

A Re-examination of Potosí Applique Censers from Greater Nicoya

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Abstract: From approximately AD 100-1250, Potosí Applique varieties were manufactured and consumed in both the northern (Nicaragua) and southern (Costa Rica) sectors of Greater Nicoya. These two-part ceramic objects consist of a dish-form base and a tall, generally 'bell-shaped' lid. The ceramic type name takes its descriptor from the generous use of plastic applique decoration adorning the vessel bodies. These objects were used for burning incense, and the lid portion of the vessel is typically understood to represent an actual landscape feature, such as a mountain or volcano, providing physical context for modelled figures seen frequently atop the lid. Published examples tend to feature fantastic crocodiles, seated humans or, less frequently, jaguars, and all of which have been linked with ritual aspects of shamanic transformation in Greater Nicoya. Here I argue that traditional interpretations of Potosí Applique are limited in their focus and thus their ability to deepen our understanding of the vessel class itself, as well as the wide array of ritual imagery and cultural messages it likely communicated in ancient times. While maintaining focus on important aspects of ritual practice and the relationship between the supernatural and spiritual transformation, this preliminary re-analysis indicates that Potosí vessels present important and unexplored representations of flora. Plants, and all their component parts (flowers, leaves, fruit, seeds, etc.) -whether offered, ingested, or burned for ceremonial purposes- likely played an important role in various types of ceremonies including mortuary, healing, and transformation, among others, and are discussed here as potential avenues for future research.

Keywords: Potosí Applique; censer; Greater Nicoya; ceramic; iconography; botany; Datura.

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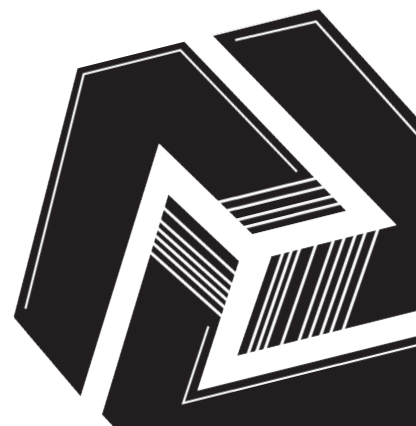
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Reexaminación de los incensarios Potosí Aplicado de Gran Nicoya

Resumen: Desde aproximadamente el año 100-1250, variedades de Potosí Aplicado fueron fabricados y consumidos en ambos sectores del norte (Nicaragua) y el sur (Costa Rica) de la Gran Nicoya. Estos objetos de cerámica consisten de dos partes, una base en forma de plato y una tapa alta, generalmente en forma de campana. El nombre del tipo cerámico toma su descriptor del uso generoso de la decoración del apliqué que adorna el cuerpo del recipiente. Estos objetos fueron utilizados para quemar incienso, y la tapa del recipiente se entiende típicamente para representar una característica real del paisaje, tal como una montaña o un volcán, proporcionando el contexto físico para las figuras modeladas vistas encima de la tapa. Los ejemplos publicados tienden a presentar cocodrilos fantásticos, humanos sentados o, menos frecuentemente, jaguares, y todos los cuales han estado relacionados con aspectos rituales de la transformación chamánica en la Gran Nicoya. Aquí, argumento que las interpretaciones tradicionales de Potosí Aplicado son limitadas en su enfoque y por lo tanto su capacidad de profundizar nuestra comprensión de la clase del recipiente sí mismo, así como el rango de imágenes rituales y los mensajes culturales que probablemente comunicada en la antigüedad. Al mismo tiempo que se mantiene el enfoque en aspectos importantes del ritual y la relación entre la transformación sobrenatural y espiritual, este re análisis preliminar indica que la cerámica Potosí Aplicado presentan representaciones importantes e inexploradas de la flora. Las plantas y todos sus componentes (flores, hojas, frutos, semillas, etc.), ya sean ofrecidos, ingeridos o quemados con fines ceremoniales, probablemente desempeñaron un papel importante en diversos tipos de ceremonias, incluyendo la mortuoria, la curación y la transformación, entre otros, y se discuten aquí como posibles vías para investigaciones futuras.

Palabras claves: Potosí Aplicado; incensario; Gran Nicoya; cerámica; iconografía; botánica; Datura.

