit: Donna McClelland.
Figure 8. Moche portrait head stirrup spout vessel with peanut pod design depicted on the headdress.
Photo credit: Christopher Donnan (1992:64).

Other Depictions of Peanuts

Peanuts have also been encountered in the Moche, Santa, and Chicama Valleys in the form of ceramic pendants (Bernier 2010; Jackson 2008). Often created using moulds from actual peanut pods (Bernier 2010), craftsmen at workshops like Cerro Mayal mass-produced these pendants along with a large variety of other Moche ritual ceramics (Jackson 2008:50). The miniature peanut pendants found here (Figure 9) were likely sewn to garments, or may have been worn as jewellery (Jackson 2008:61). These pendants, which lack any utilitarian function, are simply symbolic objects, Jackson (2008:60) argues, and their small size suggests an “intimate contact between object and viewer.”

Another medium on which peanuts have been depicted is a pre-Incan textile, with an embroidered image of a fertility ritual enacted by agriculturalists (O’Neale and Whitaker 1947:294-6). The textile was an unku (tunic) from a private collection, and therefore the original context remains unknown. However, O’Neale and Whitaker believe it to have originated from an Early Horizon settlement in the Nazca or Rio Grande Valley on the South Coast of Peru. The unku’s design has several rows of individuals, holding different agricultural crops, including chili peppers, lucuma, yuca, common and lima beans, guava, maize, and peanuts. Peanuts are identified on the garment in five instances, in quite similar depictions (Figure 10). O’Neale and Whitaker (1947) surmise that the presence of peanut, corn, and beans on the garment is reflective of the new and increasing importance of these crops in the local subsistence economy.
Figure 9. Peanut pendant beads [bottom left, top right] from Cerro Mayal. 
Photo credit: Margaret A. Jackson, Cerro Mayal Project.

Figure 10. Depiction of peanut [left] and another unidentified plant being pulled from under the ground during an agricultural ceremony, embroidered on a Nasca unku. 

Summary

This section has shown peanuts’ association with civic activities at sites such as at Pampas de las Llamas-Moxeke, dating to the Initial Period. Peanuts are also often associated with monumental architecture, such as the Early Intermediate Period site of Huancaco. Their presence in feasting middens at San Ildefonso, Catalina, and Portachuelpo in the Jequetepeque Valley is further evidence of their prestige status. Peanuts are often present on Moche ritual vessels, and even in fineline depictions of the deity Wrinkle Face. They are also among the mass-produced ceramic pendants from Cerro Mayal, and found on a Nasca unku depicting a fertility ceremony.

Based on the evidence, peanuts are clearly linked to elite consumption of the plant. The following section will address how this trend extends into feasting for the dead.
PEANUTS FOR THE DEAD

Much as with feasting contexts for the living, where luxury foods were used to maintain and strengthen socio-political relations, the same is true for ritual feasting in mortuary contexts (Arsenault 1992; Hastorf 2003; Gumerman 1994, 1997b). Peanuts are part of an array of plants included in burial offerings in pre-Hispanic times, especially Moche burials (Donnan 1995). Analysis of burial patterns reveals that these offerings are typically limited to a few plant species per burial (Gumerman 1997b:243), the quantity of which would be suitable for merely a modest meal (Donnan 1995:146). Burial patterns reflect community-wide ideas about the afterlife, and therefore the presence of foodstuffs in burial offerings alludes to the importance of the symbolic nourishing of the soul (Jackson 2008:40).

Peanuts and Moche Burials

The Burial Theme in Moche Iconography

Other highly analysed fineline drawings relating to botanical offerings are part of a set of artwork found on seven ceramic vessels that Donnan and McClelland (1979) describe as the “burial theme.” These complex drawings depict many facets of Moche burial ritual, but the “burial activity” depiction is of particular interest (Figure 11). This scene shows deities Iguana and Wrinkle Face lowering a burial encasement into a grave shaft using ropes (Donnan and McClelland 1979:6), followed by stacked gourd plates with plant foods on them, much like they would be presented in ceremonial contexts (Donnan and McClelland 1979:7). The authors acknowledge that other grave goods depicted in the burial scene, such as ceramic stirrup-spouted vessels and pedestaled jars are much more common in the archaeological record than stacked gourd plates; however, this may be due to differential preservation (Donnan and McClelland 1979:7).

Feasting for the Dead Elites

Metallic Peanuts and Elaborate Grave Offerings

The most elaborate inclusion of peanuts in a funerary context on the North Coast is in the elaborate burial of the Moche Señor de Sipan. This burial represents one of the “highest rank[s] of Moche culture,” (Alva 2001:224) and “the richest burial […] ever scientifically excavated in the western hemisphere” (Alva 2001:223), based on the large number of retainers, burial goods (such as funerary ceramics and burial dressings, masks, and jewellery), and the fine quality of materials, like precious metals, used to manufacture these items. The Señor de Sipan, a male, aged between 35 and 45 years of age, was buried in a copper-tied coffin, with eight other individuals, 451 associated grave goods and funerary ornaments. Impressive burial items included metal banners with cult images (metal plaques sewn onto cloth) (Alva 2001:226), pectorals made of hundreds of shell beads, gold and turquoise ear ornaments depicting animals and human figures, as well as a gold disk necklace (Alva 2001:227), a gold and silver...
Figure 11. Moche “burial activity” depicting offerings placed on stacked gourd plates being lowered into a burial chamber of a high status individual. Illustration by: Donna McClelland.

sceptre, a gold headdress ornament, feathers (which may have been a headdress also), and a gold backflap (perhaps armour) depicting the supernatural being called the “Decapitator” (Alva 2001:228). Other items included miniature war clubs, copper shields, copper spears, and 212 ceramic vessels (Alva 2001:228). A gold and silver peanut necklace that adorned the buried lord (Figure 12) was composed of twenty metal peanuts strung on two strands, placed from shoulder to shoulder (Alva 2001:227). The peanuts, which measured approximately nine centimetres, were gold on the right side of the necklace, and silver on the left. This distinction was thought to represent duality of the sexes – gold for the masculine, and silver for the feminine (Alva 2001:144).

Another metallic representation of a peanut, a cut gold sheet worked into the shape of a parrot in flight, carrying a peanut in its claws, was also recovered among the grave offerings found in a repository at the large Moche site at Huaca de la Luna, in the Moche Valley (Uceda 2008:167). This object was found among other modeled metal sheets of serpents, masks, and other figures near Tomb 18. In addition, the excavators recovered an ornamental feline effigy pelt covered in textiles, metal laminates, plaques, and shells (Uceda 2008:165-166). Uceda (2008:167-168) notes that many of these items are similar to items
Figure 12. Necklace of gold and silver peanuts recovered in the tomb of El Señor de Sipan. Photo credit: Susan Einstein (Alva and Donnan 1993:94).

depicted in Moche iconography: the effigy pelt is similar to that worn by orators and warriors in coca-taker images. Potentially all of these burial items, including the peanuts, are ritual items associated with Moche ideology. The representation of peanuts in a medium like precious metals further reinforces its association as a prestige good. Bawden (1996:216) notes that since metal objects are almost exclusively found in ritual and funerary contexts, these objects were “symbols of divinely sanctioned power,” giving the deceased supernatural status, and further creating distinction between them and the community.

