Conjoined Lucuma Fruit Vessels: Evolution & Context in Nasca Art

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CONJOINED LUCUMA FRUIT VESSELS:
EVOLUTION & CONTEXT IN NASCA ART

A thesis submitted in partial fulfillment of the requirements for the degree of Master of
Art History at Virginia Commonwealth University

By

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I would like to sincerely thank all those who have helped me throughout my graduate studies and completing this thesis.

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The function of a ceramic vessel is often evaluated in relation to its form. Vessels with complex forms can be challenging to analyze from this perspective and require a different approach. One such example is an overlooked yet long-lived specialized vessel type in the form of conjoined lúcuma fruits found throughout the ancient Andes. The main object of this study is a Nasca version of this vessel type in the Virginia Museum of Fine Art. This study explores the relationship between form and iconography, rather than function. It examines how Nasca potters adopted the conjoined lúcuma form vessel and adapted it to into their fertility iconography.
INTRODUCTION

A striking Precolombian vessel type composed of multiple, conjoined three-dimensional representations of an Andean fruit known as the *lúcuma*, has been recovered from both a large geographic area and an impressive time span across the Andean region. This thesis examines the distinct form of one example of this vessel type attributed to Nasca\(^1\) potters at the Virginia Museum of Fine Arts (VMFA) and referred to here as the VMFA Lúcuma Bottle, cat. #84.99 (Figure 1) and analyzes how it communicates Nasca fertility beliefs. This study is organized into three parts. The first part provides an in-depth description of the VMFA Lúcuma Bottle and the context of its creation. The second part traces the formal development of this vessel form, focusing on the importance of its adoption into the Nasca artistic repertoire. The third part looks at how this form became associated with Nasca fertility iconography.

1.1 Previous Scholarship

The motivation for this study arose not from an interest in a broad theoretical or methodological question. It is not an attempt to describe an entire cultural system or define its artistic canon. Instead it came from an interest in the details, minutiae, and the desire to understand a single object. The VMFA Lúcuma Bottle has not been the

\(^1\) Although both spellings of ‘Nasca’ and ‘Nazca’ are correct, I use the ‘Nasca’ spelling, as it seems to be the term used more commonly in recent scholarship.
subject of any scholarly literature. While this is not surprising, many items in museums have not been the exclusive subject of research or publication, it is surprising that the vessel type itself has not been the subject of any in-depth research.

Only two published accounts exist of vessels that match the same four-fruit form of the VMFA Lúcuma Bottle. One is in Justo Caceres Macedo’s Ceramics of the Prehispanic Peru, in which a vessel is illustrated but not addressed within the text (Fig 2).2 The second appears in Yumi Park’s catalog, Mirrors in Clay: Reflections of Ancient Andean Life in Ceramics, for the 2012 exhibition at the Mississippi Museum of Art and is of Moche origins (Fig 3).3 Here the vessel is accompanied by a short descriptive paragraph. A variation of this vessel type, composed of only two lúcuma fruits joined side-by-side instead of four in a ring, appears in the Blanton Blog, by the Blanton Museum of Art, Austin, Texas.4 Lúcuma shaped vessels are briefly discussed in Nasca specialist Donald Proulx’s indispensable text: A Sourcebook of Nasca Iconography, though only to acknowledge their existence in Nasca art.5

The form is complex and eye-catching. Its appearance is not common enough to be mundane, nor rare enough to be unfavorable for study. In the collection of the Museo Larco in Lima, Peru, alone there are 101 vessels in the shape of lúcuma fruits.

2 Justo Cáceres Macedo, Ceramics of the Prehispanic Peru (Austin: University of Texas Press, 2005) 218.
5 Donald A. Proulx, A Sourcebook of Nasca Iconography: Reading a Culture through its Art (Iowa City: University of Iowa Press, 2006), 171.
Fifty-six of these are ‘conjoined,’ being composed of two or more fruits. Of these, forty have the same composition as the VMFA Lúcuma Bottle, four fruits arranged in a ring. Proulx references access to a sample of ten lúcuma shaped ceramics in his 2006 sourcebook. These numbers indicate that the vessel type has been passed over in scholarly research for reasons other than having an insufficient sample size. The idea that the vessel type has been ignored because it was considered inconsequential by ancient Peruvians and modern scholars is not supported by the surviving number of vessels encountered in this study. The technical skill required to create a vessel with such a complex form, and the longevity of its existence suggests the opposite—that conjoined lúcuma fruit vessels held an important role in the ancient Andes.

1.2 Problems with an Anthropological Approach

Rather, this lack of scholarly focus is likely a result of the way ancient Andean ceramics have traditionally been interpreted. The field of archaeology has traditionally dominated the study of the Ancient Andes. As such, most of the literature regarding ancient Andean objects is written from an anthropological perspective. Notable exceptions include works by George Kubler and Rebecca Stone-Miller, but these

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6 These numbers were collected by the author during researching the Museo Larco’s online catalog. See appendix.
7 Although ‘Bridge-spout Vessel’ or ‘Double-spout Vessel’ may be more accurate descriptions of this formally complex ceramic than ‘Bottle,’ I will be calling the subject of this thesis a ‘Bottle,’ for simplification and to avoid confusion from repetitive terminology. ‘Bottle’ is also a reference to the VMFA’s official label of the object as ‘Bottle in the Form of Four Fruits.’
8 Proulx, A Sourcebook of Nasca Iconography, 171.
constitute a minority of the overall scholarship on Andean ceramics. While the anthropological scholarship is invaluable for understanding the cultures that produced ancient ceramics, it tends to limit the study of the ceramics themselves. Ceramics tend to be analyzed in two ways from an anthropological perspective: chronology and function.

The study of ceramics in the Andes has been intimately tied to a chronological framework since the beginning of scholarly interest in the area’s history. The earliest ceramic seriations were created by Max Uhle, a German archaeologist considered the father of Peruvian archaeology. Refined and further developed by later researchers these form the basis of Andean archaeology. The system of seriation places items in chronological order based on the assumption that the popularity of any artifact peaks at a certain time. The different occupation levels of an archaeological site hold different proportions of ceramic characteristics. Archaeologists may choose to characterize ceramics based on iconography, as in Christopher B. Donnan’s *Moche Art and Iconography*, or by form as in Richard Paul Roark’s *From Monumental to Proliferous in Nasca Pottery*, painting style, or a combination of these elements. John Rowe and Alfred Kroeber refined different phases within the Nasca culture based on a combination

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10 The first ceramic seriations Max Uhle constructed differentiated between Inca and Tiahuanaco styles; however his most thorough and complete sequences are based on the archaeology of the Ica Valley. Dorothy Menzel, *The Archaeology of Ancient Peru and the Work of Max Uhle* (Berkley: University of California, 1977) 1.

