Cashie Series Ceramics from the Interior Coastal Plain of North Carolina, Circa AD 800—1725

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Cashie series ceramics are among the primary material markers of the Late Woodland period, Cashie phase on the northeastern, Inner Coastal Plain of North Carolina (Phelps 1983). Our research suggests that the suite of Cashie phase archaeological manifestations (e.g., palisaded villages, ossuary burials, granule and pebble-tempered pottery) are principally associated with ancestral Tuscarora and Meherrin Indian peoples—Mid-Atlantic/Southeastern Iroquoian peoples—later identified by European explorers and settlers in the post-Contact period ethnohistoric record (Byrd 1995; Byrd and Heath 1997; Phelps 1980, 1983). The Cashie phase ceramic tradition is relatively homogenous, in terms of vessel forms and paste characteristics, and notable for its conservative range of surface and decorative treatments over the presently estimated span of the Cashie phase, circa A.D. 800—1725. The fundamental purpose of this paper is to offer a refined working typology for the series, expanding on the definition originally proposed by Phelps (1980, 1983). The data presented herein were taken from ceramic assemblage samples recovered from the Jordan's Landing (31Br7), Neoheroka Fort (31Gr4), Sans Souci (31Br5), Thorpe (31Ns3), Battle Park (31Ns19), Parkers Ferry (31Hf1), Mount Pleasant (31Hf20), Ellis (44Sn24/65) and Fishing Creek (31Hx61) sites.

The Cashie series definition (Phelps 1980, 1983) represents a significant modification of the Branchville series, purportedly associated with early Meherrin Indian affiliated sites, as defined by Binford (1964)—Binford's Branchville series was based on the assessment of a limited surface collection recovered along the Meherrin and Chowan Rivers. The Gaston simple-stamped type, described by Coe (1964), shares some attributes with the Cashie series, and another similarly described regional series, Sturgeon Head, was reported by Smith (1971)—based on survey data from the Nottoway River drainage in Virginia. Sturgeon Head ceramics are reportedly associated with pre-Contact and post-Contact period Nottoway Indian affiliated sites. Crawford's (1966) Tower Hill series, as described in his MA thesis, further appears to fit the presently offered Cashie series definition in most respects (see Eastman, Lautzenheiser and Holm 1997). Although Crawford's (1966) Lenoir series was later equated with the Cashie series (see Eastman et al. 1997), several key attributes (cord-marking, medium sand-temper)

associated with this series are not found in definitive Cashie series ceramic assemblages studied by the authors. As such, the Cashie-Lenoir series relationship and the radiocarbon date attributed to the Lenoir series (Eastman et al. 1997) are both suspect. While the Branchville, Gaston, Sturgeon Head and Tower Hill series were defined with several attributes similar to those observed in the Cashie series, the other series include cord-marked and other (e.g., check-stamped and cob-marked) types, which we have not observed in the Cashie series samples assessed for this study. Further comparative studies are certainly needed to fully understand potential cultural relationships, if any, between these geographically and chronologically disparate series.

In the early 1980s, Phelps (1980, 1983) defined the Cashie phase and the Cashie series based on his study of an extensive and diverse assemblage of ceramics and archaeological data recovered from five excavated sites (see Phelps 1980, 1983). Ensuing research projects and subsequent analyses of Cashie assemblages recovered in the Contentnea Creek and Tar-Pamlico River drainages have further enhanced our material understanding of the Cashie phase and Cashie series ceramics (e.g., Burrus 1996; Byrd 1995, 1996; Byrd and Heath 1997; Magoon 1998; Phelps 1993). The name Cashie is taken from the Cashie River, a Tidewater region tributary of the Roanoke River, which rises in northwestern Bertie County. The Cashie River approximates the seventeenth century socio-political boundary between competing, post-Contact period Upper Tuscarora and Coastal Algonkian polities (see Boyce 1978; Feest 1978). Based on surface and subsurface archaeological survey evidence, Cashie phase sites are generally distributed across the northeastern Coastal Plain between the Neuse River in North Carolina and the Meherrin River in southeastern Virginia. From east-to-west, Cashie sites occur along the fall-line zone in the eastern edge of the Piedmont province to the western fringes of the greater Pamlico-Albemarle estuary system, most distinctively along the west side of the Chowan River (Byrd and Heath 1997; Phelps 1983). While current archaeological data indicate a maximal southern distribution of Cashie sites along the southern periphery of the Neuse River valley, ethnohistoric sources suggest that Tuscarora hunting parties ranged as far south as the Cape Fear River and the eastern Sandhills in the early