Peanut Shells and Other Elite Moche Burials

A large study of a Moche cemetery at the site of Pacatnamu by Gumerman (1994, 1997b) has helped to uncover the importance of certain plants as funerary offerings. Excavations yielded 84 individuals, 30 of whom were interred with identifiable botanical remains (including maize, seaweed, peanut, squash, lucuma, lima beans, and common beans). Gumerman (1994:402) reports the remainder of the burials had very poor preservation, thus the presence of plant remains as burial offerings might be under-represented. Of the burials with food remains, maize (57 percent) and seaweed (26 percent) and the common bean (14 percent) were the most ubiquitous (Gumerman 1994:402). The lima bean was present in 6 percent of burials with food offerings, while lucuma, squash, and peanuts were only present in 3 percent of these burials. Gumerman (1997b:246) notes that this assemblage of species is quite different than remains found in middens at Pacatnamu, suggesting to him that the occupants of the site were primarily subsisting on marine resources (shellfish, fish), with agricultural produce further supplementing the diet. The corn associated in burials was also different than that found in middens; corn in burial contexts tended to have higher row numbers than those found in refuse deposits (Gumerman 1997b:244). While Gumerman (1994:399) states that this assemblage of plants from the Pacatnamu cemetery is, without
doubt, part of a larger pattern of Moche funerary offerings, as evident from both archaeobotanical remains and Moche art and iconography, the low frequency of peanuts in the cemetery assemblage would lead one to infer that peanuts were not as important as other plant resources in Moche mortuary practice. However, while Gumerman (1994) concluded that the presence of maize in burials was not related to status distinction, and that food offerings in general is likely part of “widespread Moche ritual,” further examination of the data reveals a different story for peanuts. First, according to Gummerman (1997b:246), the most elaborate burials at Pacatnamu were of individuals buried in cane “coffins.” Further, re-analysis of Gumerman’s (1994, 1997b) data reveals that another indicator of high-status among burials (aside from type of encasement) was the quantity of gourd containers left as an offering: Millaire (2002:129-130) found a positive correlation between the elaborateness of burial encasing and quantity of gourds.

Following this association with gourd quantity and burial encasement as status indicators, the presence of peanuts at Pacatnamu, even though from only a single burial, becomes much more significant. Peanuts (n=119 whole pods, and many other fragments) were recovered from Burial 9, a male of 50+ years, buried in a cane coffin, along with two ceramic vessels, and 19 gourds – the maximum number of gourds associated with burials at Pacatnamu (Gumerman 1997b). Thus, peanuts were only afforded as a burial good to those of the highest position in Pacatnamu society.

Another high status burial, excavated by Ubbelohde-Doering in the 1930s at Pacatnamu, yielded an offering of peanuts. This particular chamber tomb, grave E I, contained 12 individuals, nine of whom were interred in very elaborate cane coffins (Gumerman 1994:404). While Gumerman (1994:404, 1997:246) says that food offerings were not reported in great detail, fish bones, gourds, and peanut shells were recorded, along with other impressive offerings of copper, fine textiles and ceramics.

**Peanuts Recorded in Other Virú Valley Burials**

The use of peanuts as grave offerings among individuals of high status across the Andes may allow one to infer that the association of peanuts and prestige is a phenomenon which extends geographically beyond the North Coast (although evidence is scant in comparison), deeper in time than the Early Intermediate Period, and is not exclusive to the Moche culture.

Peanuts are associated with a small number of other burials in the Virú Valley, such as Huaca de la Cruz and Castillo Tomaval (Towle 1961:43). Towle (1952b:355) mentions a peanut pod in a grave at Castillo Tomaval which Strong and Evans (1952) classify to be a “Gallinazo culture” burial from the Early Intermediate Period, likely associated with Burial 1. This burial was a mummy bundle of a 40-45 year old woman, whose body was placed inside one of the Valle Plain ceramics, wrapped in a coarse cotton cloth, and cord (Strong and Evans 1952:107). The mummy was seated in a semi-flexed position and facing west. The burial context, as Strong and Evans (1952) describe it, appears to be a residence, and domestic refuse was noted in surrounding layers. Considering Towle (1952b:355) does not relay direct evidence of the
peanut’s association to the burial instead of from surrounding fill, her interpretation is potentially not secure.

Also in the Virú Valley, a partial excavation of a cemetery (V-66) by Strong and Evans (1952:49) from the Puerto Moorn Period exposed, what they describe, a “haphazard” assemblage of graves, one of which had an offering including peanuts. The burial was that of a female, interred with her body extended, with her hands placed on her pelvis, and facing south. She was wrapped with matting and cord, and had a gourd vessel placed to the right of her head (Strong and Evans 1952:49). Other grave offerings included an assortment of broken ceramics, along with a small quantity of botanical remains, including peanuts and maize. Strong and Evans (1952:49) mention that her cranium had evidence of “slight occipital flattening,” an observation suggesting that the individual may have been of elite status.

**Peanuts in Burials on the South Coast**

There is also evidence to suggest that peanuts were used as a prestige good in burial contexts in other Andean locales, such as the South Coast and further inland. Recent excavations at the site of Amato, located in the Acarí Valley along the southern coast of Peru, also dated to the Early Intermediate Period, recovered an elaborate burial of a 60 year old male. The individual was seated, facing north, shrouded in a plain, woven textile, and bundled with rope (Valdez 2005:5). He was interred with 44 sacrificial retainers, of varying age and sex, many of which were decapitated (Valdez 2005:3). This male was of very high rank in life, as evidenced by the large number of sacrificed individuals, as well as the burial offerings recovered. These included five camelids, a unique bird carpometacarpus bead necklace (nothing similar has been previously identified), an empty gourd container placed at his feet, and several peanut pods (the number is not specified) which were placed to his right (Valdez 2005).

Nearby at Chaviña, a Nasca cemetery also in the Acarí Valley, peanuts were among the botanical assemblage found in association with eleven “trophy heads” (Verano 1991). These heads were excavated in a linear arrangement along a western-facing adobe wall (Verano 1991:211). Some were wrapped in plain textile, and others in polychromatic textile, often containing chili peppers. The heads were placed in small pits, in which other “offerings” were placed: including corn and pacae husks, cactus spines, and peanuts (Verano 1991:211). There has been much disagreement on whether or not these are the remains of war trophies or ritual sacrifices (Verano 1991:213-218), but either way, they demonstrate that peanuts were part of mortuary and other ritual offerings.

Peanuts were also found in a mummy bundle at the Paracas Necropolis site in southern Peru, recovered from a burial chamber on Cerro Colorado (Towle 1952a). Four peanut shells were found in a woven basket, along with two gourd vessels, maize cobs and kernels, and tubers (Towle 1952a). At the site of Ancón, just north of present-day Lima, peanuts were found in Middle Horizon funerary contexts (Kaulicke 1997). While Kaulicke (1997:62) does not provide information regarding specific burials, he
notes that peanuts were regularly included as mortuary ritual food offerings, along with tubers, lucuma, and pacae.

**Summary**

Peanuts are one of the few North Coast plants commonly included as offerings for the dead. Peanuts have been found as offerings in elite Moche burials at Pacatnamu, and metallic representations have been uncovered in extravagant graves at Sipan and Huaca de la Luna. Peanuts have also been found in association with some burials in the Virú Valley, like at Castillo Tomaval, Huaca de la Cruz, and Puerto Moorin. They have, however, also been found in a high status burial in the Acarí Valley, a mummy bundle in Paracas, and with sacrificial trophy heads at Chaviña, all in the South Coast of Peru. Thus, peanuts’ prestige association might be a trend which extends further into the South Coast.