Introduction

Censers are ceremonial containers used for burning incense, a substance which plays an important role around the world in various religious ceremonies; in many cases the smoke is thought to ‘coat’ the participating members in the same smell and act as a visual cue for communication between humans and the spirit world (Kenna, 2005). “Almost 400 species of plants were reportedly burned for incense purposes throughout the world,” with copal, gums, and resins commonly used in Mesoamerica (Pennacchio, Jefferson and Havens, 2010, p. 13). A censer can be classified into distinct use categories, and for the purposes of this article I adhere to the definition forwarded by Hough (1912), who describes both a ‘Communal Stationary’ style of censer, seen in both ceramic and stone varieties, and a ‘Special Portable and Gesture’ style known only in ceramic. The Communal Stationary style of censer is defined as “large pottery vessels of hourglass shape ornamented with masks, bands, knots, knobs, and spurs, and painted in colours” (Hough, 1912, p. 111). Importantly, these large vessels are a monument to the potter’s skill, placing the ornate vessels in a “high plane of esthetic quality” (Hough, 1912, p. 116). In contrast, the Special Portable and Gesture style of ceramic censer are smaller domestic or abridged versions of the Communal Stationary style censer (Hough, 1912). This provides a simple division based on the distinction between ceremonies held in public versus those held in private spaces.

This paper begins with a brief review of previous interpretations of the conceptual elements featured on Potosí Applique censers from Greater Nicoya. This is followed by a new approach to evaluating the iconography of these vessels. Traditionally there has been a focus on the ethnohistoric importance of the volcanic and crocodilian imagery that frequently adorns these vessels. Here, I present several examples that provide a different perspective through the identification and analysis of botanical imagery and symbolism. The aim is to create a more robust and representative model of the conceptual and iconographic structures associated with Potosí Applique censers, which can be tested with further research.

Background

As introduced above, Hough (1912) provides a general explanation of the classification differences in censer types from Mexico and Central America. The level of decorative complexity varies greatly between geographic locations and across time. Kurnick (2009) outlines several iconographic tendencies in censers from Mesoamerica, which include frontal viewing, design symmetry, and the division of space. Some of the most ornate designs are found in the Maya region where flanged cylinders contain designs involving ornate supernatural heads and animals (see Rands and Rands [1959; Figures 7-9] for visual references). While censer forms vary across Central America, within Greater Nicoya the themes are presented more narrowly, with a small range of strategic design elements.

The Potosí type-class is divided into three varieties: Caiman, Santos, and Potosí (Abel-Vidor et al., 1987). Potosí Applique censers are noted as first appearing during the Late Bagaces period and continue into the Sapoá period (Dennett, 2016; Lange et al., 1992). The diagnostic features of the vessel form include areas covered in either an applique of rounded ‘bumps’ or, in certain cases, conical peaks, and an effigy on the top part of the censer lid. The applique bumps are generally present either evenly distributed across the entire lid surface, or clustered in evenly distributed bands near the rims and the upper and lower most points of the vessel surface body (Figure 1).

Few complete or nearly complete Potosí Applique vessels have been documented from excavated contexts in Greater Nicoya. Abel-Vidor et al. (1987) provides a concise summary of excavated contexts and surveys, including a list of just over 300 Potosí sherds recovered. Santos variety Potosí (Figure 2) was excavated from the site of El Rayo in 2009, which has been associated with radiocarbon results suggesting an association to the Late Bagaces ranging from AD 500 to 800 (Dennett, 2016: Table 5.4, Table 5.7).

Applique applied across the surface of the vessel body, termed ‘pellets’ or ‘bumps,’ has long been interpreted as representing the scutes of a crocodile (Dennett, 2016; Stone, 1983; Wingfield, 2009; Young-Sánchez, 2010). Crocodile effigies and scute references have been noted in censer studies in other regions of Mesoamerica, as well (see, for example, Rands and Rands [1959]). The general pellet style of applique can be seen throughout Mesoamerican from West Mexican Colima (200 BC–200 AD) groups and southward



Figure 1: Potosí Applique with crocodile effigy. Visible cluster applique as well as the rim banding. Double-headed Reptile Incense Burner, AD 500-800 Greater Nicoya, Nicaragua, Costa Rica Denver Art Museum Collection: Gift of Frederick and Jan Mayer, 1993.592A-B Photography © Denver Art Museum.

as far as coastal regions of Ecuador and the Chorrera culture (950-350 BC). In recent years, analysis of Potosí Applique in general has become somewhat stagnant, perhaps because the vessel's function is one of the most obvious in Greater Nicoya. As the most frequently published and republished images of Potosí Applique often show a crocodile and/or volcano effigy (see [Figure 1](#)), there has seemed to be no interest in further questioning the role of the applique designs. The “standardized and limited set of decorative features” ([Dennett, 2016, p. 300](#)), in addition to the lack of real understanding of the position of Potosí Applique in the broader ceramic assemblage across time and place has resulted in regurgitation by scholars of the same poignant design elements at the expense of many others that exist within the type, resulting in a lack of further exploration of the ceramic type.



