STONE VASE TRADITIONS IN MESOAMERICA: A CASE FROM HONDURAS

C. Luke¹, R.A. Joyce², J.S. Henderson¹, R.H. Tykot³

Abstract

Archaeological information from excavations reported here documents that marble carving traditions began in Honduras during the Early Formative period, 1600-1400 B.C. and continued until the end of the Terminal Classic period, A.D. 850-1050. We argue that stone carving traditions, particularly marble carving, were a local development in Honduras, which changed over time as settlement patterns and ideas of form and iconography shifted. Forms became more complex and standardized as social and political organizations became more focused. These traditions included not only marble, but limestone, greenstone, and basalt. Artifacts of stone include mace heads, manos and metates, bowls, vases, and freestanding stone sculpture. The majority of vases are carved from marble.

We suggest that Early Formative stone vase carving traditions set the stage for later traditions, specifically the use of marble. We examine relationships between ceramic and stone vase traditions, the use of vases in communities and the scale of production. Our evidence indicates that carving vases from marble became a skilled craft in Honduras. By the Late Classic period, stone vases represent luxury goods, regional identity markers, and provide evidence for the emergence of wealth and attached craft specialization in Mesoamerica.

Keywords: HONDURAS, STONEVASE TRADITION

Introduction

Honduran stone carving traditions begin during the Early Formative period, ca. 1600-900 B.C., and continue through the Terminal Classic period, ca. A.D. 850-1050. Objects carved from stone include monumental sculptures, bark beaters, stelae, ear spools, manos and metates, mace heads, pectorals, pendants, and vases. Stone vases are a special facet of the various stone carving traditions (Hirth and Grant HIRTH 1993). Carving vases from stone was practiced across Mesoamerica beginning in the Formative period. The Honduran tradition is unique among other traditions in its elaborate forms and material, specifically the use of marble. Regionally distinctive stone vases in Mesoamerica tend to be limited in number and associated with special contexts suggesting that they functioned as status and identity markers and ceremonial goods by the Classic period, if not earlier. This pattern is true in Honduras where stone vases are typically found in caves, caches, plazas, and burial mounds.

The focus of this paper is how the production of stone vases changes over time in Honduras. We examine relationships between ceramic and stone vase traditions, the use of vases in communities, and the scale of production. Based on the current data, stone carving traditions begin very early in Honduras, slightly later than the first ceramics. Vases are of very high quality; the delicate forms and thinness of the vessel walls as well as the highly polished surfaces are indicators of skilled craftsmanship. Following models of craft specialization (Clark and Parry 1990; Costin 1991), the production of luxury goods should occur as complexity increases within a community. In addition, patronage of luxury goods should follow contemporary canons of beauty in order to maintain and develop socially meaningful styles, which serve to impress and celebrate the high status of the patrons and other members of this elite group-rulers, nobles, merchants, and artisans (Clark and Blake 1994: 25-26; Joyce 2000).

A model for luxury goods: stone vases

Current research (CLARK and BLAKE 1994; GROVE and GIL-LESPIE 1992; JOYCE and GROVE 1999) shows that high status groups may have emerged throughout Mesoamerica during the Formative period, much earlier than previously thought. Excavations at Puerto Escondido as well as several other sites in Honduras (Talgua Cave, Yarumela, Los Naranjos, and Playa de los Muertos) demonstrate that communities may have been ranked by the Early Formative period (Maps 1 and 2), and participated in widespread Mesoamerican Formative networks involving the Pacific Coast, Gulf Coast, and Yucatan (HEN-DERSON and JOYCE, in press; JOYCE 1992, 1996, 1999; JOYCE and Henderson, 2001). We explore the possibly of fine quality stone vases as markers of status in the context of Formative material in Honduras and how the development of this tradition allows us to understand better the changes in social complexity. Our goal is to document how developments of stone carving in Honduras during the Formative period influenced choices made during later periods, particularly the Late-Terminal Classic period.

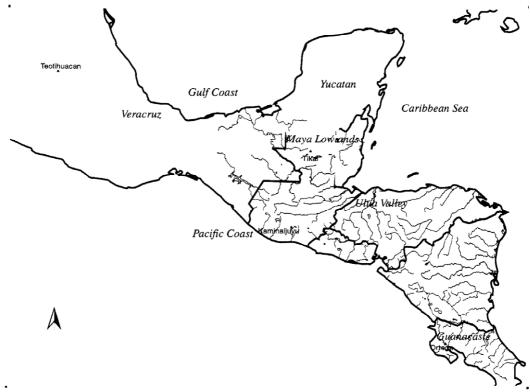
The Early Formative period marks the formation and promotion of concepts of cosmic order in Mesoamerica (Joyce 2000). During this time, jade, obsidian, and fancy ceramics functioned as high status markers (Clark 1987, Clark and Blake 1994; Grove and Gillespie 1992; Joyce and Grove 1999; Joyce 1992, 1996, 2000; Joyce and Henderson, in press). Following Clark and Blake (1994), communities and aggran-

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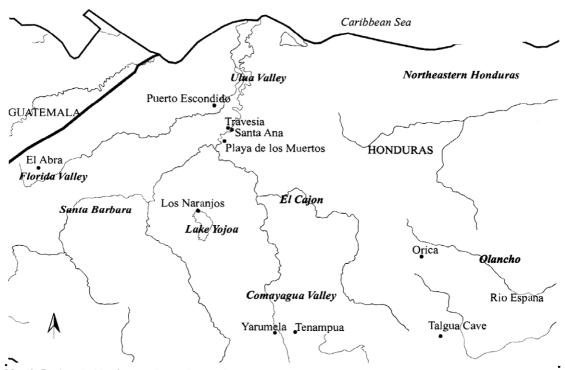
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Map 1: Mesoamerica and major sites and regions discussed in text



Map 2: Regions in Honduras and sites discussed in text

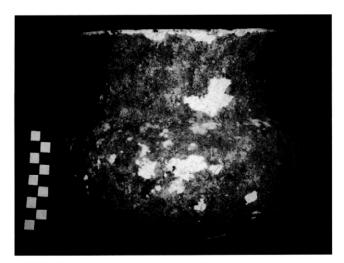


Fig. 1 - Middle Formative marble vase with red pigment, Talgua Cave. Instituto de Antropologia e Historia, Tegucigalpa, Honduras. Photo taken by C. Luke.

dizers within them competed for high status through the presentation of luxury goods during competitive feasting or what Dietler (1996) refers to as entrepreneurial feasts. These luxury goods served to link high status goods with the supernatural or cosmic order, which helped maintain and legitimate their emerging status (cf. Baines and Yoffee 1998; Joyce 2000).