The following section will provide a case study for this analysis. Using the mounting evidence for peanuts’ luxury status, and their use in feasts for the elite and the dead, I will explore differential use of peanuts at the important Virú polity sites of Huaca Santa Clara, and Huaca Gallinazo.
PEANUT USE IN THE VIRÚ POLITY

Background of the Virú Polity

The Huaca Gallinazo (V-59) of the Gallinazo Group, and the site of Huaca Santa Clara (V-67), both located in the Virú Valley, are part of a larger conglomerate of sites of which the Virú polity is comprised, and provide the setting for the case study for this analysis. The first site, the Gallinazo Group site, is the large urban centre of the polity, while the latter, Huaca Santa Clara, likely functioned as an administrative centre (Millaire 2010a). The valley-wide polity likely developed by approximately 200 B.C. (Millaire 2010a:6190). These two sites compliment defensive settlements, as well as farming hamlets in the valley, outlined by Willey (1953) as a four-tiered settlement system. By 400 B.C. the Virú polity was likely a “subservient state” under a degree of hegemonic control of the Moche expansionist state, as evidenced by Moche stylistic influences. The Virú polity was part of a “complex system for the exchange of goods and ideas” within the Moche state (Millaire 2010b:250). Millaire (2010b) proposes that the local Virú elites were able to maintain governance over the valley but provided the Moche state with local resources through a tributary system.

Peanuts in the Virú Polity

This case study serves to illustrate that peanuts were not a staple crop, nor even a common comestible, at Early Intermediate Period sites in the Virú Valley such as Huaca Gallinazo or Huaca Santa Clara. In fact, peanuts were not recovered from any residential areas at Huaca Gallinazo. Instead, peanuts tend to be associated with civic-ceremonial architecture, ritual burial, and possible elite kitchen contexts at the site. Peanuts are less abundant at Huaca Santa Clara, and neither seem to be a common food item, nor an important crop in their redistribution economy. Although peanuts are few in number at Huaca Santa Clara, just as at Huaca Gallinazo, they are associated with civic-ceremonial architecture, rooms with elite access, as well as burials. At these two Virú polity sites, therefore, peanuts likely had luxury and prestige associations and do not appear to have been an ordinary food found in domestic contexts.

HUACA GALLINAZO (V-59)

Introduction to Current Research and Setting

The Gallinazo Group site has been known to archaeologists for decades (Bennett 1950; Willey 1953; Strong and Evans 1952), and has been the subject of previous settlement analysis. The site is situated within the Virú Valley, in the district of La Libertad, along the North Coast of Peru, and about 55 km south of the major city of Trujillo along the Pan-American highway, in between the small communities of Puerto Morin to the north, and El Carmelo to the south (Figure 13). The Gallinazo Group site consists of 30 natural mounds covering an area of approximately 600 ha. Six of these mounds are interpreted as
Figure 13. Map of Virú Valley, Huaca Gallinazo, and Huaca Santa Clara on the North Coast of Peru.

possessing civic-ceremonial architecture, the largest being Huaca Gallinazo (V-59), an impressive ~82,000 m³ civic building (Millaire 2010a:6187) (Figure 14). Its construction is reminiscent of temples at Moche sites, with substantial platforms, plazas, and terraces. The *huaca* (a local Quechua-derived term likened to temple, or monumental centre) was the nucleus of an urban population estimated to range between 10,000 to 14,400 people, living on the remaining mounds in a dense aggregation of only 40 ha (Millaire and Eastaugh 2011). To sustain such a large population, the areas between the mounds were likely used as irrigated fields, as evidenced by recent coring, magnetometer and ground penetrating radar survey (Millaire and Eastaugh 2011). Radiocarbon dating suggests both the civic and residential areas were continuously occupied from the time of their construction ~ 100 B.C. to A.D. ~700 (Millaire 2010a:6190).

The objective of current excavations, led by Dr. Jean-François Millaire of Western University, is to investigate the activities that occurred at the Gallinazo Group site and to situate the site’s importance within the larger Virú polity. I have been involved with the project since 2009, and have participated in excavations for two field seasons (2009 and 2011). During the 2011 field season, my primary role was to oversee the collection of archaeobotanical remains for the first analysis of its kind at the site.
Interpretation of Subsistence and Activities on the Southern Platform and CA2

Two areas of the site were excavated in the 2011 season: 1) the Southern Platform from Sector A, the summit of the huaca; and 2) Architectural Compound 2 from Sector H, a domestic area in the outlying area of the site (Millaire and LaTorre Calvera 2011). The following is a brief overview of these areas.

Description of Southern Platform

The Southern Platform is inferred to be of elite, ceremonial, or civic use due to a multitude of factors, primarily based on their archaeological associations, as well as their prominent location within the site (Millaire and La Torre Calvera 2011). The huaca in itself, and especially the Southern Platform, are considered to be the civic and ceremonial centre of the Gallinazo Group site. It dominates its surroundings, and the Southern Platform can be seen from almost every vantage point below on the flats. This was surely an effective, and permanent reminder of the power of the Virú polity elites who governed the outlying communities. Aside from the monumental nature of the huaca, the architecture of the plaza and adjacent rooms support the elite inference, with lattice friezes, large ramps, and niches in walls. The huaca and the Southern Platform were also associated with burials, which may be ritual offerings, some containing grave offerings like large tinajas (ceramic vessels), and gourd plates. Fancy and delicately made elite ware ceramics are common to units on the huaca.

Two medium-sized rooms on a terrace adjacent to the Southern Platform, rooms A-7 and A-8, might have been kitchen areas for elite or civic use. They were associated with adobe hearths, which were reddened from use, and covered with an ashy lens of organic material, as well as broken, blackened ceramics. AMS dating of carbonized wood from room A-8 dates to cal AD 410-550 (Beta-305667) (Jean-François Millaire, personal communication 2011).
Description of Architectural Compound 2

Architectural Compound 2 (CA2) was excavated in order to elucidate domestic activities in the residential sector of the site (Millaire and La Torre Calvera 2011). The compound sits on a low mound at the base of the huaca, at the outlying edges of the Huaca Gallinazo site. The remains of plain textiles, utilitarian ceramics, and simple architecture are omnipresent. This sector was used by food producers and processors, as shown by a large number of manos for grinding grain which flank CA2. These rooms also contained much evidence of food processing, and zooarchaeological analysis has revealed that mammal bones appear to be more heavily processed in this compound as well (Claire Venet-Rogers, personal communication 2012). A large storage tinaja, along with two almacenes (storage features), were recovered in room A-2. This room in particular had many construction phases and ashy layers, and the tinaja and almacenes contained a significant amount of shellfish and fish bones. In addition, burnt maize cobs were recovered from this room (and the others around it), as well as a lesser amount of other plant materials. AMS dating of carbonized wood from CA2 room A-2 indicates that the terminal layers are relatively contemporaneous with the Southern Platform’s room A-8, (the layer filling the tinaja and almacenes is most similar, dating to cal. A.D 350-440 (Beta-305661), although the earliest deposits in A-2 date to the third century B.C. (Jean-François Millaire, personal communication 2011).

Subsistence at Huaca Gallinazo

While analysis of the botanical and zoological materials, and their spatial distributions is ongoing, certain plants and animals dominate the assemblage. In terms of plant remains, Zea mays (corn), Capiscum sp. (chili pepper), Persea americana (avocado), Pouteria lucuma (lucuma), Phaseolus lunatus (lima bean), Psidium guajava (guava), and Arachis hypogaea (peanut) were excavated in the 2011 field season (Table 6). Animal remains, such as Llama sp. (llama) and Otaria sp. (sea lion), and birds Phalacrocoras bougainvilli (guanay cormorant), and Sula sp. (booby), were recovered from both the Southern Platform and CA2. Fish bones from Paralonchurus peruanus (Peruvian banded croaker), Sciaena deliciosa (lorna drum) were also common. In addition, molluscs were also widely recovered, including Donax obesus (surf clam), and Thais chocolata (sea snail) (Claire Venet-Rogers, personal communication 2012).
Table 6. Commonly Identified Plant Remains in the Virú Valley
(Towle 1961; Fernández Honores and Rodríguez Rodríguez 2007).