Figure 2: Santos variety Potosi Applique from Locus 2 of El Rayo, Nicaragua, inset photo is a close up of the ceramic. Photo courtesy of Carrie Dennett.

As part of a broader exploration into the concept of multivocality in symbolism on ceramic vessels within Greater Nicoya (e.g., Dennett and Platz, 2017a, 2017b), I propose that the ‘crocodile scutes’ interpretation only addresses one iconographic aspect of this vessel type. We also see examples of pellet applique representing organic materials in certain Potosí Applique design programs, which may reflect the emicly important role of plants in using the censer. In this re-evaluation, the discussion is divided into three parts: (1) the lid, (2) the base, and (3) the entire vessel as a functioning unit. This division of base from lid is important, as we know that not every base had a matching lid, as such it is important to treat the two portions as separate entities. I propose that the applique pellets normally interpreted as crocodile scutes are instead representations of the surface of specific plants and/or plant seeds or fruits. Finally, I also suggest that for accurate re-evaluation these censers must be analyzed as a complete vessel where possible or applicable, rather than the lid alone, which is frequently the case in analyses, as the base provides a necessary context for the symbolic messaging taking place on the lid.

Vessel Lid

The vessel lid has been commonly thought to resemble the form of a volcano, which is strongly tied to the ethnographic and historic record of the volcano myth in Nicaragua (for further discussion see, Abel Vidor et al. [1987]; Dennett [2016]; Lothrop [1926]; Viramonte and Incer-Barquero [2008]; Werner [2000]; Wingfield [2009]). The most commonly cited effigy associated to this vessel lid is the crocodile, thus an applique of crocodile scutes would seem logical (Figure 1). However, when examining the wider variety of effigies, which includes forms such as humans, jaguars, iguanas, birds, and armadillos; the ‘scute’ applique would seem like a less logical explanation once divorced from the crocodile effigy. Rebecca Stone has previously noted that the *Datura stramonium* flower resembles the upside-down vessel lid of a particular Potosí censer in the Denver Art Museum holdings (Figure 3) (see also Wingfield [2009]).

Wingfield (2009) provides the most thorough discussion of the effigies present on Potosí vessel lids, focusing on important iconographic elements of nine of the most iconic Potosí vessels in Greater Nicoya, where female anthropomorphic forms are shown alongside the infamous crocodile effigy as she believes they relate to the Chibchan creation myth. Wingfield notes the lack of a refined sculpting technique for Potosí when compared to other contemporaneous ceramics types, a point corroborated by examples of Potosí from Mi Museo and several other local community museums in Nicaragua that I have reviewed. It seems the vessels discussed by Wingfield (2009) are more akin to the Communal Stationary style of censer as they are larger more ornate vessels, yet there are less stylised and smaller vessels that I argue represent the Portable style of censer. The greatest difference is found in design, an aspect that should be more thoroughly analyzed in the future.

The descriptive analysis by Wingfield (2009) does not mention the presence of fruit pod-like effigies present in the Mi Museo collection (Figure 4). Admittedly, it is difficult to determine exactly what type of



Figure 3: (left) Potosí censer lid argued to represent an upside down *Datura stramonium* flower (see Wingfield 2009:232, 661). Incense Burner Lid with Seated Figure, AD 500—800 Greater Nicoya, Nicaragua, Costa Rica Denver Art Museum Collection: Gift of Frederick and Jan Mayer, 1995.437 Photography © Denver Art Museum; (right) Flower of *Datura stramonium* (Photograph by Isidre blanc (2012), reproduced under the Creative Commons Attribution-Share Alike 3.0 Unported license).

fruit (or seed?) is represented on these censers for two reasons. First, it is currently difficult to deduce if there is an association between what is burned inside the vessel and what is represented on the outside, and second, many seed pods and fruits have a rather generic oval shape. Based on the small number of samples under review, it is currently difficult to determine the exact fruit/seed being shown. However, in the case of [Figure 4](#), I believe a cacao fruit pod is being represented as the effigy.

