1-1-1970

Baked Clay Objects from the Site of the 1670 Settlement at Charles Towne, South Carolina

Stanley South
University of South Carolina - Columbia, stansouth@sc.edu

Follow this and additional works at: http://scholarcommons.sc.edu/sciaa_staffpub

Part of the Anthropology Commons

Publication Info
Published in Notebook, Volume 2, Issue 1, 1970, pages 3-17.
http://www.cas.sc.edu/sciaa/
© 1970 by The South Carolina Institute of Archaeology and Anthropology

This Article is brought to you for free and open access by the Archaeology and Anthropology, South Carolina Institute of at Scholar Commons. It has been accepted for inclusion in Faculty & Staff Publications by an authorized administrator of Scholar Commons. For more information, please contact SCHOLARC@mailbox.sc.edu.
In the winter of 1968, and throughout the spring and summer of 1969, excavation was carried out on the site of the first English settlement at Charles Towne, South Carolina, which was begun in April, 1670. Little evidence for the houses of the period was found, but the fortification ditches, representing defenses constructed in the summer and fall of 1670, were located and excavated. The site is located on the tip of Albemarle Point, on the south side of the Ashley River, at the junction of Old Town Creek with the River. This site, across the river from the present site of Charleston, was occupied for only a few years in the 1670's, before the move to the present location was made. The tip of Albemarle point with which we are concerned has tidal marshes of the Ashley River on the east, and tidal marshes of Old Town Creek on the west. The nine foot deep water of Old Town Creek touches Albemarle Point at its southernmost tip only. It was to protect against an attack from this waterway that the five hundred foot long fortification ditch with separate redoubt was constructed across Albemarle Point by the colonists. A smaller ditch with accompanying palisade was dug along the land face of the peninsula; these two fortification ditches enclosing ten acres of land. It was during the excavation of these seventeenth century features that an unusual collection of baked clay objects was recovered. These objects, along with a description of the associated Indian cultural materials, will form the subject of a monograph to be published by the Institute of Archeology and Anthropology in a technical series. This paper is presented with the hope that it will elicit response from colleagues who may have found similar baked clay objects.

The Charles Towne baked clay objects are unusual in that they are not like those described from the Poverty Point site (Ford and Webb 1956), or the Jaketown Site (Ford, Phillips, and Haag 1955), yet have an apparent relationship to those objects. The Charles Towne baked clay objects are different in that they are almost invariably furnished with holes, either longitudinally, or laterally. The holes are sometimes made with the finger, sometimes with a smooth round cane or stick, and sometimes with a small tapered stick, in which case there are numerous holes either going completely through the object or stopping before reaching the opposite side (Fig. 1-4).

The Perforated Grooved Melon-shaped Baked Clay Objects from Charles Towne

The form of the Charles Towne objects can be described as massive in comparison with the typical Poverty Point objects, some of the barrel shaped, or cylindrical forms being four inches long and three inches thick. There are two basic forms represented at Charles Towne; the perforated grooved melon-shaped, and the perforated biscuit. Forty melon-shaped fragments and fifty-three biscuit fragments were found. The perforated grooved melon-shaped form is related to Poverty Point Type F, Melon-shaped (Ford and Webb 1956: 40-41), but is longer, more cylindrical, and fatter, and more massive in appearance, but can perhaps, still fall within the basic Type F of Poverty Point, except for perforation through the end or the side. Another example, from Jaketown, and
included in the Cross-grooved type from that site, is seen from the illustration (Ford, Phillips, and Haag 1955: Fig. 12b-d) to be closely related to the Charles Towne melon-shaped type. The finger impressed grooves at various angles over the surface of the Charles Towne objects are deeply impressed by small fingers in many cases, and only slightly indented in others. The holes through these melon-shaped baked clay objects were made by small fingers, usually one-half inch across. One exception is a smooth-sided hole apparently made with a reed or cane, or smooth stick, as though it were intended to be used on a shaft (Fig. 1d). Another exception, but included in the melon-shaped type is shorter than it is wide, being three inches wide and only half that in length, the finger grooves giving the appearance of a cog-wheel (Fig. 1f). Such an example is illustrated in the Jake-town report (Ford, Phillips, and Haag 1955: 44, Fig. 12d). The hole in this example is different in that it is cut from opposite sides using a flat cutting tool, such as a flat silver from a cane.