<table>
<thead>
<tr>
<th>Scientific name (Genus and specie)</th>
<th>English</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annona cherimolia</td>
<td>Chirimoya</td>
<td>Chirimoya</td>
</tr>
<tr>
<td>Arachis hypogaea</td>
<td>Peanut</td>
<td>Maní</td>
</tr>
<tr>
<td>Bixa orellana</td>
<td>Achiote</td>
<td>Achiote</td>
</tr>
<tr>
<td>Bunchiosia armeniaca</td>
<td>Peanut butter fruit</td>
<td>Cansaboca</td>
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<td>Canavalia sp.</td>
<td>Jack bean</td>
<td>Haba</td>
</tr>
<tr>
<td>Capsicum sp.</td>
<td>Chili pepper</td>
<td>Ají</td>
</tr>
<tr>
<td>Cucurbita maxima</td>
<td>Squash, cucurbit</td>
<td>Zapallo</td>
</tr>
<tr>
<td>Gigartina chaimisoi</td>
<td>Red seaweed</td>
<td>Mococho</td>
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<tr>
<td>Gossypium barbadense</td>
<td>Cotton</td>
<td>Algodón</td>
</tr>
<tr>
<td>Inga feuillei</td>
<td>Ice cream bean</td>
<td>Pacae, pacay, guaba</td>
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<tr>
<td>Lagenaria sp.</td>
<td>Gourd</td>
<td>Mate</td>
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<tr>
<td>Manihot esculenta</td>
<td>Manioc</td>
<td>Yuca</td>
</tr>
<tr>
<td>Persea americana</td>
<td>Avocado</td>
<td>Palta</td>
</tr>
<tr>
<td>Phaseolus lunatus</td>
<td>Lima bean</td>
<td>Paller</td>
</tr>
<tr>
<td>Phaseolus vulgaris</td>
<td>Common bean</td>
<td>Frijol</td>
</tr>
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<td>Pouteria lucuma</td>
<td>Eggfruit, lucuma</td>
<td>Lúcuma</td>
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<td>Prosopis spp.</td>
<td>Algarrobo, mesquite</td>
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<tr>
<td>Psidium guajava</td>
<td>Guava</td>
<td>Guajava, guayaba</td>
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<tr>
<td>Uncaria tomentosa</td>
<td>Cat’s claw</td>
<td>Uña de gato</td>
</tr>
<tr>
<td>Zea mays</td>
<td>Maize, corn</td>
<td>Maíz</td>
</tr>
</tbody>
</table>

**Peanut Recovery Methods**

Desiccated and charred botanical remains were recovered from the Southern Platform (civic-ceremonial) and Architectural Compound 2 (residential) from both screen collection and flotation sampling. Excavated materials from most units (not including sterile layers, and some layers of construction fill and rubble on the Southern Platform) were sifted through 1/8-inch screens, and all botanical materials retained in the screens were collected for analysis. Volumes for sifted materials were noted in most units.

**Flotation Sampling**

Flotation samples were also taken from most units on the Southern Platform and CA2 (areas defined as disturbed, for instance, rodent burrows or looters’ pits, were not sampled). Further, a combination of sampling strategies was employed in the process of acquiring these flotation samples. Composite/scatter sampling was carried out in many units, especially those in which no distinct features were evident, as the primary research objective was to recover as broad a spectrum of botanical taxa as possible. Small portions of sand and soil were collected from various areas within one designated context, and bagged together, following the process outlined by Pearsall (2010:69). Point sampling, also referred to as bulk sampling (Lennstrom and Hastorf 1992), was another sampling strategy carried out in this investigation, particularly in units in which tinajas, almacenes, ash lenses, and hearths were present, following procedures outlined by Pearsall (2010:71).
For each sample taken, volume (in litres) was recorded. This, in most cases, was a standardized 1 litre, a decision made with reference to the methodology of previous projects in the region (Dionne 2002), and methods outlined by Pearsall (2010) and Fritz (2005). Initially, we began with 100 percent collection of the contents of the almaceaes from room A-2. However, it quickly became clear from the large amount of remains inside them (mostly shellfish) that it would be more efficient to take a fractional sample. In addition, with the consideration of the vast number of features and layers excavated in the 2011 season, the collection of large volumes of samples was logistically unfeasible, compounded by the fact that flotation samples needed to be transported to the town of Huanchaco at the end of every day, along with various other pieces of site equipment, artifacts, faunal remains, and other materials. In retrospect, perhaps doubling, or tripling the flotation sample size would be more appropriate for making future density comparisons, if time and resources allow for it. However, considering most peanut shell fragments were quite large, the majority of peanuts recovered come from 1/8-inch screen collection, and the smaller flotation sample size is not likely to have affected the outcome significantly, if at all.

Flotation samples were processed using a combination of fine sieving and the manual bucket method (as outlined in Pearsall 2010) in the laboratory courtyard in Huanchaco. As desiccated remains can be damaged or destroyed in the process of flotation, after consulting previous work done in Virú (such as Dionne 2002), fine sieving was first completed for all samples. Botanical remains caught in a 1 mm screen were bagged for separate analysis. A preliminary sorting and removal of small adobe pieces and rocks was also conducted at this stage. The <1 mm fraction was floted by the author, using a 0.5 mm screen. Bucket flotation consisted of placing the <1 mm fraction into a 10 litre bucket, and adding water. The bucket was carefully agitated, and all floating organic remains were scooped off using the 0.5 mm hand sieve. The process was repeated until there appeared to be no more organic material floating at the top of the bucket.

Plant Identification and Quantification

Analysis of the 1/8-inch screen collection and the >1 mm flotation fraction was conducted by Lic. Estuardo La Torre Calvera. This consisted of the identification of macrobotanical remains and the recording of their counts (Appendix A2). While the <1 mm flotation fraction has yet to be analysed, this, theoretically, should not impact our discussion regarding peanuts, as they were likely to have been retrieved from the >1 mm sieve fraction. Thirteen samples were recovered from the Southern Platform. Eight samples are from features (such as burials or part of other features, or architecture) on the platform, and five are from the kitchen contexts adjacent to this plaza (n=3 from A-7, and n=2 from A-8). Botanical remains and/or float samples were recovered from 25 units in Architectural Compound 2, from within excavated rooms A-1 (n=1), A-2 (n=14), A-3 (n=3), A-4 (n=3), A-5 (n=1), and A-6 (n=2). One sample was collected from an additional feature.

Counts presented in Appendix A have been separated by the Southern Platform and Architectural Compound 2 for comparison in this analysis.
**Analysis: Peanuts at Huaca Gallinazo**

*A Note on Archaeobotanical Interpretation, Bias and Methods of Analysis*

Archaeobotanical analyses cannot reveal direct consumption at the level of the individual, nor the population. Instead, analyses of the presence and distribution of archaeobotanical remains reveal differential access to resources (the *potential* for consumption), as well as differences in production between segments of society.

Archaeobotanical data are often biased due to differential preservation between locales, and species. Cultural factors, such as processing techniques, may also affect the stronger preservation of certain goods over others. How a food item is cooked (i.e., boiled versus roasted) or prepared has a great impact on preservation, as charred remains preserve better than desiccated ones (Fritz 2005). Also, the nature of consumption itself greatly biases archaeobotanical samples; if the item in question is consumed whole, it is less likely to be found in midden deposits as no husks, cobs, pods, or seeds are left behind. In addition, differing recovery methods between projects hinders effective comparison between sites (Pearsall 1990).