11 Rowe filled in many of the gaps of Uhle’s chronology in the Ica and Nasca Valleys with data collected from field work between 1954-1969 and is credited with creating what is known as the master sequence for Andean archaeology. Menzel, *The Archaeology of Ancient Peru*, 2.
of iconography and the painting style of Nasca ceramics.\(^\text{12}\) When the proportions of the selected characteristics are plotted it is possible to draft sequences detailing the rise and fall of ceramic types over time. Seriation can then be extended beyond the comparison of occupation levels to comparison among different archaeological sites, allowing the sites to be placed into a relative chronology.\(^\text{13}\)

The second way ceramics tend to be analyzed from an anthropological perspective is by their function. This puts the VMFA Lúcuma Bottle in a peculiar position. Although it is labeled to as a “bottle” the narrow shape of the spouts would make it difficult and impractical to fill with anything, even liquids. Thus it is clearly not a storage vessel like a jar or olla. It is not a serving object such as a goblet, pitcher, or platter. Nor is it a cooking implement such as a grinding metate or pot. The lack of a mechanism within either spout removes the possibility that it is a musical whistling pot. Mark Sutton, professor of archaeology at California State University, warns that although it is tempting for archaeologists to classify an object without an easily discernable function as a ritual object, they should be cautious to do so.\(^\text{14}\) This is especially true with an object like the VMFA Lúcuma Bottle, which has not been tied to any ritual behaviors unlike incense burners or scrying mirrors.

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1.3 An Art History Approach

Thus this study looks at the VMFA Lúcuma Bottle from an Art History perspective. Instead of studying the connection of form to chronology or function, I will investigate the relationship between form and iconography. Formal analysis and Iconography are two of the most fundamental methods used in Art History to understand works of art. Formal analysis prioritizes the scrutiny of the physical and visual qualities (composition, material, construction, shape, texture, color, etc.) of an artwork over more abstract and conceptual qualities. While formal analysis cannot be completely divorced from contextual analysis, it is unique in that it is one of the few methods where the object itself provides answers, instead of needing to look outside for answers. Formal analysis will be most helpful here comparing the VMFA Lúcuma Bottle with other conjoined lúcuma vessels. Compiling data on the formal attributes of a large selection of modeled lúcuma fruit ceramics such as the number of conjoined fruits, their orientation, spout shape, and surface treatment, and plotting their frequency over time and setting will allow one to trace the evolution of lúcuma vessels (For an example of a ceramic seriation see Fig. 4). Ultimately this will help identify which characteristics are recurring and which are unique Nasca adaptations.

The iconographic method is a natural partner for formal analysis. Erwin Panofsky, art historian and one of the pioneering proponents of iconographic interpretation, stated that: “in a work of art, ‘form’ cannot be divorced from ‘content’: the

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distribution of colour and lines, light and shade, volumes and planes, however
delightful as a visual spectacle, must also be understood as carrying a more-than-visual
meaning." Iconography allows art historians to reason the meanings expressed
through formal aspects of a work. At its most basic level, iconography is the
identification of motifs in a work of art, in this case the lúcuma fruit. Once the motifs
have been identified, iconography sets out to interpret why the motif is important, and
the symbolic meanings lie behind it. 

In addition to these methods, this thesis will take into account the theory of
appropriation. Appropriation, according to the definition set by Robert Nelson in Critical
Terms for Art History, refers to the deliberate adoption of elements from an existing
artwork and its application to another. Although it still expresses the idea of
transmission of artistic elements across time and space, it gives greater agency to the
artist than the vague notion of ‘influence.’ The artist who created the VMFA Lúcuma
Bottle was aware of precedent forms and acknowledges them. They consciously chose
which original elements to retain and which to alter. Nelson describes the process as a
distortion, not a negation of a precedent. In this way, new ideas and meanings can be
purposely attached to re-imagined versions of long-lived forms.

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18 D’Alleva, Methods and Theories of Art History, 20-22.
THE VMFA LUCUMA BOTTLE CONTEXT

2.1 Current Context

The VMFA Lúcuma Bottle was given to the museum in 1984 by Mr. and Mrs. Sandford Garland Etherington Jr. Sandford G. Etherington Jr., was a second-generation Princeton alumnus, WWII veteran, a successful business manager, and travel enthusiast— a trait he seemed to have inherited from his father, who is rumored to have frequently traveled to Latin America where he had mining interests. Undoubtedly the family amassed their collection during such expeditions. From 1979 until 1984, Mr. and Mrs. Etherington graciously gave the VMFA a total of 87 Peruvian objects.

Unfortunately, beyond this there is no actual provenance for the piece—no information concerning where it was originally unearthed and in what context. The information provided by the object label is meager. It provides the dimensions,

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estimated time of creation and use, and a cultural attribution. The VMFA Lúcuma Bottle is described as being made in the Nasca style sometime during the 5th Century.

2.2 Nasca Style

The Nasca style is a ceramic style identified by Max Uhle during an 1901 excavation of a necropolis in the Ica Valley of southern Peru. Uhle was inspired to begin excavating in the Ica Valley after noticing four ceramic specimens in the Berlin Museum für Völkerkunde. The ceramic objects were unlike any others he had seen and impressed him with their beauty and technical sophistication. After studying the pottery recovered from the Ica Valley in coastal southern Peru, Uhle decreed the high-quality polychrome ceramics were part of a distinct regional style. He based this conclusion on the presence of certain traits: a wide polychrome range, division of space into registers to present designs with the greatest visual impact, symmetry in design layout, black slip outlines, and kenning. “Kenning” is a term developed by John Rowe while researching Chavin ceramics. It refers to the substitution of one element for another, such as the replacement of hair with snakes. Kenning allows for manifold meanings to be read into a single motif. Uhle dubbed this ceramic style and the civilization that produced it “Nasca” after the river valley he believed served as the cultural center.