eighteenth century (Barnwell 1908). As such, seasonal Cashie phase camps, well south of the Neuse River drainage, may be encountered in the future. Cashie phase sites, however, have not been recorded on Fort Bragg or Camp Mackall, where systematic archaeological surveys have not produced evidence of Cashie series ceramics in Cumberland, Harnett, Hoke, Moore, Richmond or Scotland Counties (e.g., Abbot et al. 1996; Benson and Braley 1998; Braley 1989; Clement et al. 1997; Culpepper et al. 1998[draft]; Irwin et al. 1998; King 1992; Trinkley et al. 1996a, 1996b, 1996c, 1997, 1998[draft]). Due to the present lack of reported site data, the extreme western and southern limits of the Cashie phase site distribution are not as well defined as the eastern and northern limits.

The general temporal placement of the Cashie phase falls within the region's Late Woodland period. The phase becomes materially recognizable in the regional archaeological record between A.D. 800 and 1000 (Phelps 1980, 1983). Byrd (1997) noted that the genesis of the Cashie phase in North Carolina roughly corresponds with the timing of the ancestral Iroquoian expansion and migration of people out of northern Appalachia/central Pennsylvania sometime after AD 600—700 (see Snow 1995, 1996). The premise of Iroquoian radiation from a central Appalachian heartland is somewhat controversial (see Crawford and Smith 1996) and more research is needed to better understand the phenomenon. Cashie phase material manifestations become recognizable as directly Tuscarora or Meherrin affiliated in the post-Contact period. The prehistoric culture phase underwent a comparatively short period of selective change and adaptation in response to the onset of European expansion and trade in eastern North Carolina in the mid-to-late 17th century. Conflict between the indigenous inhabitants of the Carolina Coastal Plain and the not-so-benign newcomers erupted well before the end of the 1600s. In 1711, open warfare began with a series of Lower Tuscarora and Coastal Algonkian raids on European settlements found along the lower Neuse and Tar-Pamlico rivers. The resulting conflict, now known as the Tuscarora War, culminated with a crushing defeat of the Lower Tuscaroras and their Algonkian allies at the Neoheroka Fort in March 1713 (see Heath and Phelps 1998).

Presently, combined archaeological and ethnohistorical data indicate that Cashie phase peoples were generally semi-sedentary "fisher-farmers" with a ranked social structure (Byrd 1997). Perhaps best classified as an "intermediate society," the Tuscaroras were organized at an intermediate tier of social complexity (i.e., "petty chiefdoms"), which fell between that of complex hunter-gatherer societies and paramount chiefdom-level societies (see Arnold 1996). Cashie phase settlement patterns range from permanently occupied, nucleated villages to loosely organized hamlets or single farmsteads dispersed over the landscape (Boyce 1978; Byrd 1995, 1996, 1997; Byrd and Heath 1997; Phelps 1980, 1983). In general, Cashie phase sites are most commonly found on well-drained, sandy loam ridges or low hills adjacent to major rivers and navigable streams, often near the confluence of smaller tributary branches. This settlement pattern reflects natural resource exploitation of multiple microenvironments. A limited number of seasonal camps or special activity sites (e.g., fishing or upland hunting camps) have been investigated as well. Cashie phase habitation and seasonal resource exploitation sites were more selectively chosen in less environmentally variable locations, perhaps due to a pronounced fishing and farming subsistence focus (see Byrd 1997), than were sites selected by either Archaic or Early-to-Middle Woodland period peoples in the same region (Byrd 1995, 1996, 1997; Byrd and Heath 1997; Phelps 1983).

For the present study, both individual sherds and partially reconstructed vessels from multiple sites were assessed to determine the consistencies and approximate range of variation of technological attributes found within the Cashie series. The broadly summarized data presented herein were primarily collected by the authors and a number of graduate students affiliated with archaeological research endeavors at East Carolina University (ECU). We especially wish to acknowledge the assistance of graduate student, Kimberly Zawacki in our studies of reconstructed vessels found in the ECU site collections. The earliest dated ceramics assessed for this paper are from the Thorpe site (31Ns3b). This multi-component, seasonally occupied site, located near the Tar River fall-line, produced two calibrated radiocarbon dates of A.D. 1022 (UGa-3142) and A.D. 1253 (UGa-3143) from features associated with