Data transformations may be performed in order to minimize bias, and allow for more robust interpretation and comparison. Three measures are used in this archaeobotanical analysis: ubiquity, standardized density, and relative plant presence. Ubiquity is calculated as the percentage of samples in which a particular plant is present relative to the total number of samples collected, regardless of the actual counts of the plant within any given sample (Hastorf 1990:272). This measure is used to minimize differential preservation issues between loci, allowing for better comparison. Standardized density may help to reveal processing, storage, waste disposal, and other activities, and is the preferred measure when samples come from contexts with similar preservation (Hastorf 1990). The third, relative plant presence (similar to relative taxa present in Hastorf 1990), provides the relative frequency of a plant (expressed as a percent of total fragments) when compared with all the other plant remains in a sample. Alone, these data may be very misleading, but when compared to other samples with similar preservation (such as intra-site comparison) this may highlight the relative importance of plant products.

**Peanuts at Huaca Gallinazo**

Peanuts were present in 62 percent of the samples from the Southern Platform (units 77, 80, 84, 85, 88, 97, 103 and 106), and none of the samples from Architectural Compound 2. This is significant considering the much larger sample size of CA2 (n=25) than the Southern Platform (n=13), and the large quantity of peanut shell fragments found there (n=96), comprising 8.1 percent of the plant fragments recovered. In the larger scope of differential plant distribution between these areas, it appears that only two other plants have a markedly different distribution between the Southern Platform and CA2: maize and gourd (seeds in particular) (Figure 15). Maize (cobs and kernels) comprise much more of the CA2 sample (together representing 85.2 percent of plant fragments recovered) than in the Southern Platform where they
comprise only 30.4 percent of recovered plant materials. Gourd seeds, however, are also more prevalent in the Southern Platform sample (44.9 percent of total fragments versus 1.3 percent in CA2).

**Burial 3**

Burial 3 was that of an infant, possibly female, placed in a north-south supine position, with the head facing north. The infant was interred with textiles, three gourd plates, a *tinaja*, and possibly another smaller vessel inside (Millaire and La Torre Calvera 2011). This burial is interpreted as being a sacrificial offering during a later construction phase on top of the *huaca*. Unit 80 is a layer of fill from the Southern Platform, which surrounded Burial 3, and the sample from the *tinaja* offering is unit 77. One peanut shell fragment was recovered from units 77 and 80 each. Unit 80 was also composed of a very small amount of maize, gourd, and guava. The sample of contents from the *tinaja* associated with Burial 3 (unit 77), contained gourd seeds (n=6), and a peanut shell. The contents of the *tinaja* are interpreted as being a burial offering of food remains, as likely were the gourd serving vessels.

**Room A-7**

Units 84, 85, 88, and 97 are levels from Room A-7 on the Southern Platform. Unit 84 consisted of surface collection, and as such, volume of excavated material was not recorded. Plant remains from this context might be mixed with wind-blown materials. However, there are strong similarities in the contents from this unit and those below. Fourteen peanut shell fragments were recovered from this unit. It is likely, considering this is such a larger sample, these shell fragments were not blown in from another context. Unit 85 consisted of ashy fill, likely refuse from local consumption, which might have been used to gain height for construction purposes. Two peanut shell fragments were recovered from this layer which appeared to be mostly construction fill and rubble, so volumes were not recorded. Unit 88 was abundant in botanical remains, and also revealed a burned adobe brick hearth, and many ceramic sherds. Three peanut pod fragments were recovered among the plant remains, which included maize kernels and cobs, chili pepper peduncles, beans, gourd flesh and seeds, and lucuma, and avocado pits. Peanuts comparatively did not account for a large portion of the assemblage. A single peanut shell fragment was also recovered from unit 97, which appeared to be a kitchen and refuse deposit, similar to unit 85. However it appeared as though A-7 had been left open since wind-blown sand entered during this period of use as well. Because this context was not completely secure, volumes, again, were not recorded for density analysis. Food remains found in this room include maize cobs, peanut shells, chili pepper seeds, lima beans, lucuma (eggsfruit) pit fragments, and guava seeds. Cotton was also recovered from some of these contexts, although it was not a comestible.
Figure 15. Huaca Gallinazo, Southern Platform versus Architectural Compound 2 – Percent Plant Presence
Units 103 and 106 in room A-8 on the Southern Platform also produced a range of plant remains. Seventy-two peanuts shell fragments were recovered from unit 103, along with a hearth full of blackened ceramics, and a large quantity of maize, chili pepper peduncles, gourd, bean, and lucuma. Peanuts are the second-most represented plant material (next to maize kernels), and this is the densest deposit of peanuts at the site, 1.8 peanuts per 10 litres of excavated materials (Figure 16).

Below, in unit 106, two peanut shell fragments were recovered in this ashy layer along with various other plant remains such as maize, cotton, mococho (sea weed), guava seeds, beans, lucuma, and avocado pits. This layer, while similar in character to 103, had a lesser density of botanical remains recovered (including peanuts, only 0.03 peanuts per 10 litres of excavated material); although, peanuts were the third most frequently encountered plant remain in this context (Figure 17).

**Figure 16. Huaca Gallinazo, Southern Platform: Unit 103 – Density of Plant Remains**
Figure 17. Huaca Gallinazo, Southern Platform: Unit 106 – Density of Plant Remains

HUACA SANTA CLARA (V-67)

Introduction to Previous Excavations and Setting

The site of Huaca Santa Clara was excavated from 2002 to 2005 by Dr. Jean-François Millaire. It is located on top of a natural hill, upon which a complex set of adobe buildings were constructed. Excavations reveal that the site was occupied consistently between 160 B.C. and A.D. 780 (Millaire 2010b:230). The site is considered to be the administrative centre of the Virú polity, as suggested by its many sectors of differing functions (Millaire and LaTorre Calvera 2003). As a general trend, the bottom, low-lying peripheral areas of Huaca Santa Clara (including part of Sector 2), are comprised of domestic structures and craft production areas, while the terraced slopes of Cerro Cementerio (including parts of Sector 2, 4, and 6) have more elaborate architecture (Millaire and LaTorre Calvera 2003). These terraces also revealed a series of “honeycombed” chambers which lacked a traditional means of access, and were interpreted as being storage rooms for food crops, likely tribute (Sector 2). The spatial distribution of “corporate architecture” in close proximity to storage facilities lends to the administrative interpretation of the site (Millaire 2010b:235). The monumental architecture on the summit of the *huaca* (in Sector 1) consists of platforms, plazas, and elaborate buildings. This area likely a had civic-ceremonial function. Sector 6, with its human burials and many sacrificed llamas, also had strong ritual functions.
Interpretations of Sectors 1 Through 7

Sector 1 is located on the central summit of Cerro Cementerio. Trenches revealed a terraced plaza, likely dating to the latest phases of occupancy at the site. This sector was heavily disturbed by looters’ pits, as well as a modern-day cement and steel cross, erected as a monument to the encroaching modern Catholic cemetery below (Millaire and LaTorre Calvera 2003). The platform had at least three construction phases, and a small storage feature (almacen) was found with some domestic refuse inside (Millaire and LaTorre 2002).