The clay from which the objects are made is not tempered, though in some examples there are a number of holes made by a fiberous material that seems to have been incidentally included with the clay. Some examples of the perforated grooved melon-shaped type are flattened on the end, and two such examples are incised with a series of parallel and zig-zag lines as a decorative treatment (Fig. 41, i).

The Perforated Biscuit Form of Baked Clay Object from Charles Towne

The biscuit form from Charles Towne resembles a hand shaped biscuit, thicker in the middle, and round to irregularly round approaching triangular in shape (Fig. 3). A biscuit form is described from Poverty Point as coming from only one fire pit, where 45 examples were present (Ford and Webb 1956: 42, 44). The biscuit form was not illustrated in the Poverty Point report, but it is assumed that the Charles Towne examples are perhaps quite similar, with the exception of the holes in the Charles Towne examples, of course. One example from Charles Towne did not have either a central hole or the smaller holes, and may be close in form to the biscuit type from the Poverty Point pit (Fig. lc).

The perforated biscuit form from Charles Towne most frequently has a central hole made with a small tapered dowel one-quarter inch in diameter (Fig. 3g-1). One example had a central finger hole, similar to the perforated melon-shaped type (Fig 3a). Some fragments reveal a number of one-quarter inch holes, some of which barely break through the surface on the opposite side of the biscuit, and some that do not extend through at all (Fig. 3g, 4k, 1). Only one example was not perforated (Fig 1c). One fragment has numerous small punc-

itations apparently applied as a design motif (Fig. 4d). Several examples are incised with parallel or cross-hatched lines (Fig. 4b, c, e-g), similar to an example from the Poverty Point site (Ford and Webb 1956: 42-43, Fig. 14j). Two fragments are of particular interest in that they are simple stamped, apparently with a carved paddle (Fig. 4a).

Some decorated examples of baked clay objects were found at Poverty Point, and in terms of the artificial cooking stone interpretation, the decorations do not neatly fit, and may, as Ford, Phillips, and Haag have pointed out, repre-
sent objects with a different function than cooking stones (Ford, Phillips, and Haag 1955: 55). The zig-zag, cross-hatched, parallel incised decorative lines, and punctations on the Charles Towne examples would also imply a function other than cooking stones, unless these were repeatedly reused without damage. The authors of the Jaketown report state that: "...we have problems of our own, but apparently decoration is not one of them." (Ford, Phillips, and Haag 1955: 55). The decorated baked clay objects from Charles Towne present a problem not encountered at Jaketown.

The Provenience of the Baked Clay Objects from Charles Towne

In the process of stripping the plowed soil from above the area of the 1670 fortification ditches at Charles Towne, and above the area ten feet each side of the ditches, Indian pottery and baked clay objects were recovered. These lay beneath the plowed soil zone in the yellow sand containing no visible humus; the layer visually appearing to be undisturbed subsoil sand. After exploratory test trenches were cut by hand and the location of the seventeenth century ditches established, front loaders were brought into the area and the top plowed soil zone was removed from the main fortification ditch as well as the fortification ditch and palisade line along the land face of Albemarle Point. When this was done the shovel crew was used to schnitt off the exposed yellow sand layer lying just beneath the removed plowed soil zone. In the process of cleanly schnittting this layer for photographing and measuring the discolored ditch and other associated features, baked clay objects and Indian pottery were found. All objects found in the yellow sand layer in this manner were assigned a special provenience designation, and whenever the object was still lying in situ, photographs were made, and the position of each clay object was recorded. Control squares were excavated in order to attempt to determine the depth of the artifact concentration within the yellow sand layer, and these revealed the same situation as seen elsewhere i.e., the artifacts were apparently confined within three inches of the bottom of the plowed soil zone. In excavating the fortification ditches, fragments of baked clay objects were also recovered, having arrived there in the process of excavation and subsequent refilling of the fortification ditches. In fact, the majority of the pottery recovered from the seventeenth century fortification ditches was pre-seventeenth century Indian in origin. In only a few instances could any sign of humus be seen to accompany the pottery and clay objects in the yellow sand layer, one of these being near the artillery redoubt near the tip of Albemarle Point. Here several baked clay objects were found lying together in a yellow sand matrix slightly stained with humus, but not presenting a definite pit outline that could be traced.