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24 Ibid., 3.
Although dates for the Nasca civilization vary according to different sources, most time spans fall between c. 100 BCE to 700 CE. It is generally accepted the Nasca civilization descends from the Paracas culture, which inhabited the region from approximately 700 BCE to 1 CE.27 The two cultures probably shared a religion, subsistence methods, and certain artistic motifs, making the moment of transition from Paracas to Nasca difficult to place. The best evidence of a cultural shift lies in the abrupt change of pottery production methods. Paracas pottery was decorated with postfired resin paints. Because the paint was applied after firing it remained bright in color but easily flaked off the ceramic surface. Nasca ceramics were painted with a clay slip prior to firing. During firing the minerals in the slip fuse to the surface of the clay body becoming part of the vessel and will not flake or wash off.28

2.3 The Nasca Civilization

The Nasca civilization was roughly contemporary with the Moche and Recuay civilizations. Unlike some of their contemporaries, the Nasca did not have a centralized government. Instead, they were composed of loosely knit, independently ruled chiefdoms with a common culture and religion.29 The religious center of Nazca was a site called Cahuachi in the lower Nasca valley. A network of secondary religious centers such as La Ventilla, Los Molinos, and Montegrande extended from Cahuachi.

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28 Proulx, A Sourcebook of Nasca Iconography, 14.
This network helped maintain a homogenous cultural ideology and iconography throughout Nasca territory.\textsuperscript{30}

Nasca influence spanned from the Canete Valley in the north to the Camaná and Sihuas valleys in the south, and as far east as the Ayacucho Valley (Map).\textsuperscript{31} It included several different ecological regions: the coast, middle valley region, and highlands. Remains of maritime mammals, fish, shellfish, llamas, and alpacas found in Nasca sites in addition to their popularity as motifs in Nasca art, indicate that the coast and highlands were exploited heavily for their resources.\textsuperscript{32} Strangely, few settlements have been found in these areas, suggesting that the Nasca traveled to them specifically to obtain resources and bring them back to the middle valley region. The middle valley region was the most densely populated area of Nasca habitation and the primary agricultural zone.\textsuperscript{33} The Nasca people subsisted on a variety of crops including maize, manioc, sweet potatoes, and various squash and beans.\textsuperscript{34} Due to the extreme aridity of the environment, agriculture relied on irrigation systems fed by seasonal flooding of rivers and scattered wells and springs.\textsuperscript{35} Access to diverse resources from different ecological zones allowed the Nasca to sustain a robust population and healthy economy, contributing to the development of the Nasca into a robust major culture of the Andes.\textsuperscript{36}

\textsuperscript{30} Isla, “The Nasca Culture,” 62.
\textsuperscript{31} Proulx, A Sourcebook of Nasca Iconography, 1.
\textsuperscript{32} Ibid., 4.
\textsuperscript{33} Ibid., 1-2.
\textsuperscript{34} Ibid., 4.
\textsuperscript{35} Ibid., 1.
\textsuperscript{36} Isla, “The Nasca Culture,” 59.
2.3 Nasca Ceramic Production

The environment played an important role in the development of the Nasca ceramic tradition. Dean E. Arnold, an authority in ceramic ethnoarchaeology, studies the relationship between environment and the development of ceramic production in the Andes. He proposes that the Nasca Valley is a prime location in that it provides the diverse resources needed in ceramic production, especially the production of a vivid polychrome tradition. The wind-blasted region is especially susceptible to erosion. Erosion is beneficial to ceramic production because it exposes many materials necessary for clays, tempers, and paints.\(^\text{37}\) In particular, erosion exposes a wide array of minerals needed for slip pigments. Access to plentiful mineral sources is likely responsible for the impressive polychromatic range characteristic of Nasca ceramics.

The seasonal atmospheric patterns of the Nasca Valley are also excellent for ceramic production. Highland regions are cold and humid, conditions not conducive to the manufacture of ceramics.\(^\text{38}\) Likewise, most of the central Andes experiences seasonal wet and dry periods. In these areas ceramic production is necessarily limited to the dry season. Although appropriate for ceramic production, much of the dry season must be dedicated to agricultural activities, further restricting when ceramic production can take place.\(^\text{39}\) The Nasca Valley, however, boasts a climate perfectly suited to year round ceramic manufacture. Agriculture in the Nasca Valley relies on seasonal flooding

of the river, not rain. The constant aridity of the atmosphere makes year-round production of ceramics possible without the use of “extensive drying sheds and complex kilns, which would protect the fragile moisture sensitive vessels during the pot-making process,” while the high winds help maintain temperatures hot enough during firing for higher quality ceramics.

Year-round production thus allowed for groups of specialized artisans to perfect the technical process of production resulting in the high-quality ceramics associated with Nasca culture. Kevin Vaughn believes that Nasca potters were viewed as more than mere craftsmen. He posits that polychrome pottery adorned with religious Nasca images was considered sacred, and that the manufacture of these pieces must likewise have been sacred and ritualistic. The artisans who produced such objects were therefore technically ritual practitioners. This theory is supported by archaeological excavation. No evidence has been found for household production of polychromes in residential sites. Yet there is evidence of polychrome production at large important ceremonial sites such as Cahuachi. The paste and pigment composition of polychromes throughout the Nasca realm are surprisingly homogenous, indicating that although widely dispersed, they were created within a specific restricted zone.

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42 Ibid., 170.
43 Ibid., 169.
FORMAL ANALYSIS

3.1 Painting

The most prominent characteristic of Nasca ceramics is their polychrome decoration.\textsuperscript{44} Nasca potters developed the largest palette not just in the Andes, but in the Americas.\textsuperscript{45} While most Pre-Columbian ceramic traditions were restricted to a mere handful of colors, Nasca potters developed slip paints in shades of black, white, purple, red, orange, yellow, gray, brown, pink, and even light blue.\textsuperscript{46} Typically this wide range of colors was exhibited in intricate geometric and abstracted paintings of natural and supernatural subjects.