There is also a general failure to address variation among the effigies portrayed on Potosi vessels, specifically the crocodile, which I argue may be represented in various stages of spiritual transformation. The frequent co-presence of iguana and gecko-like creatures may play a role in the process (Figure 5). It is important to note that the gecko-like creature from Figure 5 is the same form seen attached to the back of the human effigies from the Mi Museo collection. There appear to be different stages of the traditional crocodile effigy ranging from the naturally styled crocodile to the most abstract version with ornate ‘smoke circles’ leaving the mouth. Secondly, it appears that there is an important difference in the tail of the crocodile in some cases the tail is pointed down and in other cases the tail is curled upwards. It is not clear if this is simply an artistic element, or perhaps it signifies some stage or turning point in the spiritual transformation.

The applique pellet design is noticeably different across the Potosí type. First and foremost is the difference in pellet shape, or form, which ranges from spikes (Figure 6), to rounded ‘lumps’ (Figure 7), to raised circular ‘O’ shapes (Figure 8). I am not certain if this difference is the result of different potting communities or variation across time (perhaps both). There is also the possibility that pellet-style variation is communicating differences in vessel use within the ceramic type. In terms of pellet location, patterns vary from evenly spaced segments extending across the surface, to continuous horizontal bands encircling the rim and near the top of the lid, to a pattern of horizontal bands with vertical clusters at set intervals adorn the circumference. Generally speaking, the lid pattern tends to be mirrored near the rim of the vessel base (Figure 9 and 10).

Vessel Bottom

There are several diagnostic patterns that can be observed on the lower portion of Potosí vessels: (1) the occurrence of applique pellets in several varying design patterns, (2) the presence of a scalloped rim that lacks applique pellets and, finally, (3) distinct differences in the style of vent holes and cut-outs at the base of the vessel bottom. These three observations provide support for a broader concept of organic elements represented in this vessel type.

The first observation, of patterned applique pellet designs, appears to be the most widely distributed across Potosí varieties observed in this reanalysis. I believe that this theme is an extension from the pellets found on the lid portion (see above for detailed description of pellet location) (Figures 9 and 10).

The second observation is of the scalloped rim with the plain body lacking any applique pellets. From a bird’s eye view looking directly down at this style of base, it appears to be a minimalistic version of a flower with the scalloped rim acting as the petals and the bowl of the burner acting as the floral head or disc (see Figure 11). Continuing with this line of interpretation, the act of burning incense may mimic the release of the floral odour or pollen releasing from a flower. I am unfamiliar with any archaeological comparison of this nature, but propose that artisans attempted to mimic a flower releasing pollen into the air in having the



Figure 4: Potosí censer lid with seed-form applique pellets and fruit pod effigy, possibly representing cacao. Photo courtesy of Mi Museo, Granada, Nicaragua.

incense ‘act’ as the pollen. While we are unable to see pollen with the naked eye, more than 100,000 different species take part in pollination (Abrol, 2012), and local populations would have undoubtedly observed the local animals, birds, butterflies, bees, and/or insects taking part in the process. This reasoning may provide support for why the exterior surface lacks the applique pellets, as the exterior portion of a flower is general plain aside from the attachment of the sepal to the peduncle. Flowers also have some association to Tojolabal type spiked vessels manufactured in the Maya region, where people used a traditional spiked pedestal based vessel “as an offering receptacle for flowers” (Deal, 1982, p. 616). The *Datura* flower, for example, is represented on one version of Papagayo: Fonseca variety bowls (see Figure 12) manufactured in the Granada City area (see Dennett [2016]), and which have traditionally been thought of as a pinwheel, perhaps indicating these were similarly used as flower receptacles given the shallow depth of the Papagayo bowl.



Figure 5: Potosí censer base with gecko-like creature adorning the rim. Photo courtesy of Mi Museo, Granada, Nicaragua.

The third observation is variation in the use of cut-outs and vent styles and, in some cases, the complete lack of a ventilation system. The most notable use of the vent hole as a mechanism for intensifying ritual experience can be seen with the fantastic crocodile version of Potosí (see [Figure 1](#)), where smoke is channelled out through the elaborately modelled crocodile snout. Incense, by definition, is used for the smell provided by the organic material, thus I feel that the crocodile smoke reference may be somewhat misguided. These vents may be more related to artistic, or most likely practical reasoning such as ensuring heat can be released from the ceramic during firing in manufacture. While a mythical smoking crocodile creates a fantastic image in our minds, the lack of consistency in location of vents or presence of vents suggests to me that this was not a purposeful manufacturing element by the artisans, but rather an integrated technical requirement. Furthermore, it is difficult to determine what type of environment the censers were used in; dry season versus wet season or general geographical location relative to environmental elements may have affected smoke patterns. I have noticed three general patterns to the cut-outs and venting style present on the Potosí censer base: [Figure 5](#) demonstrates the large artistic rectangular cut-outs, [Figure 13](#)



Figure 6: Potosí censer spiked pellet detail. Photo courtesy of Mi Museo, Granada, Nicaragua.