We argue that Formative period stone vases are one indicator of the emergence of wealth in Honduras, based on their fine quality craftsmanship, rarity, and close relationship to contemporary ceramic forms. During the Early Formative in the Mazatan region of Chiapas, artisans produced ceramic vases that imitated contemporary gourd vessels. They followed contemporary vessel forms, but produced them in a new and more expensive medium (ceramics). This practice served to enhance their value, but did not tamper with meaningful social conventions (Clark and Blake 1994: 26)1. We argue that similar practices were operating in Honduras, but rather than gourd vessel forms made into ceramic forms, we focus on the possibility of marble and alabaster vases imitating ceramics. We discuss how the Honduran Formative period tradition of carving stone vases, particularly the use of marble, set the stage for later stone carving traditions in the context of the continued production of marble vases.

Formative period

Fine quality serpentine, alabaster, basalt, and greenstone bowls from the regions of Guerrero, the Tehuacan Valley, Mazatan, the Gulf Coast, and Central Mexico begin to be produced in the Formative period². Formative Honduran stone bowls and vases are unique among these traditions in style and in the use of marble or alabaster³. Vases date to the Early Formative period in the Lower Ulúa and Comayagua valleys and in certain regions of Olancho.

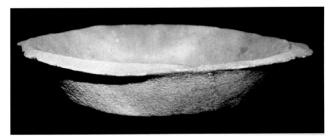


Fig. 2 - Early Classic marble bowl, Orica. Orica municipal collections, Honduras. Photo taken by C. Luke.

Formative and Early Classic stone vases reflect a canon for the period expressed in contemporary ceramic vases 4. Pottery forms from the Formative period include thin, elaborate bowls with cylindrical sides as well as the more common tecomate forms, often with burnished surfaces and/or incised designs. Lacking extensive surface decoration, the aesthetic quality resides in the overall form. Simple silhouette stone bowls, often with constricted necks or slightly flaring rims, represent a very sophisticated tradition of carving vases from a single piece of marble or alabaster that imitate these ceramic forms. The uniform thickness of less than five millimeters, with some examples less than three millimeters, demonstrates the fine craftsmanship achieved by the skilled artisans who produced these vases. Whole vases from Talgua Cave (figure 1), Orica (figure 2), collections housed in at the Instituto Hondureño de Antropología e Historia in Tegucigalpa (figure 1), the Museo de Antropología e Historia in San Pedro Sula, fragments of marble vases from Puerto Escondido (Joyce and Henderson 2001) and Yarumela (Joesink-Mandeville 1987: 200, pers. comm., 1996) demonstrate the stylistic similarities between ceramics and marble and alabaster vases.

Most likely used during festive occasions, these vases represent a specialized tradition, perhaps a particular form used as serving or drinking vessels during ritual feasting. These events can be described as patron-role feasts where the goal was to reiterate high status or entrepenuerial feasts aimed at establishing status (cf. Dietler 1996: 97). The vases represent the presence of a skilled artisan class as well as evidence for increased ceremonial practices.

When polished, marble has a nice luster, an almost milky appearance. Many of the early as well as late pieces do appear to be polished, but evidence indicates that a thin coat of red pigment was applied to the exterior of many vases as demonstrated on the Middle Formative (ca. 1000-800 B.C.) marble and alabaster vases from Talgua Cave, located in the region of Olancho (Dixon et al. 1998). All have a coat of red pigment applied to their exterior (Brady, pers. comm., 2000; LUKE, pers. obser., 1996). In addition to the marble vases, this deposit contained ceramics, and burial remains - all covered with red pigment. This suggests that either the white color was not important and the stone was chosen for its physical

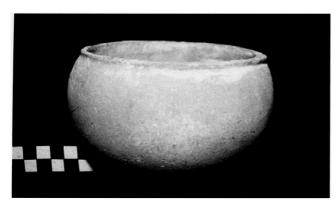


Fig. 3 – Early Classic marble bowl. Instituto de Antropologia e Historia, Tegucigalpa, Honduras. Photo taken by C. Luke.



Fig. 4 – Ulúa style polychrome. Red Group, Lug Head: Paloma cylinder. Ceramic and paint, H: 9-1/4 in. Chrysler Museum of Art, Norfolk, VA. Gift of Edwin Pearlman 87.194. Photo taken by C. Luke.

prosperities, or a specific practice of hiding or concealing a finely polished white surface with red pigment reflects certain social events possibly associated with ceremony (see Luke, this volume). This tradition also follows contemporary ceramic traditions of coating Formative period ceramics with fugitive red pigment (Joyce and Henderson, 1998).

The best context for Formative period stone vases in Honduras comes from Puerto Escondido (Henderson and Joyce, in press; Joyce and Henderson, 2001). Two fragments of stone vessels were recovered in Early Formative contexts, stratified deposits created through the successive remodeling of perishable buildings during the Early Formative period. One of these, made of granite, was deposited in the late Ocotillo phase (ca. 1600-1400 B.C.). The other, made of marble, was recovered from a context associated with early Ocotillo phase remodeling, along with Guatusa complex sherds of the Barahona phase (ca. 1600-1400 B.C.). These stone vase fragments demonstrate that a stone carving tradition was established in Honduras by the Early Formative period, and that marble vessels were used within domestic contexts.

In sum, during the Formative period marble and alabaster bowls become an important commodity in Honduras. Their chronological placement, slightly later than ceramics, suggests that the forms of stone vases imitated ceramics, following an accepted canon for the period. However, the new material, marble and alabaster, and the crafting skills necessary to produce stone vases suggest that they had a greater value than ceramic vases.