By Nasca terms, the palette of the VMFA Lúcuma Bottle is very conservative. It is slip-painted in only three colors: red, white, and black. In 2011, the Istituto Nazionale di Fisica Nucleare conducted an analysis of the slip-paints on a sample of ceramics from the ceremonial center of Cahuachi. Using PIXE-alpha (Particle Induced X-ray Emission) and X-ray defraction researchers discovered the chemical compositions and

\textsuperscript{44}Proulx, \textit{A Sourcebook of Nasca Ceramic Iconography}, 16.
\textsuperscript{45}Rebecca Stone-Miller, \textit{Art of the Andes: From Chavin to Inca} (Thames & Hudson: London, 1995), 68.
\textsuperscript{46}Proulx, \textit{A Sourcebook of Nasca Ceramic Iconography}, 16.
mineralogy of popular slip pigments used in Nasca ceramics.\textsuperscript{47} White pigment is achieved by using calcite mixed with opaque clays. Red comes from red ochre rich in iron oxides. Black pigments consist of manganese and iron, which require low oxygen levels to turn dark. Archaeological excavations confirm that hematite, the main mineral component of both red and black pigments, was actively mined from sites like Mina Primavera in the Ingenio Valley of the Nasca Region during the Early Nasca Period.\textsuperscript{48}

Unlike most polychrome Nasca ceramics the slip-painted decoration is not the primary focus of the VMFA Lúcuma Bottle. Here, slip-painting is used for a very different purpose: to spotlight its three-dimensional form. The artist cleverly alternates the bodies of the lúcuma fruits between red and black and carefully delineates them with thin white lines. Although it seems a simple decision, this decision highlights the individual body of each fruit and thus brings attention to the complexity of the form—individual bodies united into a whole. This method is echoed in the slip-painting of the calyxes. The artist paints the stem and star-shaped calyxes of the fruits in contrast with the body, and neatly outlines them in white. Again, this emphasizes the ceramic's three-dimensionality, in this case the detail of stems protruding from the round tops of the fruit.


3.2 Form

The form of the VMFA Lúcuma Bottle is of particular interest because it is atypical of the Nasca style. Because slip-painting was the primary form of ceramic decoration, Nasca potters preferred ceramic forms that allowed them to best exhibit their polychrome paintings. They gravitated towards vessel shape with generous expanses of smooth clay. The clay served as a canvas on which elaborate designs could be brushed upon (Fig. 5, Fig. 6). When Nasca potters did model the clay surface, it tended to be subtle, just enough to suggest a general shape. For example on a Nasca jar representing a human figure, the only three-dimensional modeling is a slight protuberance for the nose, and the flare of the vessel beneath the neck approximates shoulders (Fig. 7).

The VMFA Lúcuma Bottle, however, takes advantage of three-dimensionality in a very different way. The VMFA Lúcuma Bottle is far more three-dimensional than typical Nasca vessels. It is composed of four lúcuma fruit shaped chambers rendered in full three-dimensionality. They naturalistically mimic the real fruit, rounded at the top and sloping to points at the end. The four fruits are oriented point-down, balanced on the tips, and fused at the sides so that they form a true ring with an empty space in the center. Spanning the empty middle is a bridge-spout handle. A slender spout rises from the red lúcumas across from each other and is joined by a solid horizontal clay strap. The vessel measures 5.25 x 7.5 x 7.5 inches.
3.3 Construction

The sculptural nature of the VMFA Lúcuma Bottle is more in tune with ceramic vessels produced by the contemporary the Moche civilization. However, there is a great difference in construction methods used by Moche potters and Nasca potters. Unlike the Moche, who made extensive use of molds to create elaborate ceramic forms, there is no evidence that Nasca potters ever used molds. In 1986, a study using several types of X-ray analysis found that most Nasca vessels are constructed with a combination of coiling and drawing. Drawing, the process of pinching and stretching the clay upwards can be used to create small vessels devoid of seams. However, it is also commonly used to form a vessel’s base, which is then continued with coiling.

Additional techniques identified by the X-ray analysis include direct shaping and paddling. Direct shaping is similar to drawing but less consistent and regular. Paddling is used to thin clay walls, shape, and join seams.

Since the VMFA Lúcuma Bottle has not been subjected to testing, its exact method of construction remains a mystery. The potter was partially aided by the materials they worked with. Nasca clay is especially well-suited for shaping. It generally has minimal temper inclusions of small-particle sand and mica, resulting in a

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50 Proulx, A Sourcebook of Nasca Ceramic Iconography, 14.
52 Ibid., 35.
fine paste with good plasticity. Whatever methods used, the artist who created the VMFA Lúcuma Bottle was especially skilled to create the complex vessel with them. In fact, the potter seems to have gone out of their way to construct the VMFA Lúcuma Bottle in a fashion more difficult than strictly necessary.

A similar Nasca lúcuma vessel in the collection of the Museo Larco (Fig. 8) has had one of the fruits broken off. The break in the Museo Larco vessel reveals that all four of the fruits in the conjoined ring are in fact hollow. They are not merely four individually enclosed hollow globes bonded together, they were somehow seamed together so that they share hollow space – air can circulate freely through all four chambers. Another level of difficulty appears in the orientation of the fruits of the VMFA Lúcuma Bottle. The potter decided to balance the fruits on their conical tips, instead of on their sides (Fig. 8.1, Fig 8.2) as found in other versions. Taking it further, the artist tilted the fruits so that their tops lean out slightly instead of at a 90-degree angle.

The dedication to crafting a quality object, often employing exhaustively tedious and difficult methods to do so, seems to be a trait of Nasca artists in general, not just potters. This tendency speaks of a reverence for the creative process itself which Vaughn attributes to polychrome production as “ritual craft production.” Another option, that is not mutually exclusive, is that the choice to execute more difficult techniques is a mark of respect to the ancient lineage of the lúcuma vessel type.

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FORM LINEAGE

4.1 Origins

Tracing a lineage of lúcuma form patterns is a difficult task. It is greatly hampered by the uneven distribution of lúcuma vessels over time. The sample this paper references consists primarily of lúcuma form vessels from the Museo Larco collection, with additions of vessels from the VMFA, Sam Olden Collection, the University of Texas at Austin, the Brooklyn Museum, and the Regional Museum of Ica. Based on a review of vessels from these collections a working chronology for the lúcuma vessel shape can be constructed. Period names and time spans are based on those used by the Museo Larco, to which the majority of the vessels reviewed belong.

- Early Horizon (c. 800 BCE – 200 BCE): 7 lúcuma form vessels
- Early Intermediate (c. 200 BCE – 600 CE): 15 lúcuma form vessels
- Middle Horizon (c. 600 CE – 1000 CE): 15 lúcuma form vessels
- Late Intermediate (c. 1000 CE – 1476 CE): 45 lúcuma form vessels
- Late Horizon (c. 1476 CE +): 19 lúcuma form vessels

The distribution of lúcuma form vessels grows over time, except for the final Late Horizon Period. While it is possible that this distribution means that the lúcuma form
vessel became more popular, reaching its optimum florescence in the Late Intermediate period, it can also be explained by proximity to the present.