Similar instances of cultural material in sand layers, where the humus is no longer seen due to thousands of years of water penetration through the layer, are often seen on Archaic sites. This fact alone would tend to indicate a date of several thousand years for the clay objects on the Charles Towne site. Fortunately better dating through association with pottery types also recovered in this yellow sand layer is available to us.
Cultural Material Associated in the Same Layer with the Baked Clay Objects

An analysis of the cultural materials from the yellow sand layer will be included in the more definitive report on the Charles Towne excavation, and only a listing of associated objects is presented here. Several steatite sherds were present, along with a Morrow Mountain projectile point, half of a hematite atlatl weight, and as yet unidentified mineralized vertebra of a large animal. Fiber-tempered plain pottery, a nontempered plain type, a sandy paste plain type, a nontempered type with stamped impressions of what appears to be the rounded edge of a smooth paddle, Deptford Linear Check Stamped, Deptford Bold Check Stamped, and Thom's Creek Punctated (drag and jab mode) (Phelps 1968: 20), were recovered from the yellow sand layer, (Griffin 1943: 155-68; Waddell 1963). A study of the clay of these types, comparing the presence of fine sand with the relationship of sand to clay found in the Ashley River, clay used in firing bricks for a number of early plantation houses in the Charleston area, and bricks found in the fortification ditches at Charles Towne indicates that the sand seen in these Indian types is present as natural inclusions in the clay found in the area. Also present in the local clay, and seen in both the early Indian types and bricks made locally, are organic inclusions which, when fired, leave black pockets or holes in the Indian sherd or Colonial brick. The final report on the early cultural material from the Charles Towne site will include the results of this study of local clays now being undertaken. The results seen so far indicate that the percentages of sand to clay existing in some Indian sherd types may well not be the result of intentional sand tempering formulas utilized by the Indians, but merely a mixture found in natural clay deposits available to them. An examination by archeologists of locally made, nontempered bricks may reveal surprisingly similar "sand temper" to that seen in Indian sherds of the area under study. Caution would therefore seem to be warranted before a sherd is identified as sand tempered or nontempered.

The nontempered, sandy-clay sherds, and the fiber-tempered sandy-clay sherds are apparently made from the same clay source as the Deptford Linear Check Stamped sandy-clay sherds, i.e., water deposited sandy-clay. Other Deptford stamped sherds have a greater quantity of slightly larger sand in the mixture, but this too may be present in the local clays, and caution as to the "sand tempered" character of these types is necessary before type descriptions are written.

Function of the Baked Clay Objects from Charles Towne

The interpretation for the classic Poverty Point baked clay objects is generally considered to be as substitute, or artificial, cooking stones. (Ford and Webb 1956: 39). However, the Charles Towne perforated melon-shaped type, and the perforated biscuit type introduce an additional feature to be interpreted, that may or may not be satisfactorily explained by the artificial cooking stone interpretation. Perhaps the hole aided in handling the hot objects, but with the deeply impressed finger grooves on many examples, a hole through the side or end of the object would seem to offer but little additional advantage
in this regard. One example (Fig. 1d), had a very smooth, parallel-sided hole that would appear to be designed to take a shaft, and the thought occurs that perhaps this particular example was designed as an artificial atlatl weight. One of the perforated biscuit forms (Fig. 3j) is very much like the perforated steatite objects found at Stallings Island (Clafin 1931: Plate 52), that have variously been suggested to have been net weights or steatite cooking stones. If the Stallings Island steatite objects were cooking stones, the Charles Towne example of similar form may be an artificial cooking stone of the Stallings Island type. This does not take care of the other objects with irregular finger formed holes, or those with small holes in the center and randomly over the body, and the only interpretation that might seem valid is that with the hole there may have been less fracturing of the clay during firing through better heat distribution. Admittedly this is a shaky suggestion, but one emphasizing that variation in form such as we see represented in these Charles Towne baked clay objects, requires an interpretation extending beyond that necessary at the Jaketown site. In comparing the Poverty Point objects with similar examples from California, Ford, Phillips and Haag state in regard to the many stone forms imitated in clay in that area:

"These included earplugs, labrets, cup stones, sinkers, bolas, charm stones, etc. Whether these had the same function as their prototypes in stone or are simply clay "balls" of specialized form is for the California archeologists to decide. It is as though we found bannerstones, boatstones, and plummets of baked clay in the Lower Mississippi similar in form to their stone counterparts in surrounding areas but similar to Poverty Point objects in composition and finish. Fortunately we do not, so are not obliged to have an opinion on the question." (Ford, Phillips and Haag 1955: 54-55).

The variation in form between the Mississippi Valley baked clay objects and those found at Charles Towne (possibly pointing toward stone parallels) requires a special interpretation. Perhaps we will never be able to better the cautious conclusion of Ford, Phillips and Haag when they said:

"A judicious conclusion, on a continental basis, would be that only one explanation seems to answer most of the facts; that baked clay objects represent an invention, probably made more than once, in response to the household needs of a pottery-less people in a stone-less land." (Ford, Phillips, and Haag 1955: 56).

The Time and Space Relationships of the Charles Towne Baked Clay Objects

From a comparison of the Charles Towne baked clay objects with those from Poverty Point and Jaketown, it appears that some of the "uncommon types" at Jaketown (Ford, Phillips, and Haag 1955: 44, Fig. 12), are close in form to the melon-shaped type from Charles Towne. The melon-shaped type from Poverty Point (Type F), and a biscuit-shaped form from one pit (Type I), are apparently equivalent parallels to the perforated melon and biscuit forms from Charles Towne (Fig. 1-4). Incised designs are also present at both sites. (Ford and Webb
1956: 40-44, Fig. 13-14). It should be remembered, however, that the Charles Towne examples are perforated, an interesting difference from the Poverty Point and Jaketown examples. One cylindrical shaped form from Jaketown was illustrated as having a hole (or perhaps a finger impression), but no mention is made in the text of perforated forms (Ford, Phillips, and Haag 1955: 44, Fig. 12a). C. B. Moore does not indicate that perforated forms were present at Poverty Point (Moore 1913: 66-73), but in a recent study Clarence Webb has reported that five percent of the objects from the Poverty Point site were typical or unusual, including perforated, miniature, and decorated forms (Webb 1968: 308-309, Figs. 2k-2g). This indicates the presence of perforated forms at Poverty Point, but apparently not like those from Charles Towne. Gagliano and Saucier have reported perforated forms from the Linsley site in southeastern Louisiana, and have illustrated one that appears to be a biscuit form with a central perforation, similar to some of the Charles Towne examples, which they refer to as an "unusual variety" (Gagliano and Saucier 1963: 322, Fig. 2i).

One of the most interesting parallels with the Charles Towne baked clay objects is reported by Webb from the Pearl River coastal Archaic shell midden sites examined by Gagliano (Webb 1968: 298, citing Gagliano 1963), located north of Lake Pontchartrain. Here were found "A few sandy baked clay objects, biscuit-shaped or pierced and grooved, and differing from the forms of Poverty Point objects...." (Webb 1968: 298). This combination of pierced and grooved, and biscuit-shaped forms is that seen at Charles Towne.

Closer to the Charles Towne site, on the Georgia coast, Antonio Waring, Jr., found a number of Poverty Point objects in the lower level of the Sapelo Island shell ring in association with plain fiber tempered pottery having a radiocarbon date of 1848 ± 250 B.C. (Ford, Phillips, and Haag 1955: 53; Williams 1968: 329; Griffin 1952: 366). At the Dulany Site in Chatham County, Georgia, baked clay objects were also found associated with fiber-tempered pottery, with a radiocarbon date of 1820 ± 200 B.C. (Williams 1968: 329). One cylindrical baked clay object was reported by Waring from the bottom of the shell deposit at the Bilbo site in Chatham County, Georgia, and the radiocarbon dates are 1780 and 1870 ± 125 B.C. (Williams 1968: 330). The illustrated baked clay objects from the Sapelo Island shell ring are very similar in surface irregularities to the ones from Charles Towne, but apparently they were not perforated (Williams 1968: 276, Figs. 92c, 92d).