Classic period

Stone vases from Early and Late Classic periods are found throughout Mesoamerica⁵. Like the Formative period vases, Honduran Early Classic period vases are carved from marble in unique forms distinct from Mesoamerican alabaster, tecali, and basalt vessels.

Two Early Classic stone bowls, both made of marble, at Puerto Escondido are from an intrusive pit cut into Middle Formative fill. The associated ceramics date to the Early Classic, Chamelecon phase, ca. A.D. 200-450. Marble bowls housed at the Instituto Hondureño de Antropología e Historia in Tegucigalpa are also attributed to the period between the Late Formative to Early Classic period, ca. 100 B.C.-A.D. 200 (figure 3). One vase from the region of Orica (figure 2) is an open vessel with a scalloped flaring rim. It is very similar to pieces from Early Classic Kaminaljuyu (Shook 1969). Like the Formative period stone vases, these vessels mimic contemporary ceramic forms.

During the Classic period, Ulúa style polychrome ceramic vases begin to be produced in the Lower Ulúa Valley. This marks a significant shift in ceramic production during a period of increasing population growth in the region (Henderson 1992 b; Joyce 1985, 1991, 1993 a & b). These objects were also used as serving vessels and distribution patterns indicate that access to this type of pottery was not restricted (Henderson 1992 a; Joyce 1985, 1991, 1993 a). Therefore, in contrast to the situation in the Maya world, polychrome pottery is not believed to have been a marker of elite status in the Lower Ulúa valley.

It is during this period that Ulúa style marble vase production begins. Unlike the polychrome vases, marble vases do show restricted distribution at large centers suggesting that high status groups used these vessels. The majority of Ulúa marble vases are from the region surrounding the site of



Fig. 5 - Ulúa style polychrome, Travesía. Maroon Group, Lug Head: Bombero cylinder fragments. Staatliche Museen zu Berlin - Preußischer Kulturbesitz. Ethnologishes Museum. Photo taken by C. Luke.

Travesía, where they have been found only in special contexts such as caches and burials associated with other putative elite goods (Henderson 1992a; Luke, n.d.). Most likely used as drinking vessels during ceremonial activities, these vessels provide the best evidence for the emergence of an elite in the region (Luke, n.d.; Luke and Tykot 2001).

Like other Honduran marble vases, Ulúa style marble vases are part of a canon of the period. The earliest vases are cylinders, lacking handles, with repeating vertical and horizontal mat designs, similar to Red Group, Cyrano: Cyrano (Luke, n.d.). Several of these vases have ring-supports, a form documented in Early Classic ceramics (Beaudry-Corbett et al., 1993) and on Red Group, Cyrano: Cyrano (Joyce 1993a). Vases with bird handles and ring-supports mark the next stage of production, related to Maroon Group, Lug Head: Paloma (figure 4; Luke, n.d.). Shortly after the initial production period, the tripod drum style becomes very popular and it is most likely related to Early and Middle Classic period tripod ceramic forms (Luke, n.d.; Schaffer 1992). Dual lug handles on ceramic cylindrical vases are found in El Salvador, Comayagua, and the Lower Ulúa Valley. Marble vases reflect an expansion of this ceramic tradition – tripod drums and cylinders with ring bases and dual lug handles - most closely related to Maroon Group, Lug Head: Paloma and Bombero (figures 4 and 5; Luke, in press, n.d.; Luke and Tykot 2001; cf. Viel 1978; cf. Joyce 1993a). Bird handles appear first on Ulúa marble style vases followed by bat, monkey, feline, and composite forms (figures 6, 7 and 8)6. The later cylindrical Ulúa style marble vases with composite handles are more closely linked with iconographic traditions from the Central Maya region.



Fig. 6 - Ulúa style marble vase. Middle American Research Institute. Tulane University, New Orleans, LA.



Fig. 7 – Ulua style marble vase, Travesía. Staatliche Museen zu Berlin Preußischer Kulturbesitz. Ethnologishes Museum.

Across Mesoamerica, the Late Classic period marks the development of regionally specific stone vase traditions. Vessels are typically associated with special contexts suggesting that stone vases functioned as markers of elite groups and regional identities: Central Maya alabaster vases (Ahumada et al. 1999: 75-80; Chase and Chase 1989: 20; Coe and Kerr 1997: 91, 138-39, figs. 10, 48, 101, pls. 64, 97; Nakamura 1987; WILLEY et. al 1994; FASH 1991), Yucatan tecali vases (collections at the Dallas Museum of Art; MOHOLY-NAGY and LADD 1992: 102-105; Ruz Lhuiller 1954: 6, fig. 6, pl. 24; Thomp-SON 1938) and Ulúa style marble vases (STONE 1938; LUKE, n.d.; Luke, this volume). The Ulúa marble style is unique to the Lower Ulúa Valley and reflects the continued development of a long-standing marble vase tradition. Late Classic vases are carved from marble into specific forms and with a limited set of iconographic motifs.



Fig. 8 – Ulúa style marble vase, Santana. Middle American Research Institute. Tulane University, New Orleans, LA.

Unlike earlier stone vase traditions in Honduras, the exterior of Ulúa marble vases is carved in a very specific iconographic program. Sculpted volutes, often creating profile and central images, are unique from local ceramics and other stone vase and sculptural traditions. Sculpted borders in the form of scales, voussures, interlocking keys, and/or the mat motif usually frame these profile and central images. This imagery marks a completely new set of images not previously part of the Ulúa valley iconographic repertoire and closely related to imagery from the Pacific and Gulf Coast regions of Mesoamerica (Luke, n.d.). Evidence suggests that portions of the exterior were covered in stucco as in the earlier traditions.