Cashie phase ceramics (see Eastman 1994b[ID#s 119 and 120]) . The Jordan's landing site (31Br7), a permanently occupied, palisaded village on the Roanoke River, produced two calibrated radiocarbon dates of A.D. 1290 (UGa) (Phelps, personal communication 1998) and A.D. 1418 (UGa-1086) (see Eastman 1994b[ID #108]) from undisturbed Cashie phase features. These combined Cashie site dates, along with an additional corrected date of A.D. 1425 (UGa) (Phelps, personal communication 1998) from the Ellis site, indicate a 2-sigma range of A.D. 889-to-1638, or a 1-sigma range of A.D. 985-to-1480 (see Eastman 1994a, 1194b), of prehistoric Cashie phase occupations on the northern Inner Coastal Plain of North Carolina.

The Neoheroka Fort site, one of several fortification complexes built by Contentnea Creek Tuscarora communities during the Tuscarora War (A.D. 1711—1715), has yielded an extensive ceramic assemblage considered well-representative of the final decades of the Cashie phase. The fort's occupation was for a discrete period, apparently restricted to the winter of 1712—1713. Combined with diverse ceramic assemblages from undated historic and prehistoric period Cashie phase sites, the sample assemblages are generally representative of some 800 years of Cashie phase ceramic technology. Although a calibrated radiocarbon date of A.D. 786 (1-sigma range, A.D. 673-to-958) has been offered for the Cashie series from a pit feature on the Tower Hill site (31Lr1) in Lenoir County (see Eastman 1994b[ID #40]), the feature contained obviously mixed Middle and Late Woodland ceramic types (see Crawford 1966; Eastman et al. 1997). While the estimated deposition date is certainly plausible for the Cashie phase, the context of the radiocarbon sample is certainly suspect and is not considered specifically valid for the Cashie series.

The basic attributes of the Cashie series are similar over time. There are, however, some readily apparent shifts in the frequency of surface treatments, a reduction in vessel form diversity and techno-functional (e.g., temper, hardness, interior finishing) differences late in the phase (post-Contact). Based on the observed chronological variation in the Cashie series and concomitant socio-cultural changes wrought by European contact and interaction in the historic period, we now sub-divide the Cashie phase

into two sub-phases, Cashie I and Cashie II. The term Cashie I is used to describe the period from A.D. 800—1650; essentially the prehistoric and Contact periods combined. The term Cashie II is now used to describe the later historic period, from A.D. 1650—1715. It is important to note that surface treatments and basic vessel construction methods did not radically change between the Cashie I and Cashie II phases. Neither radically new surface treatments nor new vessel forms were added to the ceramic tradition, rather, common prehistoric-to-Contact period (Cashie I) ceramic types and vessel forms "fell out" of the less diverse range of vessels represented in later Colonial period assemblages (Cashie II). Limited innovation or technological adoption does occur with Cashie II ceramics in the form of simple loop handles on small vessels—at present, there appears to be no Cashie I phase precedent for such handles.

Tempering and interior vessel finish are perhaps the most distinctive regional ceramic attributes that separate Cashie I series ceramics from other Early or Middle Woodland period ceramic series found in eastern North Carolina. These particular attributes, combined with specific surface treatments, make the Cashie I series unique in the regional archaeological record. With one peculiar exception (see below), Cashie I and Cashie II series paste characteristics are relatively homogenous over time and space. Tempering, meaning intentionally introduced aplastic material, generally consists of sub-angular and sub-rounded pebble or granule-size elements of quartz material, with minor frequencies of apparently random, very angular or well-rounded quartz grains. Temper elements observed in the samples assessed for this study most commonly exhibit a typical size range of 1.0—4.0 millimeters (mm). Larger, 5.0—7.0 mm, sub-rounded and rounded quartz pebbles and much smaller, 0.5—1.0 mm, angular and sub-angular grains of coarse sand occur in the paste of some vessels. The largest (5.0—7.0 mm) and smallest (0.5—1.0 mm) clastic inclusions, however, appear to be incidental to the "modal" size range of purposefully introduced tempering elements. A minority of Cashie I and Cashie II sherds and/or reconstructed vessels contain obvious angular quartz inclusions. This observation suggests that tempering materials may have been occasionally crushed to reduce the size of pebbles or granules that

fell outside the size range considered acceptable by Cashie potters. Alternately, fractured granules and pebbles may simply co-occur in the natural temper sources, presumably riverine sand and gravel bars, tapped by the potters. A minority of presumed Cashie series "vessels," with a fine sand-temper or "temperless" paste are known, but such finely tempered vessels are restricted to one peculiar vessel form that we define as "dippers."

