**Comparative Analysis of Carved Ceramic Discs from the British Caribbean in DAACS**

Lynsey A. Bates1, Jillian E. Galle1, Khadene Harris2, and Mark W. Hauser2

1The Digital Archaeological Archive of Comparative Slavery, Virginia, USA

2Northwestern University, Illinois, USA

(SLIDE) Humans have carved small circular and oval discs from ceramic vessel fragments for thousands of years. Archaeologists recover them on pre-dynastic sites in Egypt, Iron Age sites in Cyprus and Turkey, in Roman Britain, on Woodland period Native American sites, and on colonial period historic sites around the world. Scholars have posited a host of interpretations for these artifacts, ranging from “discoidal” counters to gaming pieces to toilet paper.

(SLIDE) Archaeologists primarily identify hand-carved ceramic discs excavated from contact- and historic-period missions, forts, and domestic sites across British, Dutch, French, and Spanish colonial domains as gaming pieces. Their relatively consistent presence on sites of slavery has inspired a continuing debate over the usage and the possible games people played, in particular whether the games were African in origin.

(SLIDE) Rather than focus on mere presence and absence, we examine several distinct attributes of the ceramic discs to determine why enslaved people spent time producing these objects. Our dataset consists of discs recovered from domestic contexts associated with enslaved people and their descendants on nine sites in the British Caribbean, and more specifically on a large assemblage of discs recovered from Morne Patate, a sugar and coffee estate located in southwest Dominica. We evaluate the three most common interpretations that 1) the discs served as clothing fasteners particularly button blanks; 2) the discs served as counters used by overseers or managers to systematically track the work of enslaved and freed laborers; 3) the discs served as gaming tokens used during leisure time. We also contend that several of these disc characteristics indicate on-site production by enslaved laborers at Morne Patate.

**What attribute values would we expect to see for each hypothesis?**

(SLIDE) Eighteenth and nineteenth century buttons came in a variety of sizes and materials dictated by function and fashion. Button size and material often correlated to garment type; for example, cotton underclothes typically had small, sew-through shell or porcelain buttons, while men’s greatcoats had large brass buttons with shanks. Button “blanks” or “molds” were covered with fabric, often to match the garment. Discs used as buttons or button blanks presumably would mimic one or several types of buttons in size, shape, weight, and thickness.

(SLIDE) Discs as counters are another potential interpretation. If planters required enslaved or tenant laborers to document the number of bags of coffee cherries picked, for example, then we would expect uniformity in diameter, weight, and composition of the discs, perhaps to the extent of identifiable size “sets” representing known quantities of goods. In this case, the quality of the original ceramic vessels would not play a role in disc manufacture.

(SLIDE) Discs manufactured for gaming may exhibit similar characteristics with the presumed selection of vessels to create distinguishable sides, possibly for “heads” and “tails” sets. Uniformity in size and shape would facilitate movement on a board. Ceramic gaming pieces made of harder materials, such as refined earthenwares and porcelains, would remain intact through daily use.

Differences in Ceramic Disc Abundance

(SLIDE) The DAACS website provides detailed, comparable data from over 80 sites of slavery from North America and the Caribbean.

(SLIDE) Here we include comparative data on hand-carved ceramic discs from domestic sites occupied by enslaved people and their descendants during the eighteenth and nineteenth centuries in the Caribbean.

(SLIDE) First, we use a simple abundance index to track per capita artifact discard. We began by calculating artifact densities to determine an appropriate denominator class. In this case, wine bottle glass serves as an independent artifact class that is consistently discarded across the sites that does not fluctuate with time.

(SLIDE) Here we see the abundance of discs on Caribbean sites over time. Each data point is colored by island. [CLICK] Of note is that on most of the Caribbean sites in DAACS no discs were recovered, so we’re dealing with a fairly rare artifact type.

(SLIDE) Among the sites with discs, most are on Jamaica sites (in blue), including here at the Mona Works Yard and Village, and at Papine village. Also note that while Seville House 15 and St. Nicholas Abbey Village have higher discard rates than areas of the Morne Patate village areas, they also have the largest confidence intervals, which suggests we should be skeptical about sample sizes. In fact, Seville House 15 has six discs and St Nicholas Abbey has 10 discs, while Morne Patate Block A has 17 and Block B has 42.