Several factors account for why marble was chosen for Ulúa style stone vases. After years of carving stone into various forms, skilled craftsmen understood that marble was soft enough to be manipulated with reasonable labor expenditure, it was fine enough to sculpt intricate programs, source location was known, and the color may have provided important symbolism. The tradition of carving vases from marble held considerable importance, as this had been the practice for over 1.600 years. The established tradition of luxury vases made from marble continued well into the Late and Terminal Classic periods. Outside the Ulúa Valley, these vases were seen as exceptional objects, carved with powerful iconographic programs, and from a material not abundant in other regions of Mesoamerica. Found in high status contexts in Nicaragua (Espinoza Perez et al., 1996), Costa Rica (Ferrero 1981: 88;

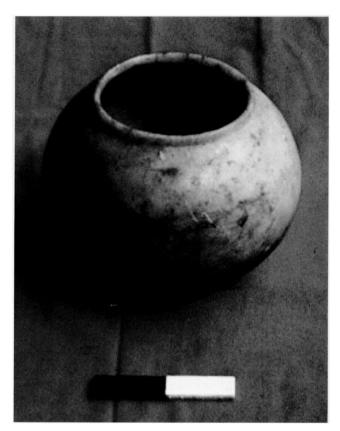


Fig. 9 – Late Classic green stone bowl, Travesía. Instituto de Antropologia e Historia, Tegucigalpa, Honduras.

STONE 1972: 141), and the Maya Lowlands (KIDDER 1947; PENDERGAST 1990, 1982; THOMPSON 1939), these vases most likely served as presentation gifts during important ceremonies commemorating alliances at home and abroad.

As Ulúa polychrome vases were most likely used during feasting events, including both eating and drinking symbolic recipes, it is reasonable to suggest that Ulúa style marble vases had a similar function. Yet, unlike Ulúa polychrome feasts, those involving marble vases may have served to visually distinguish among ranked differences in social status among community members, specifically the presence of an elite group. These diacritical feasts (Dietler 1996: 98) may have functioned as performances where regional and long-distance alliances were celebrated and reaffirmed.

Evidence suggests that at least two or three other stone vase carving traditions were present during the Late Classic and Terminal Classic periods. Several marble vases, now housed at the Instituto Hondureño de Antropología e Historia in Tegucigalpa, indicate a tradition of carving vases from stone on the Bay Islands. Several Late Classic vases, from the Patuca region, are unique in their elegant forms as well as their material, greenstone (Smithsonian A373427-0). These vases are

very similar to one vase from Travesía (figure 9). Given the abundance of greenstone arrifacts from the Patuca region (Smithsonian collections, Luke pers. obser., 1998) it seems possible that a greenstone source could be located in the region and that vases made from greenstone were luxury gifts. A tripod base fragment of a greenstone vase recovered from Mantecales is in the Ulúa marble form, but the lack of imagery and the green color of the stone suggest that it might be more closely related to the Patuca stone carving tradition. Finally, a worked piece of exquisite green marble from Cerro Palenque (Hendon and Lopiparo, in press) also suggests an additional stone carving tradition, specifically the carving of greenstone. This tradition may be related to other greenstone vase traditions in Mesoamerica.

The location of this greenstone source is not known. However, Marmoles de Honduras, a modern marble quarry firm, notes at least three greenstone sources in Honduras: one near Tegucigalpa, one near Los Cedars, and one in Olancho. These sources were not visited during the 1996, 1999, and 2000 survey seasons (Luke and Tykot, in press; Luke, n.d.). This information suggests that greenstone may not have been imported into Honduras, and may be a locally available.

Production

The continued use of marble for carving vases over a period of two thousand years indicates a considerable time-depth tradition in Honduras. As JOYCE (2000) has argued elsewhere, the development of specialized crafting skills in Formative Mesoamerica created a class of craft specialists underwritten by elites. Stone vases represent an important specialized crafting skill. In Honduras, marble and alabaster vases indicate the presence of high quality craftsmanship as well as specific procurement strategies - to be expected with skilled crafting practices. «To the extent that products of these craft workers perpetuated success in display by their patrons, the same social groups would continue to set the standards of beauty, one of the scales of value by which wealth could have been assessed» (JOYCE 2000). A suite of iconographic motifs, ritual performances, and luxury goods developed during the Formative period and set the parameters within which later Mesoamerican elites operated. Lavish use of items of high culture by Late Classic elites was extremely traditional in the selection of valued materials (JOYCE 2000; cf. Baines and Yoffee 1998). Evidence from Honduras follows this model nicely. Given the various culture groups living in Honduras over a two thousand year period, this perpetuation of stone vase production was most likely not facilitated by political continuity. Rather it appears that the waxing and waning of political and social power operated within a defined vocabulary of material products of high culture established during the Formative period.

By the Late Classic period, stone vase production became highly standardized. The use of alabaster ceased while the procurement of marble for the production of Ulúa marble style vases became highly organized focusing on one central procurement zone 7. Sixty-seven of the seventy-one vases sampled show high probability of coming from the same quarry indicating restricted procurement strategies and control of production organization. In conjunction with the stable isotope results, distributional and stylistic data from 153 vases strongly point to a production area at or in the near vicinity to the site of Travesía (Luke, n.d.). It is unlikely that an actual workshop with marble scrap heaps and/or unfinished vases will ever be identified at this site because it has been extensively and intensively looted for Uúa style marble vases, among the most valued items on the Pre-Columbian antiquities market 8. The special contexts, limited circulation, elaborate iconography and restricted procurement activities of Late Classic marble vases suggest restricted production, perhaps attached specialization. An additional tradition of carving greenstone vases may be contemporary with these marble vases or may be just slightly later.

Stable isotope results from two Late Classic marble vases not part of the Ulúa marble style, currently housed at the Museo de Antropología e Historia, San Pedro Sula, are produced from sources other than those used for the Ulúa marble style. This evidence indicates that stone carving traditions during the Late Classic period can be linked with specific procurement regions.

Future results from a sub-set of Formative and Early Classic marble bowls will allow us to understand when specialized procurement and production strategies began in Honduras. This data will be used in conjunction with settlement pattern and ceramic data to discuss possible relationships between increasing complexity and craft specialization.

Conclusions

Among the various stone carving vase traditions in Mesoamerica, the Honduran tradition is unique. Beginning in the Early Formative period, vases were carved from marble and alabaster. By the Late Classic period, marble was preferred to alabaster. Similar to other stone vase traditions in Mesoamerica, Honduran stone vases tend to mimic contemporary ceramics in form during all time periods.