Sector 2 is located at the base of Cerro Cementerio, and is comprised of three platforms on the northern periphery of the site (Millaire and LaTorre 2002). Parts of Sector 2 were heavily eroded, and were also subject to previous looting (Millaire 2010b:235). Eighty-three rooms were uncovered, constructed of a mixture of adobe bricks, mud, and some stone (Millaire and LaTorre 2002). A large portion of these rooms did not have traditional entrances, and are interpreted as being storage facilities (Millaire and LaTorre 2002). A ramp and possible plaza were excavated, as well as a large, 30 by 35 m building (Millaire and LaTorre Calvera 2003). Also notable was the presence of a thick, zig-zagged perimeter wall constructed on the northwest and eastern side of this sector (Millaire and LaTorre 2002).

Sector 3 comprises of the northwest area of the site. Thirteen rooms were mapped here (Millaire and LaTorre 2002), and archaeological investigation included surface collection and test pitting 1 by 1 m units to discover activities from the latest occupations (Millaire and LaTorre Calvera 2003). This sector is inferred to be a domestic area, based on the rustic quality of architecture, and domestic refuse consisting of textiles, utilitarian ceramics, manos, and hearths with organic remains (Millaire and LaTorre 2002). There was also evidence of copper metal working in this area (Millaire and LaTorre 2002).

Sector 4 is the western portion of Cerro Cementerio. The modern cemetery directly encroaches into this area. Five rooms were partially excavated, and two burials were found associated with this sector, as well as a looter’s pit (Millaire and LaTorre Calvera 2003). Some of these buildings likely served administrative functions, while others were residences of the local elites (Millaire 2010b:236).

Sector 5 includes the southwest segment of the site. Excavation consisted of 16 1 by 1 m test pits in conjunction with surface collection from the terminal occupations of the site (Millaire and LaTorre Calvera 2003).

Sector 6 encompasses the southern terrace of Cerro Cementerio, and is comprised of four distinct areas: the upper terrace, the eastern side of the upper terrace, the lower platform, and the southern extension. Excavations in Sector 6 yeilded the remains of 20 sacrificed juvenile llamas and 12 elite human burials (Millaire and LaTorre Calvera 2003). Often, rooms had restricted access, and some even had panoramic views of the valley (Millaire 2010b:237-238).

Sector 7 lies directly south of Sector 2, and to the east of Sector 1. A single structure was mapped, and 14 1 by 1 m test pits were excavated, along with surface collection (Millaire and LaTorre Calvera 2003).
Methods for the Analysis of the Huaca Santa Clara Archaeobotanical Data

The identification and quantification of archaeobotanical remains from the 2002 and 2003 seasons was carried out by collaborator Lic. Estuardo La Torre Calvera of the Instituto Nacional de Cultura. Hand-written records from the 2002 season were transferred to an SPSS document by Jean-François Millaire, and I added the 2003 data for analysis (Appendix B\(^3\)). Because of differing sampling strategies and data recording (an unknown number of units sampled, and volumes not recorded), ubiquity and standardized density cannot be used as a method of data analysis at Huaca Santa Clara. Only percent plant presence will be used to evaluate the use of peanuts at the site. This method of data transformation is not a reliable means of evaluating inter-site differences (Hastorf 1990), and direct comparison with units at Huaca Gallinazo is not possible. However, this measure does allow meaningful intra-site comparison of the relative importance of plant products like peanuts.

Analysis: Peanut Distribution at Huaca Santa Clara

Analysis of the data reveals that peanuts are found in low quantities (n=48) in all sectors of the site (Sector 1, n=6; Sector 2, n=20; Sector 3, n=2; Sector 4, n=4; Sector 6, n=5; Sector 7, n=8), except for Sector 5 (n=0), (Figure 18). Three peanut pod fragments were recovered from superficial layers with either no associated sector, or the sector was not recorded. Their presence in Sectors 1, 2, 6 and 7 is of most interest, occurring in higher frequencies and often in association with elite activities, and will be elaborated upon in greater detail.

Sector 1

Of the total number of peanut fragments at Huaca Santa Clara, 13.3 percent of them were recovered in Sector 1 (Figure 18). While this only amounts to a mere six fragments, it represents 8.1 percent of all the botanical remains recovered from this civic-ceremonial area (Figure 19), and is the second most abundant category of plant materials (tied with gourd, and second to maize at 68.9 percent of the recovered botanical remains). While it is unlikely that this area was used for food processing, or even much consumption for that matter, the presence of peanuts on the summit of Cerro Cementerio, amidst few other taxa in under-whelming quantities shows their association in civic-ceremonial contexts.

\(^3\) Counts presented in Appendix B have been separated by sector for comparison in this analysis.
In Sector 2, a single peanut pod fragment was recovered from the superficial layer. Peanut fragments were also found associated with fill in rooms A-30 (n=2), A-66 (n=12), and A-5 (n=2). Four peanut fragments were recovered from sealed contexts under floors, including beneath floor 5 in A-8 (n=1). Particularly noteworthy are A-5 and A-30, both of which had large tinajas set into the floor. Three
vessels were laid into the floor in A-5, and contained the remains of coprolites, wool, and other plant remains including maize and beans (Millaire and LaTorre 2002). While peanuts are found in the largest quantity at Huaca Santa Clara in Sector 2 (44.4 percent of the total peanut fragments recovered; Figure 18), and are associated with storage facilities, they only amount to 1.7 percent of the total botanical fragments recovered here (Figure 20). In comparison to the quantities of other domesticates in Sector 2, including maize cobs (n=440) and kernels (n=180) which comprise 52.0 percent of the botanical fragments, or avocado (n=65) 5.4 percent, gourd (n=63) 5.3 percent, and squash (peduncles n=60) 5.0 percent, they do not appear to have been a significant part of the redistribution economy at Huaca Santa Clara.

![Figure 20. Huaca Santa Clara, Sector 2 – Relative Plant Presence](image)

**Sector 6**

In Sector 6, four peanut pod fragments were recovered from the upper terrace. In A-97, a 1.7 by 3 m rubble-filled room, containing pottery, textiles, and other ecofacts, yielded a single peanut. The eastern wall of this room possessed niches. A single peanut was also recovered from the eastern side of the upper terrace. In addition, A-102, a 3.8 by 10.5 m room on the eastern side of Sector 6 yielded one peanut pod fragment. The western wall had a niche, and the room also contained pottery, textiles, and other ecofacts, as well as eight burials dating to the Early Intermediate Period. The room may have been roofed, but possibly open on the eastern side, overlooking the inner valley. The room was a “highly restricted area,” as
this gallery only had access from the south end of the room. Most of the burials associated with this room are interpreted as being important individuals, and most are wrapped in textile, and placed with gourd containers and agricultural produce (Millaire 2010b:239). The peanut was found in association with Burial 9, a woman who may have served as a retainer for Burial 7. The woman from Burial 9 was tattooed, approximately 20-35 years old, and had evidence of serious head trauma, likely resulting in her death. Burial 7 was a woman with extensive tattooing, also between the ages of 20-35, shrouded in multiple textiles, laid on her back, with her head oriented north. A cotton pouch was placed in her chest, and a gourd bowl to her right. In addition to her retainer, (Burial 9), she was also accompanied by a dog (Millaire 2010b:240).

Also in Sector 6, but on the lower platform (11 m downslope from the upper terrace), and south of the main buildings in the sector, two peanut pod fragments were recovered. One pod fragment was recovered from adobe rubble, and the other from below a sealed floor context (floor 1) in A-117, a 5.6 by 6.4 m room filled with debris, textiles, pottery, and other ecofacts.