Figure 7: Potosí censer rounded 'lump' pellet detail. Photo courtesy of Mi Museo, Granada, Nicaragua.



Figure 8: Potosí censer raised circular 'O' pellet detail. Photo courtesy of Mi Museo, Granada, Nicaragua.

shows a medium sized triangular cut-out, and [Figure 15](#) shows a delicate cross or plus sign style of vent next to a small circular vent.

One final comment regarding the vent styles is the cross ([Figure 14](#)) and 'x' ([Figure 1](#)) on some of the



Figure 9: Potosí censer applique banding with vertical clusters. Lidded Incense Burner with Female Figure, AD 500-800 Greater Nicoya, Nicaragua, Costa Rica Denver Art Museum Collection: Gift of Frederick and Jan Mayer, 1995.699A-B Photography © Denver Art Museum.

vessels seen in many collections I have reviewed. Important to note, [Figure 4](#) contains an incised ‘x’ on the upper region of applique pellets though it does not penetrate through the vessel to create a vent. It is possible that specific vessels with the cross and/or ‘x’ held higher power when combined with other censers. I have discussed elsewhere (see Dennett and Platz [2017b]) the symbolic relationship to the creator couple concepts from the broader Zapotec religious cult. I hypothesize that this concept may have been drawn upon during ritual ceremonies using the censers to increase the power of the ritual and perhaps the combination of incense used.

Hough (1912) briefly mentions general venting style, suggesting that vent holes not related to ventilation of the fire were perhaps used as ‘handles’ for holding and/or transporting the vessel over small distances. I question if the larger gaping holes in the base of some of the Potosí vessels were related to transportation in this manner or if they are simply artistic cut-outs. The lack of exploration into how ritual



Figure 10: Potosí censer with banding focused on upper and lower edges. Incense Burner With Fantastic Reptile, AD 500-800 Greater Nicoya, Nicaragua, Costa Rica Denver Art Museum: Collection of Frederick and Jan Mayer Photo © James O. Milmoie.

and ceremony took place currently makes this question very difficult to answer. Figure 14 shows a small circular vent similar to a censer from Copan (see Hough [1912: Figure 3]). Worth mentioning is the fact that the vessel used by Hough (1912: Figure 3) in discussion of transportation methods also exhibits pointy applique pellets, although the vessel he demonstrates is from the site of Copan, Honduras. The spikes have also been discussed as a grip to hold the vessel, and disperse heat away to prevent the carrier's hands from burning (Deal, 1982; Houston, 2014). This is an interesting idea, but in the case of Potosí from Greater Nicoya, the variation seen in applique design suggests this may not have been the intention of the applique. In many cases, however, it seems that vent holes on the effigies or closed parts of the censers are simply designed to prevent the ceramics from breaking or exploding during the firing process.

The Complete Vessel



Figure 11: Bird's eye view of Potosí censer base with scalloped rim profile. Photo courtesy of Mi Museo, Granada, Nicaragua.

The applique pellets on censers from other geographic locations has been compared to tree bark, particularly the Ceiba tree, due to the obvious visual similarities (for example Dreiss and Greehill [2008]; Houston [2014]; Kidder [1950]; Kurnick [2009]; Pennacchio, Jefferson, and Havens [2010]). Censer vessel forms from the Condega Museum in northern Nicaragua are reminiscent of the spikey vessels found in northern Central America, which are said to resemble Ceiba bark. In some cases, this is perhaps what is being mimicked on the Potosí surface, especially in cases where the pellets are uniform across the surface and of a taller, pointier nature. In ritual ceremony these specific Potosí vessels might act as a 'tree' or axis mundi connecting the physical realm to the spiritual one either below or above the surface of the earth depending on the ritual (Houston [2014]; Kurnick [2009]). I question if the wide variation in stylistic pellet renderings across the Potosí varieties has blurred our ability to recognize this as a potential option in Greater Nicoya. Figure 5 demonstrates linear incising reminiscent of the bark striations present on tree trunks, in addition to the general tree trunk form with incense perhaps representing the center of the tree. The lack of consistent design in the shape of the pellets and vessels that have non-uniform pellet designs, however, raise new