The limited number of stone vases and their fine quality compared to other artifact groups in Mesoamerica during all time periods suggests that stone bowls functioned as luxury goods and regional identity markers beginning in the Formative period and most definitely by the Late Classic. The production of Late Classic Ulúa marble style vases developed out of existing marble carving traditions integrating new forms and iconographic motifs. This style is unique in Mesoamerica suggesting that the vases functioned as markers of an Ulúan identity outside of the region. Ulúa marble vases found in special contexts in Costa Rica, Belize and Guatemala indicate that they functioned as luxury goods exchanged among elite groups.

Given the long-standing tradition of marble vases as high status goods in Honduras, we suggest that Early Formative traditions played a vital part in establishing this luxury good. Carving vases from stone during the Formative period served to set the stage for later luxury production. Classic period communities drew from traditional technologies to provide links to their historical past, thereby legitimating their emerging status.

Acknowledgements

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Notes

¹Clark and Blake (1994: 25-26) argue that aggrandizers borrowed foreign ceramic technologies for personal advantage.

² The earliest hemispherical bowls are from the Tehuacan Valley dating to the Coxcatlan phase (4800-3500 B.C.; MACNEISH, Nelken-Terner and Johnson 1967: 117-118). These granite bowls are crude in form and style and may reflect the first alternative material to gourds, prior to ceramic production. Stone bowls continue to be produced in the Tehuacan Valley until the Late Classic period and the quality becomes more elegant and the material shifts from granite to limestone and marble. Twenty-three stone bowls and vases from San Lorenzo (Coe and Diehl 1980: 232-234, 294) date from the Early Formative (Ojochi phase, 1500-1300 B.C.) to the Villa Alta period (A.D. 900) with the majority dating to the Formative periods (collections at the Peabody Museum of Natural History at Yale University). Other stone vases have been reported from the Ocos and Chiapa de Corzo I phases and the Formative period phases at Tlatilco (MACNEISH, NELKEN-TERNER and JOHNSON 1967: 117-118). Greenstone vases from Xochipala (GAY 1972: 48-50) and stone vases from Atopula (Henderson, 1979) in Guerrero date to the Formative period. Thirty vases from Xochipala carved from greenstone, often with incised, sculpted, and polished designs on the exterior, suggest a specialized workshop. Stone vases from the Barra phase in the Mokaya region of Soconusco imitate fancy ceramics (Clark and Blake 1994:22) One stone vase from Chalcatzingo (Grove, 1987: 335) with an incised exterior design dates to the Cantera phase (700-500 B.C.), equivalent to the Middle Formative. In all of these cases, with the exception of the early Tehuacan vases, the vases are very high quality, presumably not everyday goods.

³ Marble and alabaster were preferred to granite, volcanic tuff, limestone, and greenstone – all available in Honduras. Unlike many greenstones, marble is relatively soft, making it easy to carve. Yet, it is more durable than soapstone and finer than volcanic tuff or granite, allowing for the production of vases with very thin walls and fine designs.

⁴ A similar pattern is found in the Mazatan region. During the Locona phase (beginning ca. 1400 B.C.) «artisans made ceramic

vessels and figurines, elaborate carved stone bowls that imitated fancy ceramic forms, greenstone beads, and, perhaps, textiles and cordage» (Clark and Blake 1994: 22).

⁵ Early Classic stone vase traditions are documented from the southern regions of Mexico and the Guatemalan highlands and lowlands. Vessels from Chalchuapa date to the Late Formative through Early Classic periods (SHEETS 1978: 35-37). At Zaculeu (Woodbury and Trik 1954: 241) and Kaminaljuyu (Shook and KIDDER 1961) pairs of joined alabaster cups are found in Early Classic tombs. Carved from a single piece of alabaster, the presentation of two cups side-by-side is unique in Mesoamerica. A similar pair is on display at the Princeton Museum of Art and attributed to Teotihuacan III, ca. A.D. 500. Stucco remains are found on the paired cups from Kaminaljuyu (SHOOK and KIDDER 1961) and two cups currently housed at the Instituto de Antropologia e Historia in Tegucigalpa, Honduras. A tripod marble vase with a labial flange is from Finca Arizona, Guatemala (Shook 1969: 213). One vase from Tikal (SHOOK and KIDDER 1961) is very claborate with incised glyphs and remains of stucco on the rim and base. Marble bird vases are found at Kaminaljuyu (Miraflores ca. 200 B.C.; Shook and Kidder 1961), in the Cuyamel caves near the site of Copán (Healy 1984), and in the Ulúa Valley (Strong, Kidder and PAUL 1936).

There are several stone vases on display at the Popol Vuh Museum other than the two Ulúa style vases. One is particularly interesting. It is a tripod drum with very thin walls and an exterior midband rope motif. There is a channel through the wall of the vase that has openings at the lip and at the interior of the base. There are remains of red pigment and white stucco. The other vase is a cylinder tripod. Not on display, but it the storage area, are ten other vases. Two of these date to the Early Classic. One is a doublecup like those from Kaminaljuyu and the other is a tripod drum with a scalloped rim. This vessel is similar to one from Orica, Honduras. The other remaining eight vases vary in style and quality.

Only two stone vases are known from Teotihuacan, both from burial contexts (Sempowski and Spence 1994: 53, 103, 158, 168,191). One vase, an onyx bowl, dates to the Xolalpan phase (A.D. 400-700) and was associated with stucco vases, jade, miniature vessels, bowls, and jars. The other vase, made from alabaster, has four supports and was associated with bone needles, obsidian, bowls, miniature vessels, painted slate and a pyrite disc. It dates to the Tlamimilolpa phase, A.D. 200-400. These contexts reflect, again, stone vases associated with rich deposits.

⁶Within the Lug Head types there are two varieties: Paloma and Bombero. Paloma dates slightly earlier than Bombero. The distinguishing features of these varieties are a diagnostic red color on Paloma with bird handle forms and a maroon color on Bombero with monkey handle forms (JOYCE 1993a, 1993b).

⁷ During a regional survey of the Lower Ulúa Valley (January 1995, June 1996 and January 2000) marble and limestone sources were located (LUKE and TYKOT, in press). No alabaster sources were located suggesting that Late Classic production focused on marble because it was locally available and alabaster was not.