Forty-four of the lúcuma form vessels from the Late Intermediate period come from the Chimú culture and account for 44% of the entire sample. The Chimú were contemporaries of the Inca and known for their material wealth. The Inca ruler Thupa Inka Yupanki conquered the Chimú between 1470 and 1475, only about fifty years before the arrival of the Spanish in Peru. Upon his victory Thupa Inka Yupanki brought the last Chimú monarch, his retainers, and many craftsmen back to Cuzco with him. Spanish chroniclers may even have been able to document aspects of Chimú culture from living Chimú people. As a result, ceramics made by the Chimú are more likely to have survived and been recovered than those of older civilizations. The sudden drop of lúcuma form vessels can also be explained for the Late Horizon as ceramic production of indigenous people declined due to the conquest and ensuing oppression by the Spanish at the hands of Francisco Pizarro in 1533.

This uneven distribution of lúcuma form vessels means there is more information on how lúcuma form vessels evolved after the Nasca civilization than leading up to it. Out of the available sample there are only seven vessels that clearly predate the VMFA Lúcuma Bottle. These include one vessel attributed to the Vilcús culture, two vessels from the Salinar culture, and four vessels from the Virú-Gallinazo culture. Of these, only two vessels, both from the Virú-Gallinazo culture, share the four-fruit composition of the VMFA Lúcuma Bottle (Fig. 9.1, Fig. 9.2). The sample size is too small, however, to say

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56 Ibid., 260.
that the Nasca version of lúcuma form vessels derives from Virú-Gallinazo precedents based on this evidence. What the existence of these seven lúcuma form vessels does prove, is that lúcuma form vessels were circulating during the Early Horizon period, and that the four fruit composition of the VMFA Lúcuma Bottle was already in use several hundred years before the Nasca civilization even existed.

The question then becomes: can the lúcuma form be traced back even further than the Early Horizon period? The answer is both yes and no. There are no known ceramic vessels made in the shape of lúcuma fruits that can be positively identified prior to the Early Horizon period. There are however, many examples of ceramics rendered in full three-dimensionality of other types of fruits and vegetables.

While the exact origins of pottery production in the Americas is unknown, the first recognizable pottery tradition is acknowledged to have come from Ecuador around 4,000 BCE.\textsuperscript{57} Not surprisingly, the earliest known examples of ceramics in vegetal forms also come from Ecuador. The Chorrera tradition (c. 1000 BCE – 300 BCE) in particular focused on observing and reproducing natural phenomena, instead of the fantastical and supernatural. Common subjects of Chorrera ceramics are animals, fruits, and vegetables\textsuperscript{58} – in particular squash and gourds (Fig 10.1, 10.2, 10.3). The depictions of fruits and vegetables are idealized, without imperfections. The clay

\textsuperscript{57} Francisco Valdez and Diego Veintimilla, eds., \textit{Amerindian Signs: 5,000 Years of Precolumbian Art in Ecuador}, trans. Mercedes Reyes (Quito: Colibrí editions, 1992) 14.

surface has been polished in a way that mimics the tightly stretched skin of perfectly ripe specimens.\footnote{Cummins, “Tradition in Ecuadorian Pre-Hispanic Art,” 72.}

As early in the ceramic history of the Americas as these Chorrera vessels are, they have already surpassed the utilitarian stage of ceramic development. The form of many Chorrera vessels exceeds practical use; they are not intended for normal storage or serving. If liquid ever was held within the vessel it was for a far different purpose. Almost all Chorrera vessels in the shape of natural forms have a long spout that attaches to the vessel with a looped handle. Whistles were built in at the juncture of the vessel and the handle. When the vessel is filled with liquid and then manipulated, the movement of liquid through the vessel’s interior chamber creates a soft whistling from air pressure changes within the chamber.\footnote{Ibid., 444.} This musical effect adds to the ceramic vessel’s sensory presence and likely indicates that these vessels were used in a ritual context\footnote{Ibid., 458.} much like later ceramic descendants of these forms.

4.2 Cultural Variations

Subtle and obvious divergences exist among lúcuma form vessels belonging to the different Peruvian cultures who adopted them. This section contains a brief description of the three cultural groups with the most vessels of this type.

Mochica
The Mochica civilization was the Nasca civilization’s northern neighbors, named after the Moche River Valley thought to be their cultural hub. Although contemporary with the Nasca civilization, Mochica society was very different. It was more highly structured and stratified, operating at a state-level. Not surprisingly their lúcuma form vessels are also very dissimilar from Nasca versions.

Mochica lúcuma form vessels may have two, three, or four conjoined fruits, although two-fruit vessels are significantly less popular. Considering the popularity of two-press molds in the Mochica ceramic tradition, it is likely the majority of the vessels are mold-made. None of them however reveal a mold-seam. Most Mochica ceramics were additionally worked after being removed from the basic mold. This allowed pieces to be produced quickly but still individualized through freehand carving, applique, and painting.62 Mold seams would also be cut away during this part of the process.

77% of the sample vessels have their fruits oriented with the tips upward so that they rest on a more stable base (Fig. 11). Of those that are oriented tips downward, one is asymmetrically constructed so the vessel leans to one side (Fig. 12), and the other has actually had the tips flattened out (Fig. 13). They all have the characteristic Mochica stirrup-spout that is associated with elite use. On several pieces, the stirrup spout is oriented front to back, instead of side-to-side, which is a typical Mochica alignment.63

They are crafted from terra cotta and either appear in their natural terra cotta red, or have been slip-painted with red and cream. Their surfaces were then burnished until

62 Stone-Miller, Art of the Andes: From Chavin to Inca, 104.
63 Ibid., 106.
smooth and shiny. The vessel with the flattened tips (Fig. 13), slip-painted in white, has even been adorned in red with fine-line painting of an anthropomorphic bird-headed character bearing a shield and baton. Fine-line painting is a painting method associated only with Mochica. Detailed outlines of figures and scenes are painted in red on a cream background resulting in an aesthetic similar to early Greek Black Figure vase painting.64

Lambayeque

Previously thought to be a part of the Chimú culture, the far northern culture focused on the Lambayeque Valley is now known as the Sícan culture. It is now accepted that the Chimú conquered the Sícan and absorbed much of their style.65 The Sícan were primarily known for their metal works, which perhaps explains the strange lack of formal cohesion among the Sícan lúcuma form vessels.