Figure 12: (right) Papagayo: Fonseca variety bowl Bowl with Painted Pin-Wheel Flower, AD 800—1250 Greater Nicoya, Costa Rica Denver Art Museum Collection: Gift of Frederick and Jan Mayer, 1995.524 Photography © Denver Art Museum (left) *Datura stramonium* flower. Photograph by Júlio Reis (2004), reproduced under the Creative Commons Attribution-Share Alike 3.0 Unported license.

questions and bring about additional hypotheses. This concept has been incorporated into other Nicaraguan art forms as well as, and is featured in the poem “La Ceiba” by Nicaraguan poet Pablo Antonio Cuadra (2007), where he mentions placing “hot embers on the trees for a kind of incense because they believe their ancestors emerged from the Ceiba’s roots.”

The general lack of appliqué bumps along the bottom portion of the incense burner base is very similar to remaining portion of the calyx below the hard fruit that replaces the *Datura* flower (Figure 15). Examining the appliqué bumps on the upper and lower portions of the vessel may suggest that complete vessels represent a thorny plant pod. On a slightly more abstract note, the upper and lower portions of the vessel could be representative of the cutting of the plant pod for content extraction.

For argument of this model to re-evaluate the imagery contained on this vessel, I am using the *Datura stramonium* plant as an organic reference. *Datura* has been explicitly noted in other research as being represented in incense vessel forms (for example, Camilla [1995]). As it is a naturally occurring plant in north-central Nicaragua, I believe that it could be a realistic option for organic imagery on the vessel (Figure 16). The intention here is to expand our current perspectives on the imagery represented on the ceramics of Greater Nicoya.



Figure 13: Triangular cut-outs on Potosí censer base. Photo courtesy of Mi Museo, Granada, Nicaragua.

There are a large number of vessels that have different geometric patterns in the place of the pellets. Rather than representing an entire plant pod, I suggest that these pellets are actually individual fruit or seedpods. One potential hypothesis is the use of Morning Glory (*Convolvulaceae*) seeds based on evidence for their pre-Columbian consumption from the Florentine codex (Sahagún, 1963). The use of Morning Glory seeds seems to have been focused in the Oaxaca region of Mexico, as well, where its use has been observed in divination by a Zapotec shaman (Schultes, 1998; Stafford, 2013). Cacao seed applique is similarly observed on censers from the Maya area, which has been suggested to “symbolize the human heart and that chocolate -the liquid made from the seeds of those pods- symbolizes human blood” (Kurnick, 2009). Larry Steinbrenner (2006) provides an excellent summary of the ethnohistoric accounts of cacao in Greater Nicoya, noting contact-period plantations identified across Pacific Nicaragua. Steinbrenner (2006, p. 269) suggests “cacao was known and used in Lower Central America before the arrival of the Mesoamericans” ca. AD 800. Bergmann (1969: Fig. 1) noted that the Rivas region was a secondary location for cacao cultivation. The large quantity of Potosí recovered from the Rivas and Ometepe archaeological zone (Healy,



Figure 14: Smaller, more delicate cross-shaped ('+') venting style on Potosí censer base. Photo courtesy of Mi Museo, Granada, Nicaragua.

1980; Bransford, 1881; Haberland, 1992), in addition to the production of cacao, provides further support of cacao seed representation on the body. I believe that there was a greater knowledge base of plant biology than what we as archaeologists currently allow for. Seeds carry knowledge, food, and medicine among other things, and I believe that there was a greater respect and desire to preserve the sacred element of the biological world in which people lived. Bransford (1881) mentions the presence of seeds in addition to coffee and beans as burial offerings on Ometepe. Iconography displaying seeds on ceramic vessels could be the ultimate form of respect to that plant, reinforcement of its important place in the ritual economy of life, alongside the addition of those seeds in burial offerings to individuals, perhaps needed to start their new life in another world.

An important side note is the differentiation of the iconographic organic elements represented on the surface versus actual organic products used inside, as incense. This would have allowed for a variety of organics to be used inside, that is to say, a ceramic to meet general incense needs versus a dedicated censer



Figure 15: Datura fruit pod. Photograph by Amada44 (2010), reproduced under the Creative Commons Attribution-Share Alike 3.0 Unported license.

for specific types of incense, and by extension ritual, based on exterior decoration. I believe that there are a variety of potential plants that may have served as the inspirational model for these ceramic styles such as *Ariocarpus fissuratus* (false Peyote), *Hylocereus undatus* part of the Cactaceae family (native), *Epiphyllum* (native), maguey, and Passiflora among others yet to be identified.