Morne Patate

(SLIDE) What can explain this large number of discs at one site? Excavated from 2015 to 2017 by Dr. Mark Hauser, Morne Patate was a sugar estate with later mixed agriculture including coffee located in the far southwest of Dominica.

(SLIDE) The quantity and breadth of refined ceramics at Morne Patate village indicates its residents had access to cash and that they acquired some fashionable ceramics. Other costly and fashionable goods, such as religious medallions and coins, found in the village suggest that people of African descent living at Morne Patate participated in local markets before and after Emancipation.

(SLIDE) As I noted earlier, a majority of the carved discs were found in excavation Block B, with excavation Block A having the second largest quantity. We believe these block areas roughly correspond to individual houses. This image shows the gaming pieces grouped by the units in which they were found, with large circles representing 10 discs and the smallest circle one disc.

(SLIDE) Which hypothesis best explains this quantity of discs from one site? We rely on the attributes of the discs themselves, including diameter, thickness, weight, material, form, and decoration, to test the three usage hypotheses.

Measurement Attributes

(SLIDE) In terms of size, individual ceramic discs from Caribbean sites in DAACS range in diameter from 10 to 50 mm. The Morne Patate discs fall neatly within this range, with a majority having diameters of 15, 20, or 25 mm, and an average diameter of 24.1 mm.

(SLIDE) How does the disc size data compare with that of buttons found on Caribbean sites? This boxplot illustrates button diameter by button material type. We see that both the median and 50 percent of the diameter measurements of all material types fall below the observed average diameter of discs from DAACS Caribbean sites. Furthermore, the few buttons greater than 24 mm in diameter are only made of copper alloy.

(SLIDE) Clothing historians have demonstrated that coats, frocks, and greatcoats were adorned with the largest and most visible buttons that generally measured between 18 and 35 mm in diameter. Galle’s research on buttons found on Virginia and Jamaican domestic sites supports these conclusions. This evidence suggests that, in keeping with research on enslaved clothing, on average the discs are most similar to buttons for this type of men’s garment.

(SLIDE) When we compare three common attributes between all buttons, button blanks, and carved discs, [CLICK] we see that as expected the average button diameter is 8 to 9 mm *smaller* than the discs. [CLICK] Perhaps the most striking difference is the thickness and associated heft of carved discs compared to the buttons. Of the 29 button blanks, 19 were found on Jamaican sites and three at Morne Patate.

(SLIDE) In addition to the size differences, no button blanks made from ceramic vessels recognized as such have been recovered from the 83 sites in DAACS in North America and the Caribbean. In addition, the data suggest that the discs would be unwieldy to cover with cloth, sew onto clothing, and use daily. While we do not rule out the possibility of secondary use as fasteners, we argue that the evidence indicates that these discs were produced for another purpose.

Material and Form

(SLIDE) The vessels from which people manufactured the discs were primarily hollow and flat tablewares such as cups and plates. However, different parts of vessels were also selected, including rims and lid fragments.

(SLIDE) We contend that it is unlikely that people would select this *variety* of vessel type and completeness fragments, with the abundance of both hollow and flatwares in the overall assemblages, if counting was the goal of manufacture. Although the discs are surprisingly uniform in size and weight for objects made by hand, if planters required their enslaved or tenant laborers to document the produce they cultivated, then we would expect even greater uniformity in visual appearance of the discs for comparison purposes.

(SLIDE) The material of the vessel fragments selected does indicate a preference for refined earthenwares such as creamware, pearlware, and whiteware. The vast majority of the discs are whiteware, 73 percent. Only five of the discs were made from coarse earthenwares, one imported and three Caribbean or locally-made earthenware, of those three are glazed on one side.

Considering the counter hypothesis, we argue that it is unlikely that enslaved people would select higher fired, refined earthenwares for these uses rather than the many discarded, utilitarian coarse earthenware vessels with softer, easier to carve paste on these sites. Only four of the 102 discs from Caribbean sites in DAACS were made of softer tin-enameled earthenware or coarse earthenware.