Six of the ten Sícan vessels in the sample are single fruits, three are three-fruit conjoined vessels, and there is one four-fruit vessel. All of the conjoined vessels are red and white slip-painted and have spouts embellished with elaborately dressed human figures. Some of the single fruit vessels are terracotta colored, and some have the dark gray coloring from low-oxygen firing. The majority of the vessels have a bridge spout, but three of the single-fruit vessels have stirrup spouts. The most common factor

64 Stone-Miller, Art of the Andes: From Chavin to Inca, 106.
65 Ibid., 156.
is that all of the Lambayeque vessels are oriented with the fruit tips upward, no matter what combination of other traits there are.

Chimú

The Chimú ceramics, unlike the Lambayeque ceramics are remarkably uniform, especially considering Chimú ceramics are the bulk of the sample with 53 vessels. Chimú lúcuma form vessels typically occur as four-fruit or single-fruit vessels, although there is one example of a two-fruit vessel. 86% of the single-fruit vessels are oriented tip upward, while all of the four-fruit vessels are oriented tip down. All but two vessels have stirrup spouts, a revival of the Moche’s preference. The homogeny may be a result of Chimú potters excessive use of molds. They surpassed even the Moche’s use of molds and unlike the Moche they did not personalize the individual vessels after removing them from the mold except to add little monkey or lizard appliques to the spouts. Sometimes, they did not even bother to smooth out the seams left behind from the molds. While the vessels vary between being a dark gray and a glossier even black, all are the product of low-oxygen firing.

4.3 Nasca Variant

The Nasca variants of the lúcuma form vessel stand out from the others for several reasons. The Nasca civilization seems to be the only southern Peruvian group that adopted the lúcuma form vessel. No known examples from the Paracas or

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67 Ibid., 174.
Tiwanaku civilizations have surfaced. Either the form did not reach southern Peru until c. 700 BCE, or for some reason it failed to find a place in a southern ceramic tradition before the Nasca. Even once the Nasca potters began to replicate it, the lúcuma form vessel does not seem to have circulated outside of Nasca civilization. Its introduction into the Cuzco area later clearly resulted from the Inca Empire’s conquest of the Chimú people to the north, and not from diffusion from the southern coast into the southern highlands.

Nasca potters are also responsible for developing some of the most difficult design compositions. While not the first to craft the four-fruit conjoined ring version of a lúcuma form vessel, they did pioneer balancing this version on the delicate tips of the downturned fruit. Lúcuma form vessels from cultures prior to the Nasca culture always orient the lúcuma fruits on their sides, or tip upwards so that the vessel is resting on the fruits’ more stably rounded base. As mentioned earlier, Moche attempts to copy this design ended in less than stellar attempts.

Nasca lúcuma form vessels show less variation in the number of fruits composing the vessel. The Mochica show the most variation with vessels composed of anywhere from one to four fruits, and the Virú-Gallinazo have one of the oddest configurations with a version composed of six lúcuma fruits (Fig. 14). Meanwhile, Nasca potters restricted themselves to producing only vessels in pairs of two or four fruits. This is likely due to the Nasca culture’s appropriation of this form into their fertility iconography. I suggest placing the fruits in pairs emphasizes the reference to the human female breast.
Slip-painting is used to further highlight this emphasis. While the majority of lúcuma vessels produced by other cultures in this sample retained their natural terracotta color or smudge fired, all of the Nasca vessels have been slip-painted. The slip painting on Nasca vessels is obviously used to bring attention to the calyx of the lúcuma fruits, a not-so-subtle allusion to nipples. None of the vessels from other cultures appear to show any interest in accentuating the calyx. Most of the time they are hidden or are barely present as faint modeling. The Nasca appear to be the only group to incorporate characteristics into lúcuma form vessels that purposefully recall breasts. One Nasca vessel makes the association to not just breasts but female fertility glaringly clear, by not only painting the calyxes to resemble nipples, but also painting the tapered ends of the fruit to resemble the pubic triangle (Fig. 15).

**ICONOGRAPHY**

5.1 Identifying the Lúcuma

Of course there is more to determining the role of lúcuma vessels in fertility iconography than the simple observation that they look like abstracted representations of breasts. The first step in an iconographic analysis is the identification of the object, in this case the lúcuma fruit. It is easier to identify lúcumas in Nasca art when they are in
three-dimensional form than as painted images. This is in part due to the abstracted painting style of Nasca artists. There appear to be disagreements among experts over which symbols represent which plants. For example, Proulx says lúcumas are depicted in two dimensions as heart-shaped, with two or three seedpods as if they are made visible through the fruit’s skin, and topped with a stem (Fig. 16). However, several Nasca ceramics painted with what are designated as lúcuma fruits differ greatly from this design (Fig. 17.1, Fig. 17.2).

The VMFA Lúcuma Bottle is not actually identified as a lúcuma in the VMFA’s description but just as ‘fruits’. Close comparison of the VMFA Lúcuma Bottle to other similar vessels identified as lúcuma form by experts in Andean archaeology and art history allowed me to. Fortunately the mimesis of the lúcuma form vessels makes its identification fairly easy. The lucuma forms are visually quite similar to their natural versions, except in color.

Known in Peru and Chile as lucumo, lucma in Ecuador, and lúcuma in Colombia, the *Pouteria lúcuma* is a leafy evergreen tree about 12 meters tall that grows along the coasts and temperate valleys of the Andes and is adapted to a dry environment. It produces fruit year-round that fall to the ground once mature. Fruit has a rounded heart-shape topped by a calyx (Fig. 18). Beneath its smooth green skin is bright

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68 Proulx, *A Sourcebook of Nasca Ceramic Iconography*, 166.
69 *Pouteria lúcuma* is also referred to as *Lucuma obovata* and sometimes *Lucuma bifera Molina*.
orange flesh with a large nut or pit. The lúcuma’s flesh has a sweet taste, making it a popular ice cream flavor in modern Peru. Proulx believes that lúcuma trees appeared in Peru sometime before 1800 BCE. The first written documentation of lúcuma occurs in a 1549 communiqué from Diego Palomino, a captain in Pizarro’s army, to Charles V, the king of Spain.

5.2 Lúcuma Uses

Once the lúcuma fruit has been identified, it remains to consider how the lúcuma fruit was used to important to the Nasca people. This section will explore three possibilities: as a food resource, medical application, and lactation aid.