Final Comments and Avenues for Future Research

The widespread occurrence of this style of censer found in several different regions suggests there may be more generalized iconographic representations that transcend cultural boundaries and instead likely reflect the most basic item, or representation, of what is used inside the vessel. It is short-sighted to continue repetitive citations without further exploring wider worldview concepts or specific components of the world including organic materials. According to Abel-Vidor et al. (1987), the majority of Potosí is found outside of funerary contexts; future archaeological projects must explore alternative settings if we are to retrieve new archaeological data to explore ritual wares outside of traditional funerary sites.

As Dennett (2016) states, Potosí Applique requires additional compositional “re-evaluation as its traditional varieties (Santos and Potosí) actually represent different production locations and differing potting traditions.” Perhaps the combination of compositional and stylistic/iconographic analysis will further clarify or allow us to formalize the visible differences among the effigy forms invoked, vessel form styles, and applique pellet sequences. We also do not have extensive information about the extent of manufacturing for the different varieties, though Dennett (2016) has provided petrographic support for the Santos variety of Potosí Applique as being produced around the Granada City area. Some scholars working in other regions have associated “the low level of firing and poor finish of the censers [to] part-time non-specialist production” (Charlton, Nichols, and Charleton 1991, p. 107), although we do not know if this is the case for Greater Nicoya. It is also possible that these were manufactured for single-use events, thus ritual representation was more important than painted decoration. Perhaps they were created to mimic the earth they were created from or as tribute. Hopefully future large-scale projects can provide greater insight into the manufacture and role of Potosí Applique.

Residue analysis may also provide information as to regional differences among organics burned and thus preferred, available, or required for different rituals utilizing these types of censers. This could become a critical approach to future analysis of this vessel type, as it will provide additional direction to this model’s hypothesis that organic materials had a more important role in the iconographic imagery on the vessel than previously assumed. Residue analysis may also help us better understand which plants were used for spiritual purposes versus medicinal or dietary ones. While ethnohistoric sources may provide clues to potential incense used (Dennett, 2016), I strongly believe that residue analysis is the next necessary step to better our understanding of what was being burned.



Figure 16: Potosí censers from the Arguello private collection, Nicaragua. Photo courtesy of Larry Steinbrenner.

As previously mentioned, the intention in presenting this hypothesis and model is for re-evaluation using multiple lines of evidence, in this case building toward a future synthesis of iconographic and ethno-botanical analyses to expand our understanding of these important ceramics. Previous studies have tended to remove symbols from their practical contexts and physical world representations; they haven't then been amicably interpreted in artistic manners. I hope that future research can begin to tie the physical realm in which these communities lived to their artistic interpretations in the ceramic record. We must focus more strongly on multidisciplinary research if we are to better understand what is represented on these ceramics and how they were used.

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References

- Abel-Vidor, S., Baudez, C., Bishop, R., Bonilla, L., Calvo, M., Creamer, W. ... Tillett, A. (1987). Principales tipos ceramicos y variedades de la Gran Nicoya. *Vinculos*, 13(1/2), 7-318.
- Abrol, D. P. (2012). *Pollination Biology: Biodiversity Conservation and Agricultural Production*. Dordrecht: Springer.
- Bergmann, J. F. (1969). The distribution of cacao cultivation in Precolumbian America. *Annals of the Association of American Geographers*, 59(1), 85-96.
- Bransford, J. F. (1881). *Archaeological Researches in Nicaragua*. Washington D.C.: Smithsonian Institution.
- Camilla, G. (1995). Le erbe del diavolo: Aspetti antropologici. *Altrove*, 2, 105-115.
- Charlton, T. H., Nichols, D. L. and Charlton, C. O. (1991). Aztec Craft Production and Specialization: Archaeological Evidence from the City-State of Otumba, Mexico. *World Archaeology*, 23(1), 98-114.
- Cuadra, P. A. (2007). *Seven Trees Against the Dying Light: A Bilingual Edition* (Translated by Greg Simon and Steven F. White). Evanston, Illinois: Northwestern University Press.
- Deal, M. (1982). Functional Variation of Maya Spiked Vessels: A Practical Guide. *American Antiquity*, 47(3), 614-633.
- Dennett, C. L. (2016). *The Ceramic Economy of Pre-Columbian Pacific Nicaragua (AD 1-1250)* (Unpublished doctoral dissertation). Department of Archaeology, University of Calgary, Canada.
- Dennett, C. L., and Platz, L. A. (2017a). Materializing Ritual: Sorcery, Transformation, and Divination in Greater Nicoya. Poster presented at the 82nd Annual Meeting of the Society for American Archaeology, Vancouver, B.C.
- Dennett, C. L., and Platz, L. A. (2017b). Valorando la prosapia y el culto religioso de los Chorotega en la Gran Nicoya. Parte I: El culto religioso y la iconografía. Paper to be presented at the *XI Congreso de la Red Centroamericana de Antropología (RCA 2017)*, University of Costa Rica, San José.
- Dreiss, M. L. and Greenhill, S. (2008). *Chocolate: Pathway to the Gods*. Arizona: University of Arizona Press.
- Haberland, W. (1992). The Culture History of Ometepe Island: Preliminary Sketch (Survey and Excavation, 1962-1963). In F. W. Lange, P. D. Sheets, A. Martínez and S. Abel-Vidor (eds), *The Archaeology of Pacific Nicaragua* (pp. 63-117). Albuquerque: University of New Mexico Press.
- Healy, P. F. (1980). *Archaeology of the Rivas Region*. Waterloo, Ontario: Wilifred Laurier Press.
- Hough, W. (1912). *Censers and Incense of Mexico and Central America* (Volume 42; Volume 1887 of