Decoration

(SLIDE) The decoration present on individual discs indicates selection for aesthetic quality; only 14% are undecorated which includes the five coarse earthenware discs. Overall, the decorative genres of the discs represent styles popular in the first and second quarters of the 19th century. The primary decorative technique is transferprinting, found on 47 percent of the total, with blue being the most common color.

(SLIDE) In the Morne Patate assemblage specifically, three related attributes suggest selection for particular decorative motifs. First, there are eight instances of more than one disc carved from vessels with the same type of decoration, most of which consist of transferprinted vessels.

(SLIDE) Second, there are instances of discs with the same pattern, possibly made from the same vessel, and selection for the same elements within a pattern.

(SLIDE) Another striking illustration of pattern selection are two gaming pieces and sherds from a brown transferprinted plate commemorating the life of Prince Albert, dating to sometime after Albert’s death in 1862.

(SLIDE) Finally, the presence of decoration on only one side of the disc occurs on 89 percent of the Morne Patate discs. This attribute indicates a selection for sherd fragments with one decorated and one undecorated surface, possibly to easily create “heads” and “tails” sets. Only seven of the discs are undecorated, and one has decoration on both the interior and exterior. Taken together, we argue that the interrelated attributes point to on-site manufacture and intentional choice by enslaved laborers for sherds that have distinct sides and possibly for identifiable elements such as shapes, trees, and leaves.

On Site Production

(SLIDE) Several other attributes indicate that enslaved people made these discs within their homes and yard spaces at Morne Patate. We infer that the stages of gaming piece production began with an initial rough “cutting” of facets followed by a smoothing or grinding effort to achieve a rounded shape. Each of these manufacturing stages is represented in the assemblage. We identified a handful of discs as “preforms,” sherds likely still being worked into discs. Some are roughly knocked out, with three-quarters rounded edges and one flat side, while others have many “faceted” or worked edges that roughly made the sherd round. Some discs are perfectly round with smoothed edges that indicate either heavy investment in manufacture or a well-used disc that has been worn smooth. Thus the decorative and manufacturing evidence points to production of discs at this site.

Other Evidence for Gaming

While we cannot definitively conclude that the Caribbean carved discs in DAACS were used as gaming pieces, there is further historical evidence that contemporary games were played with similar ceramic fragments. (SLIDE) Jonathan Troupe recorded his observations on gaming among enslaved people on Dominica in 1789, and described two different games. While Troupe does note a game similar to mancala in a board with hollows and small pebbles, he also mentions a second game wherein enslaved people tossed ceramic fragments in the air after mixing them in the hand. Troupe implies that the second game is one of chance, possibly similar to shooting dice, that people played to win plantains.

(SLIDE) Further evidence is found in a 1775 painting from the Paul Mellon Collection of the Yale Center for British Art depicting a scene near the British barracks in Antigua. (SLIDE) In the foreground, several men of African descent play a game with white discs while a British soldier looks on. It is possible that this game is the same one described by Troupe. We thank Jessica Maclean for passing on the painting reference.

**Conclusions**

(SLIDE) Our attribute-based analysis of the Morne Patate assemblage reveals provocative evidence for off-time activities, the opportunity for which likely would increase after Emancipation. The chronological signature of the discs also presents possible routes for further research. Mean ceramic dates for excavation Blocks A, B, and the village as a whole hover around Emancipation. When we highlight the contexts in which the gaming discs were found on a chronology plot of individual contexts, we see that a majority of the contexts with discs fall in the post-emancipation period. Furthermore, as noted earlier, 75 discs are made from whiteware vessels, and 24 exhibit decorations that were not produced until 1840 or 1845 in England.

It is difficult to identify evidence for small scale production for *sale* in markets as opposed to use on site at Morne Patate. While the sheer quantity of carved discs found at Morne Patate in comparison to other sites suggests possible production for sale, considerable wear on some of the discs suggests they were used and discarded in the village.

(SLIDE 38) Overall, the disc assemblage from Caribbean sites in DAACS bring us one step closer to interpreting the use of gaming pieces on sites of slavery. This dataset provides insight not only into the economic activities of enslaved people and their descendants, but also their aesthetic choices in creating these singular discs.