Food

Proulx hypothesizes that there may be a correlation between the frequency of a plants appearance in Nasca iconography and its importance in the Nasca diet. Following this logic, beans and maize would claim the primary place as the staple food in the Nasca diet, while lúcumas would fall into a lower bracket with pepinos and peppers. However, Proulx admits this approach is not without issues. It fails to address plants that do not appear in the iconography at all, despite being known by and accessible to the Nasca. The potato is one example. It has been observed that the plant motifs in Nasca iconography are almost exclusively crops grown in the temperate

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76 Proulx, *A Sourcebook of Nasca Ceramic Iconography*, 204-205.
and tropical lowlands while crops from the highlands are largely absent.77 Also absent from Nasca iconography are non-edible plants that are known to have been used by the Nasca for other purposes, like cotton and coca. The reason for these absences is currently unknown.78

Medicinal

Significance to the Nasca diet does not equate to religious or ritual significance. Although it is impossible to claim exactly why Nasca valued the lúcuma fruit, there is an intriguing possibility that connects it with healing. A 2010 study by Leonel E. Roho has associated the lúcuma with healing properties. The nut oil from the inedible and discarded pits is exceptionally high in fatty acids which have many health benefits. Lúcuma nut oil was investigated as a treatment for fibroblast migration, angiogenesis (the development of new blood vessels), inflammation, bacterial and fungal growth, and wound healing. Although lúcuma nut oil was not an effective antibacterial or antifungal, it was a very effective treatment for angiogenesis and wound healing. This was established in two in vivo studies. In the first study lúcuma nut oil aided in the regeneration of tail fins in transgenic Zebra fish larvae 48 hours after the tail fin had been amputated. In the second study, topically applied lúcuma nut oil drastically

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78 Proulx, A Sourcebook of Nasca Ceramic Iconography, 204-205.
accelerated the healing of cutaneous wounds on mice. The study concluded that *lúcuma* nut oil has promising implications in medicine for skin regeneration.\(^7^9\)

There is some debate on how warlike the Nasca civilization was, but the presence of trophy heads and warrior iconography in their imagery makes it evident that there was a certain level of violence inherent in Nasca culture. Whether the ancient Nasca were aware of these healing properties is a mystery. Yet if they were, it would surely earn the *lúcuma* an important position in their culture and iconography, especially with the ability to greatly increase the recovery time of wounds sustained in battle.

Lactation Aid

*Lúcuma* fruits also have a relation to breast health. In a study published in the Journal of Ethnobiology and Ethnomedicine, Spanish speaking people of Mestizo origin in northern Peru were shown plants collected in nearby fields and markets and asked a series of simple questions such as: “What is this plant used for, which part is used, how is it prepared?” When shown the *lúcuma* fruit, test subjects consistently responded that the fresh fruit is eaten to promote lactation in women after pregnancy.\(^8^0\) By using an ethnohistorical approach to apply data from the present mestizo population to ancient Peruvians, it is plausible that the Nasca people may have used the *lúcuma* fruit for similar purposes.

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5.3  FERTILITY

The connection to lactation highlights the most promising aspect of the *lúcumas* significance to the ancient Nasca people: its use as a fertility symbol. In *The Sex Life of Food* an association is drawn between the shape of foods and genitalia. Vegetables such as asparagus, carrots, and mushrooms draw obvious comparisons with male anatomy. Meanwhile, fruits are most commonly associated with female anatomy. In China and France, peaches are euphemisms are for the female sex. In American slang breasts are comically referred to as melons. In the biblical book of Solomon is the verse, “Thy stature is like a palm tree, and thy breasts like clusters of grapes.” The visual resemblance between breasts and *lúcumas* make the *lúcuma* fruit an ideal subject for this treatment and I suggest that among the Nasca they served as a similar metaphor.

The relationship between agricultural fecundity and human fertility runs deeper than mere appearances, however. *Pachamama*, is the pan-Andean earth-mother

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82 The following section of this thesis relies heavily on information from the *Handbook of Incan Mythology*. There is a debate over how to reconstruct Nasca religion responsibly. While Proulx warns that "contextual disjunction" is a significant issue when using ethnographic analogy to compare cultures separated by such a great time spans (approximately 800 years) as the Inca and Nasca, other scholars such as Tello, Burger, and Silverman believe the existence of a pan-Andean culture allows post-Columbian chronicles of Incan religion to be used as a reasonable model. Helaine Silverman and Donald Proulx, *The Nasca* (John Wiley and Sons, 2008) 194.
entity, and is sometimes simply referred to as *Mama* (mother). She is the principal female deity and is responsible for all procreative forces from childbirth to crop growth. She is intrinsically linked with food-plants. Her daughters or lesser incarnations of herself are considered guardians of specific fruits and crops, for example: *mama-oca* and *mama-coca*. Her fecundity was integral to Nasca society; it ensured survival. The importance of agricultural fertility can be seen in Nasca iconography, where icons of fertility extend beyond fruits and vegetable to creatures such as lizards, foxes, and snakes that protect crops by consuming pests.

The extremely arid environment of southern Peru’s coastal communities, required reliance on carefully controlled agricultural practices. Throughout the year ceremonies were held in *Pachamama’s* honor at different points in the agricultural cycle. *Pachamama* lies dormant until she is physically opened in August for plowing, giving farmers access to her regenerative female forces locked within the earth.

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83 Although much of the information available on *Pachamama* comes Inca sources, the cult of *Pachamama* was venerated in the Andes long before the Inca incorporated *Pachamama* into their pantheon and continued to be popular well into the Colonial Era. Paul R. Steele, *Handbook of Inca Mythology* (Santa Barbara: ABC-CLIO, 2004) 21-23.
84 Ibid., 93.
85 There is an image of a Nasca vessel online that supposedly depicts Pachamama lying on her back bearing humans and plants. Unfortunately the image comes without any context. The photographer comments that it was part of a temporary exhibit which goes unnamed and that he is not aware of its current location. https://www.flickr.com/photos/theadventurouseye/5593551692/in/photostream/
86 I have found no references to a *mama-lúcuma*, however the Inca believed the ancestral siblings Condor Tocas and his sister Coya Guarmi brought pacay and *lúcumas*, both coastal fruits, to the highlands. It is interesting the Inca thought it worth affirming the *lúcuma*’s origins from coastal regions. Perhaps the fruit held greater importance in coastal regions. Steele, *Handbook of Inca Mythology*, 94.
88 Ibid., 144.
Pachamama then becomes restive again until sowing and awakes to give up her fruits at harvest time.\textsuperscript{89}