- Proceedings of the United States National Museum). Washington, D.C.: Government Printing Office.
- Houston, S. (2014). *The Life Within: Classic Maya and the Matter of Permanence*. New Haven, Connecticut: Yale University Press.
- Kenna, M. E. (2005). Why Does Incense Smell Religious?: Greek Orthodoxy and the Anthropology of Smell. *Journal of Mediterranean Studies*, 15(1), 1-20.
- Kidder, A. V. (1950). Certain archaeological specimens from Guatemala, Part II. *Notes on Middle American Archaeology and Ethnology*, 1(95), 46-51.
- Kurnick, S. (2009). Crossing Boundaries: Maya Centers from the Guatemala Highlands. *Expedition*, 51(1), 25-32.
- Lange, F. W., Sheets, P. D., Martínez, A. and Abel-Vidor, S. (1992). *The Archaeology of Pacific Nicaragua*. Albuquerque, N.M.: University of New Mexico Press.
- Lothrop, S. K. (1926). *Pottery of Costa Rica and Nicaragua* (Contributions from the Museum of American Indian Heye Foundation, Vol. 8.). New York: Vreeland Press.
- Pennacchio, M., Jefferson, L. and Havens, K. (2010). *Uses and Abuses of Plant-Derived Smoke: Its Ethnobotany as Hallucinogen, Perfume, Incense, and Medicine*. Oxford: Oxford University Press.
- Rands, R. L. and Rands, B. C. (1959). The Incensario Complex of Palenque, Chiapas. *American Antiquity*, 25(2), 225-236.
- Sahagún, B. (1963). *Florentine Codex. General history of the things of New Spain* (Vol. 3, Book 11). Santa Fe, N.M.: School of American Research.
- Schultes, R. E. (1998). Antiquity of the Use of New World Hallucinogens. *The Heffter Review of Psychedelic Research*, 1, 1-7.
- Stafford, P. (2013). *Psychedelics Encyclopedia*. Berkeley, CA: Ronin Publishing.
- Steinbrenner, L. (2006). Cacao in Grater Nicoya: Ethnohistory and a Unique Tradition. In C. McNeil (ed.), *Chocolate in Mesoamerica: A Cultural History of Cacao* (pp. 253-270). Gainesville, FL: University Press of Florida.
- Stone, D. (1983). Synthesis of Pre-Columbian Ceramics from Costa Rica. *Indiana*, 8, 201-221.
- Viramonte, J. G. and Incer-Barquero, J. (2008). Masaya, The “Mouth o Hell”, Nicaragua: Volcanological Interpretation of the Myths, Legends and Anecdotes. *Journal of Volcanology and Geothermal Research*, 176, 419-426.
- Werner, P. (2000). *Ethnohistory of Early Colonial Nicaragua: Demography and Encomiendas of the Indian Communities*. *Institute for Mesoamerican Studies. Occasional Publication, No. 4*. Albany: State University of New York.
- Wingfield, L. (2009). *Envisioning Greater Nicoya: Ceramic Figural Art of Costa Rica and Nicaragua, c. 800 BCE – 1522 CE* (Unpublished doctoral dissertation). Emory University, Atlanta. Georgia, USA.
- Young-Sánchez, M. (editor). (2010). *Nature and Spirit: Ancient Costa Rican Treasures in the Mayer Collection at the Denver Art Museum*. Denver, CO: Denver Art Museum.