Closer yet to Charles Towne, on Daws Island, across the Broad River from Beaufort, South Carolina, a small shell mound or ring fragment can be seen (38Bu9), washing away, and inundated at high tide. A collection from the area, and the shell deposit was made by Tom Hemmings and Jim Michie (Hemmings 1969: 6). This included a number of baked clay objects with a sandy-clay paste, but fashioned in the spherical and melon-shaped forms more typical of Poverty Point than the Charles Towne examples (See Fig. 5). Baked clay objects and plain fiber-tempered pottery were the only artifacts actually pulled from the eroding surface of the shell deposit. However, other artifacts were scattered along the beach, some of which, no doubt, came from the shell mound originally. Of particular interest in this latter group of objects is a small winged atlatl weight, a fragment of a smooth barrel shaped atlatl weight, projectile points, a fragment of a steatite "net sinker" (or cooking stone), and a fragment of a
finely engraved bone pin. All of these objects are identical with those illustrated from the Bilbo Site by Waring, promising an interesting parallel when the surviving remnant of the Daws Island mound is archeologically examined (Williams 1968: 168-178, Figs. 62-69).

A number of radiocarbon dates provide a good indication as to the likely dates for the Charles Towne baked clay objects. Gagliano and Saucier's date of 1740 ± 120 B.C. for the Linsley site (Gagliano and Saucier 1963: 326), the Sapelo Island shell ring date of 1848 ± 250 B.C. (Ford, Phillips, and Haag 1955: 53; Williams 1968: 329; Griffin 1952: 366), the Bilbo dates of 1780 and 1870 ± 125 B.C. (Williams 1968: 330), and the Dulany site date of 1820 ± 125 B.C. (Williams 1968: 330), all of which contained baked clay objects, clearly place a date approaching 2000 B.C. for the use of these objects. The association at the Bilbo site, the Sapelo Island shell ring, and at the Dulany site of clay objects with fiber-tempered pottery clearly points to the relationship of the fiber-tempered pottery from Charles Towne with the Charles Towne baked clay objects.

In his summary paper on the Poverty Point Culture Webb has said:

"The picture emerges, therefore, of coastal peoples from Georgia [now South Carolina] to Louisiana, between 2000 and 1000 B.C., who used baked clay balls, with or without stone or pottery vessels, in their cooking process"(Webb 1968: 300).

Summary of the Baked Clay Objects from the Charles Towne Site

From a typological comparison with baked clay objects recovered from Louisiana to South Carolina in association with fiber-tempered pottery at a time period approaching 2000 B.C., we can see that the Charles Towne baked clay objects are very likely closely related in time and space to the Poverty Point objects. The fact that the majority of those at the Charles Towne Site are perforated presents an additional interpretive problem relating to function. With the exploration of early sites on the South Carolina coast still in the infant stages, we can look forward to a time of more abundant data bearing on the baked clay objects, as more sites are examined. Perhaps then a more definite explanation for the differences between the typical Poverty Point baked clay objects and the perforated forms from Charles Towne can be advanced.

BIBLIOGRAPHY

Claflin, W. H., Jr.

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Title</th>
<th>Source</th>
</tr>
</thead>
</table>
Waddell, E. G.

Waring, A. J., Jr.

Webb, C. H.