*Pachamama*’s cycle of fallowness and abundance seems to be in opposition to the perennially fruit-bearing nature of the *lúcuma*. While the availability of other crops are restricted to alternating periods of fallowness and activity, the *lúcuma* produces fruit year-round. This surely made it an important food source during times of scarcity. The four-fruit configuration of the VMFA Lúcuma Bottle in alternating colors may in fact be a nod to its availability through these seasons.\textsuperscript{90}

The alternating colors of the fruits further illustrate *lúcumas* relation to fertility. Determining the meaning of something like color is difficult. Andean scholars have attempted to glean such things through a combination of written sources, representational art, cached offerings, ritual attire, and other paraphernalia.\textsuperscript{91} Red is associated with blood,\textsuperscript{92} an integral component of the menstrual cycle and indicative of female procreative power. It is also the color the rivers turn during the beginning of the rainy season and the end of harvest.\textsuperscript{93} In Inca harvest ceremonies young women

\textsuperscript{89} Proulx, *A Sourcebook of Nasca Ceramic Iconography*, 93.
\textsuperscript{90} The only alternative theory behind the four fruit configuration is that it may reference the cardinal directions. I respectfully disagree considering this theory was offered in regards to a four-fruit Moche vessel. The Moche also created variations of this vessel form with two and three fruits. While it could be argued that the two-fruit vessels maintain some relation as being half of the whole (which is a pair of pairs), the three fruit vessels make any allusion to duality or four cardinal directions unlikely. Park, *Mirrors of Clay*, 48.
\textsuperscript{91} Silverman and Proulx, *The Nasca*, 194.
\textsuperscript{92} Steele, *Handbook of Inca Mythology*, 137.
\textsuperscript{93} *Ibid.*, 137
ritually impersonating the incarnation of Pachamama known as Pachamam Suyrumama or "Mother Earth of the long dress that drags over the ground," also wore red dresses.94

The darker color on the vessel could carry two possible meanings. It could indicate death. The Inca dressed in black, sacrificed black llamas, and blackened their faces in soot during ceremonies towards the end of the rainy season. The rainy season was a period of contact with ancestors and coincidentally a period of agricultural inactivity. Thus the alternating red and black could depict the cycle of agricultural birth, death, and rebirth.95

The other possibility is cosmic. While the cosmos in the Andes are thought to generally be male forces96 there is a female component known as yana phuyu. Yana phuyu refer to the black clouds of interstellar dust that blot out parts of the bright streak of the Milky Way. Yana phuyu is supposedly composed of a fecund feminine “earth.” The reproductive forces of this earth are believed to be the origin of the colors of the rainbow. The darkest color of which is associated with the persona of mama.97 The calyces of the lúcumas on the VMFA Lúcuma Bottle may also recall a connection to the cosmos. The calyces are star-shaped. Tracking the path of the stars, especially the Pleiades constellation regulated agricultural practices. The Pleiades disappears from the horizon in Mid-April when the harvest begins and reappears in early June at the end

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94 Steele, Handbook of Inca Mythology, 93.
95 Ibid., 137.
96 Ibid., 21.
of the harvest season.\footnote{Steele, \textit{Handbook of Incan Mythology}, 144.} Thus even if the color scheme of the fruits does not represent the alternating agricultural seasons, the reference to the stars still might.

The association of fertility with the lúcuma fruit seems to be supported by archaeological evidence as well. \textit{Lúcuma} fruits and leaves have been found in women’s burials. The unwrapping of an Incan mummy bundle excavated in 1976 close to Ancon, a town in central coastal Peru, revealed multiple uses of lúcuma products in a woman’s burial. \textit{Lúcuma} leaves were found within a \textit{spondylus} or Thorny Oyster shell\footnote{Spondylus shells were important offerings associated with springs and rainfall, and considered a favorite food of the gods.} near the woman’s left shoulder. More lúcuma leaves, along with other coastal plants such as maize, pacay, and tilandsia were padded around the body within the bundle. \textit{Lúcuma} fruits were found wrapped in a length of cotton with coca leaves next to a workbasket, in a blue and maroon striped cotton packet with an assortment of other fruits and seeds, and within a mesh bundle with cords and the remains of nets.\footnote{Karen E. Stohert, “Unwrapping an Inca Mummy Bundle,” \textit{Archaeology} (1979): 11.} The proliferate use of lúcuma fruits and leaves alongside materials with ceremonial significance like coca, maize, and \textit{spondylus} shells impies lúcuma’s inclusion extends beyond that of a food offering.

In a Moche burial at San Juanito in the Santa Valley along Peru’s northern coast, lúcuma again seems to play an important role. A statue carved from lúcuma wood was found on the chest of an elderly elite woman. Unfortunately there are no images of the statue but it is described as having a “baby-faced” appearance. It is speculated the carving may be a symbol of rebirth, or reference ‘bringing a baby to term’ in the afterlife.
It is worth noting that an infant was interred nearby to the old woman and possibly at the same time.\(^\text{101}\)

**CONCLUSION**

The VMFA Lúcuma Bottle is an example of a distinct ceramic vessel type that is part of a long yet overlooked tradition. *Lúcuma* form ceramic vessels have roots that date back thousands of years to the formative Chorrera style in Ecuador. They have always served a role beyond that of utilitarian serving or storage vessels that even today is shrouded in uncertainty. As the lúcuma form vessel passed through generations each cultural group left their mark upon it.

Nasca potters broke with their ceramic tradition to adopt this fully three-dimensional vessel form. Using their advanced technical skills Nasca potters took the lúcuma form vessel to a new level of complexity and sophistication. The Nasca appear to be the only culture that incorporated the form into fertility iconography. They deliberately employed design elements that highlight the resemblance between lúcuma

fruits and female breasts. The red and dark pigments used are both linked with different types of fertility while the configuration of the four fruits in a ring may intentionally parallel the agricultural cycle. There is ethnographic and archaeological evidence for the association between lúcuma fruit and fertility.

The VMFA Lúcuma Bottle is an arresting example of how significant forms persevere over time when they are adapted to communicate culturally relevant ideas.
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(Photo by Akramm, https://commons.wikimedia.org)


Proulx, Donald A. A Sourcebook of Nasca Iconography: Reading a Culture through its Art. Iowa City: University of Iowa Press, 2006.


APPENDIX

List of all *lúcuma* form and *lúcuma* decorated vessels referenced for this study. Vessels with catalog #s beginning with ML belong to the Museo Larco Collection. Vessels belonging to other collections are likewise identified.

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