⁸ Fakes of Ulúa style marble vases do exist. They are easily recognizable by erroneous associations of iconographic motifs and forms as well as modern tool marks, particularly evidence of metal tools, not available in antiquity.

Table 1 – Chronological periods and Ceramic complexes

		Period	Lower Ulúa Valley	Ceramic complexes
A.D. A.D.	1050 850 650	Terminal Classic	Santiago Late Ulúa	
A.D. A.D.	400 250	Early Classic	Early Ulúa Late Chamelecon Middle Chamelecon	
200 700	B.C.	Middle Formative Early Formative	Early Chamelecon Playa	Toyos Sula
900 1100 1400	B.C. B.C.		Chotepe Ocotillo	Causel Cusuco
1600	B.C.		Barahona	Gualusa

References

AHUMADA, ALEJANDRO TOVALIN, VELAZQUEZ DE LEON COLLINS, J. Adolfo and Ortiz, Victor M. Villareal 1999 Cuenco de Alabastro con Decoracion Incisa Procedente de Bonampak. Mexicon, Vol. XXI: 75-80.

Baines, John and Yoffee, Norman 1998 Order, Legitimacy and Wealth in Ancient Egypt and Mesopotamia. In Archaic States: A Comparative Approach, edited by GARY FEINMAN and Joyce Marcus, pp. 199-260. Santa Fe.

BALL, JOSEPH W. 1993 Pottery, Potters, Palaces, and Polities: Some Socioeconomic and Political Implications of Late Classic Maya Ceramic Industries. In Lowland Maya Civilization in the Eighth Century A.D., edited by JEREMY A. SABLOFF and JOHN S. Henderson, pp. 243-272. Washington, D.C.

Beaudry-Corbett, Marilyn, Pauline Caputi, John S. Hender-SON, ROSEMARY A. JOYCE, EUGENIA J. ROBINSON, and ANTHONY Wonderley 1993 Lower Ulúa Region. In Pottery of Prehistoric Honduras: Regional Classification and Analysis, edited by JOHN S. HENDERSON and MARILYN BEAUDRY-CORBETT. Los Angeles: Institute of Archaeology, University of California. Monograph 35.

Chase, Arlen F. 1992 Elites and Changing Organization of Classic Maya Society. In Mesoamerican Elites, edited by DIANE Z. Chase and Arlen F. Chase. Norman.

CHASE, ARLEN F. and CHASE, DIANE Z. 1989 Investigations at the Classic Maya City of Caracol, Belize. San Francisco: Pre-Columbian Art Research Institute. Monograph 3.

CLARK, JOHN E. 1987 Politics, Prismatic Blades and Mesoamerican Civilization. In The Organization of Core Technology, edited by J.K. Johnson and C.A. Morrow, pp. 259-284. Boudler, Colorado.

CLARK, JOHN E. and BLAKE, MICHAEL 1994 The Power of Prestige: Competitive Generosity and the Emergence of Rank Societies in Lowland Mesoamerica. In Factional Competition and Political Development in the New World, edited by E.M. Brumfiel and J.W. Fox, pp. 17-30. Cambridge, England.

CLARK, JOHN E. and PARRY, WILLIAM J. 1990 Craft Specialization and Cultural Complexity. In Research in Economic Anthropology, Volume 12, pp. 289-346.

COE, MICHAEL D. and DIEHL, RICHARD A. 1980 In the Land of the Olmec: The Archaeology of San Lorenzo Tenochtitlan. Vol. I. Austin.

COE, MICHAEL D. and KERR, JUSTIN 1997 The Art of the Maya Scribe.

COSTIN, CATHY L. 1991 Craft Specialization: Issues in Defining, Documenting, and Explaining the Organization of Production. In Archaeological Method and Theory, edited by Michael B. Schiffer, Volume 3, pp. 1-56.

DIETLER, MICHAEL 1996 Feasts and Commensal Politics in the Political Economy: Food, Power and Status in Prehistoric Europe. In Food and the status quest: An Interdisciplinary Perspective, edited by Polly Wiessner and Wolf Schiefenhovel, pp. 87-125. Providence, RI.

DIXON, BOYD, HASEMANN, GEORGE, GÓMEZ, PASTOR, BRADY, JAMES E., and Beaudry-Corbet, Marilyn 1998 Multi-Ethnicity or Multiple Enigma: Archaeological Survey and Cave Exploration in the Río Talgua Drainage, Honduras. Ancient Mesoamerica 9:

ESPINOZA PEREZ, EDGAR, LARAINE FLETCHER, RONALDO SALGADO GALEANO 1996 Arqueologia de las Segovias: una secuencia cultural preliminar. Managua, Nicaragua: Instituto Nicaraguense de Cultura: Organizacion de los Estados Americanos.

FASH, WILLIAM 1991 Scribes. Warriors and Kings. London.

FERRERO, LUIS 1981 Costa Rica PreColumbina. San Jose.

GAY, CARLO T.E. 1972 Xochipala: The Beginnings of Olmec Art. The Art Museum, Princeton University. Princeton.

GROVE, D.C. 1987 Ancient Chalcatzingo. Austin.

GROVE, D.C. and GILLESPIE, SUSAN 1992 Archaeological Indicators of Formative Period Elite: A Perspective from Central Mexico. In *Mesoamerican Elites: An Archaeological Assessment*, edited by DIANE Z. CHASE and ARLEN F. CHASE, pp. 157-168. Norman

HARTMAN, C. 1907 Archaeological Researches on the Pacific Coast of Costa Rica. *Memoirs of the Carnegie Museum of Natural History* 3(1): 1-88.

HEALY, PAUL 1984 The archaeology of Honduras. In *The Archaeology of Lower Central America*, edited by Fred Lange and Doris Stone, pp. 113-164. Albuquerque.

HENDERSON, JOHN S. 1979 Atopula. New Haven.

HENDERSON, JOHN S. 1988 Investigaciones arqueologicas en el Valley de Sula. Yaxkin XI: 5-30.