Sector 7

Eight peanut pod fragments were recovered from Sector 7, primarily from test pits PC-2 (n=1), PC-5 (n=3), PC-7 (n=1), and another from an undocumented superficial context. Peanut pod fragments (n=2) were also recovered from A-98, a moderately sized 2.3 by 3 m room of loose fill, ceramics, textiles, and other ecofacts. These eight fragments represent 4.9 percent of the botanical remains from this sector (Figure 21), and although an unimpressive quantity, this is the second-largest distribution of peanuts at Huaca Santa Clara (Figure 18).
Figure 21. Huaca Santa Clara, Sector 7 – Relative Plant Presence

Summary of Findings

Analysis of archaeobotanical remains from the Virú polity sites Huaca Gallinazo and Huaca Santa Clara indicate that peanuts were not a staple food for commoners living at these sites. Instead, peanuts are associated with civic-ceremonial, elite, and burial activities.

At Huaca Gallinazo, peanuts were only recovered from excavations on the Southern Platform, the monumental civic-ceremonial centre, a finding similar to Dionne’s (2002) study at the nearby site of Huanacaco. At Huaca Gallinazo, peanuts were found in association with a ritually sacrificed child (Burial 3), as well as in elite kitchen contexts (rooms A-7 and A-8). The hearths and the array of foodstuffs found in these kitchens are similar in distribution to the elite feasting deposits reported by Swenson (2006) at San Ildefonso, Catalina, and Portachuelo de Charcape in the Jequetepeque Valley, however, we cannot yet be certain if rooms A-7 and A-8 were kitchens where competitive feasts were prepared. These rooms also had high numbers of gourd seeds, (n=26 for A-8, n=37 for A-7). Gourd seeds, which are removed in order to create the gourd serving plates, might also be indicative of the preparation of foods for feasting activities. However, until further excavation of the Southern Platform can establish a better baseline understanding of archaeobotanical distributions at the site, it is hard to make any definitive conclusions about room A-7 and A-8’s purpose.
At Huaca Santa Clara, peanuts were not particularly abundant. However, peanuts are associated with civic-ceremonial areas of the *huaca*, especially in Sector 1. Peanuts were also recovered in areas of ritual nature which only elites would have had access, in Sector 6. Also similar to Huaca Gallinazo, peanuts were found in Sector 6 in association with an elite burial, Burial 9. As peanuts store exceptionally well in cool and dry environments (Woodruff 1966:85), they would be especially well suited for the enclosed “honeycomb” storage pits excavated at Huaca Santa Clara. Based on this knowledge, we expect peanuts to have been a choice crop in valley-wide production systems; however, this is does not parallel the findings at this site. Peanuts were present in storage facilities in Sectors 2 and 3 at Huaca Santa Clara, but their frequency is quite low relative to staple crops like maize, beans, and avocados. As these storage facilities likely acted as warehouses for crops exacted as tribute, overseen by the administrative elites residing at the site, the low frequency of peanuts indicate that they were not a large part of the redistribution economy in the Virú Valley.
DISCUSSION AND CONCLUSION: PEANUTS AND POWER

Peanuts and Power on the Peruvian North Coast

The act of consuming peanuts, or any food for that matter, is a ritual act in itself (Douglas 1999). Even the most mundane mealtimes are patterned and highly structured acts, and governed by social institutions, framing, in this case, whom, when, and how people may eat peanuts. Meals also do not occur in a vacuum (Douglas 1999:232), and the consumption of peanuts, whether a small meal enjoyed by a family, part of a feast hosted by local elites, or a sacrificial meal left for a deceased individual, must be evaluated separately, each within its own context. It is human nature to project categories onto every part of our lives, and food choices are no different; these are based on how appropriate we think they are for our consumption, as well as when and where we should consume them (Douglas 1999:241). Indeed, peanuts have various enriched meanings depending on their context. While peanuts represent sustenance and nourishment in a simple meal, they represent great wealth, power, and domination over the landscape and surrounding communities when they are present in lavish competitive feasts hosted by local elites. They are also representations of power during life, and a symbol of respect when they are placed in the burial of a lord. Similarly, when depicted on a fine vessel, the symbolic expression (power, wealth, life, or death) serves to situate these hidden meanings.

High and low class foods are an internalisation of class divisions, and create a hierarchy of taste preferences, or “superiority of tastes,” that serves to reify status difference (Bourdieu 1984). The use of peanuts among elites in coastal Peru is a clear example of such a status distinction. In Bourdieu’s terms “the habitus,” a structure, is defined as internalized dispositions and perceptions (categorized), which generate both practice and meaning (Bourdieu 1984:7). Elites used peanuts, among other foods, to reinforce the class differences between themselves and commoners. In order to effectively create this difference, the elite must have purposely selected goods that were difficult for lower class individuals to obtain (Bourdieu 1984:192). In the case of incipient and established complex societies in the Early Intermediate Period on the North Coast of Peru, this was a simple task since they controlled the land on which such crops were produced. They also controlled the distribution of the agricultural products, as seen at administrative centres like Huaca Santa Clara.

Food distinction is also a product of surplus, personal wealth, and the sheer ability for conspicuous consumption (Goody 1982:152), as well as control over the labour force (Goody 1982:156). It may even be the case that the elites purposely manipulated distinction-creating foods, like peanuts, through imagery on ceremonial vessels, not only to broadcast these notions of distinction to commoners, but also to reify the “pleasure of distinction” for the elites themselves (Goody 1982:98). While the elite strove to express their status distinction to the non-elite, they also had to express more subtle within-class distinctions (Mintz 1985:13). Mintz (1985:95) suggests that elaborate meals prepared for guests are a deliberate force-feeding of symbolic meaning to guests, as they would have no choice but to acknowledge
the display of status and wealth. Peanuts, used in ritual feasts and burial activities, may have acted as a means to define status differences between elites and commoners and to reify distinction within the elite circles.

**Potential Under-Representation at Sites**

Many large studies, such as Donnan and Mackey’s (1978) analysis of burial patterns in the Moche Valley, spanning from the Preclassic Period to the Chimú and Colonial Periods conclude that plant remains are uncommon in the majority of burials. Many of these burials are poorly preserved, and were subjected to intensive looting in previous decades. In many burials in Donnan and Mackey’s (1978) study, when botanical remains were encountered, they were seldom identified. Often, when gourd bowls were found in burials, suggesting food offerings, they were badly decayed, so it is unlikely that their perishable contents would have preserved (Donnan and Mackey 1978:192). Peanuts, along with other high status foods used in mortuary offerings are likely to be under-represented in the archaeological record due to poor preservation, looting, as well as lack-of interest in reporting them.

Many other post-depositional factors may influence the presence or absence of peanuts, along with other plant foods in domestic contexts. Peanuts may be under-represented in the archaeological record in the North Coast because domesticated animals living in residential areas of sites, like dogs, guinea pigs, and ducks would have consumed much of the food waste left by inhabitants (Shimada 1994:181). In addition, garbage was also commonly used in construction fill (although it typically remains contained within sectors), as well as burned (Shimada 1994:181).