Williams, Stephen, ed.
baKed clay oBsEcTs frOM the charles towne siTe

a. Perforated, grooved, melon-shaped form with flattened ends, diagonally impressed finger grooves. (38 CH1-154-23)

b. Typical cross-grooved form from Poverty Point Site, Louisiana, for comparison. (Donated by Jerry Dukes, Myrtle Beach, South Carolina)

c. Imperforate, biscuit-shaped form. (38CH1-230B-34)

d. Melon-shaped form with stick or reed perforation extending through the length of the object, as though designed to receive a shaft. (38CH1-1K-23)

e. Deeply grooved, melon-shaped form with finger-made hole through the side. (38CH1-204B-24)

f. Cog-shaped form related to the melon-shaped examples in form, but to the biscuit-shaped examples in thickness. (38CH1-174B-24)

g. Melon-shaped form with diagonally impressed finger grooves and side perforation. (38CH1-204B-60)
FIGURE 2

FRAGMENTS OF THE PERFORATED GROOVED MELON-SHAPED FORM FROM CHARLES TOWNE

a. Top view of perforated, grooved, melon-shaped fragment. (38CH1-154B2-1)

b. Side view of perforated, grooved, melon-shaped fragment. (38CH1-232B-24)

c. Top view of melon-shaped fragment with finger perforation. (38CH1-204B-61)

d-i. Perforated, grooved, melon-shaped fragments. (38CH1-34A-23; 38 CH1-204B-55; 38CH1-154B7-24; 38CH1-204B-56; 38CH1-204B-50; 38CH1-204B-59)
FIGURE 3

BISCUIT-SHAPED BAKED CLAY OBJECTS
FROM THE CHARLES TOWNE SITE

a. Finger perforated, biscuit-shaped fragment. (38CH1-154B3-23)

b-f. Fragments of biscuit-shaped forms. (38CH1-154B4-23; 38CH1-154B5-23; 38CH1-207C-32; 38CH1-154B13-23; 38CH1-13-155)

g. Perforated biscuit-shaped form with several holes. (38CH1-2AA-1)

h,i,k,l. Biscuit-shaped forms with central perforation. (38CH1-154B-23; 38CH1-154B4-23; 38CH1-2A-23; 38CH1-2-43)

j. Biscuit-shaped form with central perforation cut with sliver of reed or stick, similar to steatite forms from Stallings Island. (38CH1-154B1-23)
FIGURE 4

INCISED, PUNCTATED AND SIMPLE STAMPED BAKED CLAY OBJECTS FROM CHARLES TOWNE

a. Simple stamped, biscuit-shaped fragments, possibly indicating a later time period than previously known in the Southeast for baked clay objects. (38CH1-2-49; 38CH1-55A-24)

b. Parallel line incised, biscuit-shaped fragment. (38CH1-200B-24)

c. Cross-hatched, incised, biscuit-shaped fragment similar to examples from Poverty Point, Louisiana. (38CH1-121B-23)

d. Shallow punctations applied as decoration on a baked clay object. (38CH1-200B-27)

e-g. Cross-hatched, incised decorated, biscuit-shaped fragments (38CH1-207A-36; 38CH1-55-23; 38CH1-73B-1)

h. Incised decorated, flattened melon-shaped form; flattened end decoration in circle to right, body incising to left. (38CH1-200B-26)

i. Top view of flattened end, melon-shaped form with zig-zag incised decorative lines around central, finger-perforated hole. (38CH1-200B-25)

j. Scraped surface, biscuit-shaped fragment similar to plain sherds from the site. (38CH1-175B-26)

k. Biscuit-shaped form with several small punctations extending through the disc. (38CH1-2N-37)

l. Biscuit-shaped fragment with punctations that do not perforate the body. (38CH1-141-23)
Figure 4
BAKED CLAY OBJECTS FROM DAWS ISLAND IN PORT ROYAL SOUND, BEAUFORT COUNTY, SOUTH CAROLINA (38BU9), APPARENTLY RELATING TO THE BILBO SITE IN GEORGIA

a-c. Melon-shaped, baked clay objects nearer in form and size to the Poverty Point examples than are the Charles Towne specimens. (38BU9-21; 38BU 9-27; 38BU9-26)

d. Spherical-shaped form with flat paddle edge impressions forming a pattern over the surface. (38BU9-23)
e. Melon-shaped fragment. (38BU9-24)
f,h. Spherical-shaped form with slight finger impressions. (38BU9-25; 38BU9-2)
g. Spherical-shaped form. (39BU9-22)
i. Cross-grooved form from Poverty Point, included for scale and comparison. (Donated by Jerry Dukes, Myrtle Beach, South Carolina.)