HENDERSON, JOHN S. 1992a Elites and Ethnicity along the Southeastern Fringe of Mesoamerica. In *Mesoamerican Elites:* An Archaeological Assessment, edited by DIANE Z. CHASE and ARLEN F. CHASE, pp. 157-168. Norman.

HENDERSON, JOHN S. 1992 b Variations on a theme: a frontier view of Maya civilization. In *New Theories on the Ancient Maya*, edited by E.C. Danien and R.J. Sharer, pp. 161-71. Philadelphia.

HENDERSON, JOHN S. and JOYCE, ROSEMARY A. 1998 Investigaciones Arqueológicas en Puerto Escondido: Definición del Formativo Temprano en el Valle Inferior del Río Ulúa. *Yaxkin* XVII: 5-35.

HENDERSON, JOHN S. and JOYCE, ROSEMARY A. in press Puerto Escondido: Exploraciones Preliminares en el Formativo Temprano. Presented at the VII Seminario de Antropología de Honduras: «Dr. George Hasemann». Instituto Hondureño de Antropología e Historia, Tegucigalpa. *Yaxkin*.

HENDON, JULIA A. and LOPIPARO, JEANNE in press Investigaciones Recientes en Cerro Palenque, Cortés, Honduras. Presented at the VII Seminario de Antropología de Honduras: «Dr. George Hasemann». Instituto Hondureño de Antropología e Historia, Tegucigalpa. *Yaxkin*.

HIRTH, K. and HIRTH, S. GRANT 1993 Ancient Currency: The Style and Use of Jade and Marble Carvings in Central Honduras. In *Precolumbian Jade: New Geological and Cultural Interpretations*, edited by Frederick W. Lange, pp. 173-190. Salt Lake City.

JOESINK-MANDEVILLE, L.R.V. 1987 Yarumela, Honduras: Formative period cultural conservatism and diffusion. In *Inter-*

action on the Southeast Mesoamerican Frontier, edited by EUGENIA J. ROBINSON. BAR International Series 327.

JOYCE, ROSEMARY A. 2000 High Culture, Mesoamerican Civilization, and the Classic Maya Tradition. In *Order. Legitimacy* and Wealth in Ancient States, edited by Janet Richards and Mary Van Buren, pp. 64-76, Cambridge.

JOYCE, ROSEMARY A. 1999 Social Dimensions of Pre-Classic Burials. In *Social Patterns in Pre-Classic Mesoamerica*, edited by DAVID C. GROVE and ROSEMARY A. JOYCE, pp. 15-47. Washington, D.C.

JOYCE, ROSEMARY A. 1996 Social Dynamics of Exchange: Changing Patterns in the Honduran Archaeological Record. In Chieftains, Power and Trade: Regional Interaction in the Intermediate Area of the Americas, edited by Carl Henrik Langebaek and Felipe Cardenas-Arroyo, pp. 31-45. Bogota, Colombia: Departamento de Antropología, Universidad de los Andes.

JOYCE, ROSEMARY A. 1993a The Construction of the Mesoamerican Frontier and the Mayoid Image of Honduran Polychromes. In *Reinterpreting Prehistory of Central America*, edited by Mark Miller Graham, pp. 51-102. Nitwot.

JOYCE, ROSEMARY A. 1993 b Appendix for Polychromes. In *Pottery of Prehistoric Honduras: Regional Classification and Analysis*, edited by J.S. HENDERSON and M. BEAUDRY-CORBETT, pp. 64-135. Los Angeles: UCLA Institute of Archaeology, Monograph No. 35.

JOYCE, ROSEMARY A. 1992 Innovation, Communication and the Archaeological Record: A Reassessment of Middle Formative Honduras. *Journal of the Steward Anthropological Society* 20: 235-256.

JOYCE, ROSEMARY A. 1991 Cerro Palenque: Power and Identity on the Maya Periphery. Austin.

JOYCE, ROSEMARY A. 1986 Terminal Classic Interaction on the Southeast Maya Periphery. *American Antiquity* 51 (2): 313-329.

JOYCE, ROSEMARY A. 1985 Cerro Palenque, Valle de Ulúa Honduras: Terminal Classic Interaction on the Mesoamerican Periphery. Ph.D. dissertation, Anthropology, University of Illinois, Urbana.

JOYCE, ROSEMARY A. and GROVE, DAVID C. 1999 Asking New Questions about the Mesoamerican Preclassic. In *Social Patterns in Pre-Classic Mesoamerica*, edited by DAVID C. GROVE and ROSEMARY A. JOYCE, pp. 127-153. Washington, D.C.

JOYCE, ROSEMARY A. and HENDERSON, JOHN S. 2001 Beginnings of Village Life in Eastern Mesoamerica. *Latin American Antiquity* 12 (1): 5-24.

JOYCE, ROSEMARY A. and HENDERSON, JOHN S. 1998 Before Playa de Los Muertos: The Early Formative Archaeology of the Lower Ulúa River Valley. Manuscript in possession of authors. Kerr, Justin 1990 *The Maya Vase Book*, Vol. 2. Kerr Associates.

KIDDER, A.V. 1947 Artifacts of Uaxactun. Carnegie Institution of Washington Publication 576. Washington, D.C.

Kidder, A.V., Jennings, J.D., and Shook, E.M. 1946 Excavations at Kaminaljuyu, Guatemala. Washington, D.C.: Carnegie Institution of Washington, Publication 561.

LANGE, FREDRICK W. (editor) 1993 PreColumbian Jade: New Geological and Cultural Interpretations. Salt Lake City.

LEHMANN, WALTER 1909 Methods and Results in Mexican Research. Translated by Seymour de Ricci from Archiv fur Anthropologie, vol. 4, pp. 113-68, 1907.

LONGYEAR, JOHN, M. 1952. Copan Ceramics. Washington DC: Carnegie Institution of Washington, Publication 597.

LUKE, CHRISTINA in press Los vasos del mármol: los períodos Clásico Tardío y Clásico Terminal en el valle del Río Ulúa, Honduras. Presented at the VII Seminario de Antropología de Honduras: «Dr. George Hasemann». Instituto Hondureòo de Antropología e Historia, Tegucigalpa. Yaxkin.