**Lack of Peanut Consumption in Ethnographic Accounts**

Garcilaso de la Vega (1966) wrote that peanuts were not a common ‘staple’ food consumed by the indigenous population at the time of Spanish colonisation. Based on ethnographic materials from the last century, it appears that this trend continued from the 1600s into the twentieth century in Peru. An ethnography of Mocheros (the indigenous population living outside Trujillo in the Moche Valley) conducted in the early 1940s by Gillin described in great detail their small-scale irrigation agriculture and use of medicinal plants. While Gillin (1945:15) notes obvious evidence of Spanish acculturation (like the use of oxen plowing, the use of livestock droppings as manure, and the cultivation of many old-world crops), he stresses that for the most part their subsistence economy is rooted deeply in time. The Mocheros lived on small farms, and cultivated primarily alfalfa, sorghum, maize, lentils, beans, and yucca, and fruit trees line their fields. Some Mocheros also cultivate a small amount of peanuts; the only large-scale producer of peanuts that Gillin (1945) encountered was that of a nearby Forastero (“outside settlers”) who was growing peanuts for commercial purposes. Peanuts also did not appear to be consumed frequently during his study. A large dietary survey he conducted shows that only 3.2 percent of breakfasts reported contained any amount of peanuts, and only 0.4 percent of evening meals (Gillin 1945:59). No mid-day
meals included peanuts. Further, even though Gillin (1945:46) reported that *chicha*, most often known as a maize beer, was a rather loose term for “rustic drink,” that could even be produced from peanuts, he did not witness any *chicha* being produced or consumed that was not made from maize (Gillin 1945:53). Peanuts were also not involved in any medicinal practice that Gillin (1945) witnessed, nor did he note knowing of any healing properties.

During the course of my research, I have not found a single account, ethnohistoric or ethnographic, of indigenous Quechua or Inca peoples (coastal or highland) suggesting that peanuts were a significant part of the diet. Garcilaso de la Vega (1966:501) blatantly states that peanuts were a not a staple crop eaten by commoners; rather, they were often collected by the poor and presented to the rich. Peanuts may be lacking in these reports simply because they were not traditionally consumed in any notable quantity by the general populous. Perhaps this is evidence of a dietary exclusion, rooted in deep time.

**Why the Lack of Peanuts?**

Based on the nutritional characteristics of peanuts: their high fat and protein content, a good source of vitamins like niacin, and minerals such as copper and chromium (Estrella 1990; Savage and Keenan 1994; Woodroof 1966), and paired with their semi-perishable, long-term storage capacity, we would expect peanuts to be a good choice of crop for farmers, and food for commoners. Analysis of archaeobotanical data from Virú polity sites like Huaca Gallinazo and Huaca Santa Clara in this research clearly does not provide evidence for this supposition. A potentially fruitful avenue for future research, although outside the scope of this thesis, would be the analysis of peanut protein versus the protein acquired from fish and domesticated animal sources. It could be the case that up until Moche times, fish were so plentiful that they easily supplied the protein needs of North Coast inhabitants. However, during the shift from marine resources to domesticated llama and guinea pig as the primary protein sources by the Middle Horizon (which Pozorski [1979] thinks may have been the result of over-exploitation of the marine resources), peanuts again were overlooked as a suitable staple food (Pozorski 1982a). Perhaps the symbolic value of peanuts in the ideological world-views of the North Coast inhabitants outweighed their health benefits and potential for storage, instead garnering them a prestige good to be used by elites to create and reify distinction.

**Observations and Conclusions**

This thesis has documented the peanut’s luxury association in pre-Hispanic Peru from the Initial Period until well after the Spanish Conquest. Peanuts possess many symbolic, medicinal, and nutritive properties that render them a specialty good, and they perhaps had a luxury association even during their domestication process (Dillehay et al. 2007). Peanuts may have been highly valued for their high fat and protein content, rendering them an extremely calorie dense food (Woodroof 1966). They also contain many important vitamins and minerals, particularly niacin, copper, and chromium (Savage and Keenan
They have a wide range of medicinal properties: from aphrodisiac to soporific, and system-cleaners, and even known for curing jaundice, alopecia, scurvy and pellagra (Cobo 1890; Estrella 1990). Their potential for long-term storage (Woodroof 1966) would also have been advantageous for aggrandizers or elite social groups who were accumulating surplus foods for feasts. Based on their presence on a wide variety of Moche ritual vessels, peanuts were an important crop in North Coast ideology, and carried connotations of death and agricultural fertility (Bourget 1996; Jackson 2008).

Botanical analysis of the Virú polity sites Huaca Gallinazo and Huaca Santa Clara has shown a differential spatial distribution of peanuts, associated with civic-ceremonial architecture, ritual burials, and possible elite contexts. At Huaca Santa Clara, peanuts were part of the large array of crops controlled by administrative elites, however, their small quantity leads me to conclude that they were not a major part of the redistribution economy. At Huaca Gallinazo, peanuts were completely absent from domestic areas of the site. These findings are similar to other sites on the North Coast, where peanuts are found in association with elite feasting activities, and veneration of the dead.

Peanuts have been linked to civic-ceremonial activities at sites dated as early as the Initial Period, such as Pampas de las Llamas-Moxeke (Pozorski and Pozorski 1995). Peanuts are also often associated with monumental architecture, as noted at the Early Intermediate Period site of Huancaco (Dionne 2002). Their presence in feasting middens at San Ildefonso, Catalina, and Portachuelo de Charcape in the Jequetepeque Valley is further evidence of their prestige status (Swenson 2006). Peanuts are often present on Moche ritual vessels, and even in fineline depictions of the deity Wrinkle Face (Donnan 2008; Uceda 2008; Quilter 2010). They were also among the mass-produced ceramic pendants from Cerro Mayal (Bernier 2010; Jackson 2008) likely used for personal adornment, and found on a Nasca unkūu depicting a fertility ceremony (O’Neale and Whitaker 1947). The continuation of peanut iconography on elaborate ceramics into Chimú times, as well as ethnohistoric accounts of peanuts as an Incan luxury item in the sixteenth century (Garciilaso de la Vega 1966), and their inclusion in offerings to Viracocha (Rowe 1946) may also prove that the peanut’s luxury distinction continued until well into the Colonial era.

Peanuts are one of the few North Coast plants commonly included as offerings for the dead. They have been found as offerings in elite Moche burials at Pacatnamu (Gumerman 1994, 1997b), and metallic representations have been uncovered in extravagant graves: an exquisite gold and silver peanut necklace adorned El Señor de Sipan (Alva 2001) and a cut metal sheet worked into a depiction of a parrot carrying a peanut in its clutches was uncovered in a burial repository at Huaca de la Luna (Uceda 2008). Peanuts have also been found in association with other burials in the Virú Valley, like at Castillo Tomaval (Towle 1952b; Strong and Evans 1952), Huaca de la Cruz (Towle 1961), and Puerto Moorin (Strong and Evans 1952). They have, however, also been found in a high status burial in the Acarí Valley (Valdez 2005), a mummy bundle in Paracas (Towle 1952a), and with sacrificial trophy heads at Chaviña (Verano 1991), all on the South Coast of Peru. Thus, the peanuts’ prestige association extends across the Andes. Future archaeobotanical investigators should note differences in distribution of peanuts within sites, especially in...
a wide range of contexts, in order to further our understanding of peanuts’ luxury status. There is much more work to be done on peanuts on the North Coast of Peru, including directly dating peanuts in order to secure the chronology of their use in the past. In addition, they are likely far more widespread in the archaeological record than is represented in the literature. However, since peanuts were an important part of pre-Hispanic North Coastal ideological and political systems, they can no longer be overlooked, nor fall by the wayside in analysis over more traditionally favoured plants such as maize, beans, and tubers.
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Towle, Margaret A.

Uceda, Santiago

Valdez, Lidio M

Veblen, Thorstein

Verano, John W.

Willey, Gordon R.

Woodroof, Jasper Guy
APPENDICES

Appendix A. Plant Counts from Huaca Gallinazo (V-59) from the Southern Platform versus Architectural Compound 2.

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Appendix B. Plant Counts from Huaca Santa Clara (V-67) by Sector.

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