LUKE, CHRISTINA M. n.d. Ulúa style marble vases. Ph.D. dissertation draft, Anthropology, Cornell University.

LUKE, CHRISTINA and TYKOT, R.H. 2001 Craft Specialization in Late Classic Ulúan Communities: Ulúa Style Marble Vases. Paper presented at the 66th Annual meeting of the Society for American Archaeology, San Francisco.

Luke, Christina and Tykot, R.H. in press Marble Sources and Artifacts from the Ulúa Valley, Honduras, Association for the Study of Marble and Other Stones in Antiquity (ASMOSIA V). Museum of Fine Arts, Boston.

Luke, Christina, Tykot, Robert H., and Scott, Robert 2000. A Scientific Study of Marble Vases and Sources from the Ulúa Valley of Honduras: Stable Isotope and Petrographic Analysis. Manuscript.

MACNEISH, RICHARD S., NELKEN-TERNER, ANTOINETTE and JOHNSON, IRMGARD W. 1967 The Prehistory of the Tehuacan Valley, Vol. II: Nonceramic Artifacts. Austin and London.

Moholy-Nagy, Hattula and Ladd, John M. 1992 Objects of Stone, Shell, and Bone. In Artifacts from the Cenote of Sacrifice: Chichen Izta, Yuacatan, Textiles, Basketry, Stone, Bone, Shell, Ceramics, Wood, Copal, Rubber, Other Organic Materials and Mammalian Remains, edited by CLEMENCY CHASE COGGINS, pp. 99-152. Cambridge: Peabody Museum of Archaeology and Ethnology, Harvard University.

NAKAMURA, SEICHI 1987 Reconocimiento Arqueologico de los Valles de La Venta y de Florida. Yaxkin X, Vol. 1, 1-37.

PASZTORY, ESTHER 1978 Middle Classic Mesoamerica: A.D. 400-700. New York.

PENDERGAST, DAVID M. 1990 Excavations at Altun Ha, Belize, Volume 2. Toronto, Canada: Royal Ontario Museum.

PENDERGAST, DAVID M. 1982 Excavations at Altun Ha, Belize, Volume 3. Toronto, Canada: Royal Ontario Museum.

Pendergast, David M. 1967 Ocupación Post-Clásica en Altun Ha, Honduras Británica. Revista Mexicana de Estudios Antropologicos 21: 213-214.

RATTRAY, EVELYN 1992 The Teotihuacan Burials and Offerings: A Commentary and Inventory. Nashville, Tennessee, Number 31.

REENTS-BUDET, Doris 1994 Painting the Maya Universe: Royal Ceramics of the Classic period.

ROBICSEK, FRANCIS 1975 A Study in Maya Art and History: The Mat Symbol. New York: Museum of the American Indian Heye Foundation.

Ruz Lhuillier, Alberto 1954 Uxmal: Temporada de trabajos 1951-1952. Anales del Instituto Nacional de Antropología e Historia 10: 241-99.

SEMPOWSKI, MARTHA L. and SPENCE, MICHAEL W. 1994 Urbanization at Teotihuacan, Mexico, Vol. III: Mortuary Practices and Skeletal Remains at Teotihuacan, edited by Rene Millon, pp. 1-483. Salt Lake City.

Schaffer, A-L. 1992 «On the Edge of the Maya World» Archaeology March/April 1992, pp. 50-53.

Sheets, Payson 1978 Artifacts. In The Prehistory of Chalchuapa, El Salvador: Artifacts and Figurines, Volume III, edited by ROBERT J. SHARER, pp. 1-133. Philadelphia.

SHOOK, EDWIN M. 1969. Archaeological Discovery at Finca Arizona, Guatemala. Notes on Middle American Archaeology and Ethnology, Washington, D.C.: Carnegie Institution of Washington.

SHOOK, EDWIN M. and KIDDER, ALFRED II 1961 The Painted Tomb at Tikal. Expedition 4 (1): 2-7.

Spinden, H.J. 1925 Chorotegan culture area, Proc. Congr. Amer., Goteborg, 21st session, 1924, pt. 2, pp. 529-545.

Squier, E.G. 1858 The States of Central America; their geography, topography, etc. New York.

STONE, DORIS Z. 1977 Pre-Columbian Man in Costa Rica. Cam-

STONE, DORIS Z. 1957 The Archaeology of Central and Southern Honduras. Cambridge: Papers of the Peabody Museum of Archaeology and Ethnology 29 (3), Harvard University.

STONE, DORIS Z. 1938 Masters in Marble New Orleans: Tulane University, Middle American Research Series, Publication 8, pt.1.

Strong, Duncan 1948 The Archaeology of Honduras. In Handbook of South American Indians Volume 4. Washington, D.C.

STONE, DORIS Z. 1935 Archaeological investigations in the Bay Islands, Spanish Honduras. Washington, D.C.: Smithsonian Miscellaneous Collection, Volume 92, Number 14.

STRONG, WILLIAM DUNCAN, KIDDER, ALFRED II, and PAUL, A.J. Drexel 1936 Preliminary Report on the Smithsonian Institution-Harvard University Archaeological Expedition to Northwestern Honduras. Washington, D.C.: Smithsonian Miscellaneous Collections, Volume 97, Number 1.

THOMPSON, J. ERIC S. 1939 Excavations at San Jose, British Honduras. Washington, D.C.: Carnegie Institute Washington, Publication Number 506.

THOMPSON, J. ERIC S. 1938 The High Priest's Grave: Chichen Izta. Yucatan, Mexico. Chicago: Anthropological Series Field Museum of Natural History, Publication 412, Volume 27 (1). VIEL, RENÉ 1978 Etude de la céramique Ulúa-Yojoa Polychrome (Nord-Ouest de Honduras): Essai d'analyse stylistique du Babilonia. Ph.D. dissertation, Université René Descartes, Paris.

WILLEY, GORDON R., LEVENTHAL, RICHARD M., DEMAREST, ARTHUR A., and FASH, WILLIAM L. 1994 *The Copan Residential Zone*. Cambridge: Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University, Volume 80.

WOODBURY, RICHARD B. and TRIK, AUBREY S. 1954 The Ruins of Zaculeu Guatemala. Richmond.