Although the tempering elements found in the Cashie I and Cashie II series often give the cursory appearance of crushed quartz, the majority of the aplastic inclusions were apparently procured from natural riverine deposits. A preliminary clay and temper sourcing study (Burruss 1996) indicated that moderate-to-well-sorted, sub-angular and sub-rounded deposits of quartz pebbles and granules in the 2.0—5.0 mm range naturally occur in many of North Carolina's Inner Coastal Plain river drainages. Such deposits were successfully located and samples on narrow beach strips along the Roanoke and Cashie Rivers, respectively near the Jordan's Landing (31Br7) and Sans Souci (31Br5) sites. Moreover, clay deposits suitable for hand-built pottery production are found in close spatial proximity to both the former Cashie phase habitation sites and the potential temper sources (Burruss 1996). Burrus (1996) conducted firing experiments with five potentially potable clay types. Although definitive Late Woodland period pottery production sites have not been recorded in the vicinity of these clay sources, fired Craven and Dogue series clay tiles produced by Burruss (1996) were found similar to actual Cashie series sherds, in terms of hardness, texture and color, when fired at temperatures around 600-degrees Fahrenheit. Experimental vessels produced from these clays appear quite durable (Burruss 1996).

Paste hardness of the Cashie I and II series ranges from two-to-five on Moh's hardness scale, with a series average hardness of three. Ceramic hardness is generally the interrelated result of firing temperature differences and material variations between different clays, but for the Cashie series, scratch-test hardness measures are likely skewed toward the harder end of the Moh's scale, because of the mass of quartz sand tempering elements in the paste. Moh's scale hardness measures are not necessarily significant, particularly in relation to other regional, Woodland period pottery series (e.g.,

Deep Creek, Mount Pleasant, Hanover series) where we find similar hardness variations. This said, however, there are rather distinct differences in the casually observed brittleness of Cashie I ceramics from the Jordan's Landing site (31Br7) and the Cashie II series ceramics from the Neoheroka Fort site (31Gr4), with the later being much more friable. We hope to more objectively address this distinctive difference in material properties in a future study.

Although we also evaluated paste color variation for this study, color is not especially meaningful from a diagnostic standpoint and not reported here. Assessed vessels were fired in either oxidizing or reducing atmospheres, and later exposed to a variety of cooking fire conditions, which contributed to a range of observed color, oxidation and sooting pattern variations, often on the same vessel. In other instances, it appears that post-depositional refiring, surface weathering and other actions affected color. Recent survey for, and the subsequent testing of, the regional clay sources previously mentioned, indicate that local, potable clay types all produce a plethora of colors, depending upon the specific soil type, firing environment and firing temperature (Burruss 1996). For these reasons color, much like paste hardness (within a general range), is not considered a specific diagnostic attribute of the Cashie series.

Surface treatments within the Cashie I and Cashie II series, based on the presently confirmed data, are limited to four types: simple-stamped, fabric-impressed, plain, and incised. There is no current evidence from controlled excavation contexts of cord-marked (*contra* Eastman et al. 1997), net-impressed or check-stamped types within the two related series. Plain and incised treatments are minority surface treatments in Cashie I phase assemblages, but the production of plain, primarily paddle-stamped and smoothed, vessels apparently increased in frequency during the Cashie II phase. Overall, the Cashie I series is dominated by simple-stamped and fabric-impressed types. Vessel finishing treatments, other than interior scraping or smoothing, are nearly always restricted to the exterior vessel surfaces as well as the rim lip. Specimens assessed rarely include interior upper rim treatments other than scraping or smoothing. Simple-stamped and fabric-impressed types, in particular, are found

throughout the chronological and geographic distribution of Cashie I ceramic assemblages, but fabric-impressing appears to have declined rapidly during the Cashie II period, circa 1650—1715. Although Byrd and Heath (1997) recovered fabric-impressed Cashie I series sherds from sites associated with historic period Lower Tuscarora towns along Contentnea Creek, fabric-impressed vessels are not found in the substantial collection of vessels and sherds recovered from the Neoheroka Fort site, circa 1712—1713.

Simple-stamped impressions generally consist of evenly spaced, parallel, lands and grooves. The distinctly angular lands and grooves typically range from 1.0-to-2.5mm in width, with groove widths typically narrower than land widths. In most instances, the observed simple-stamped impressions, with their angular edges, suggest the common utilization of precisely carved, rather than, leather thong-wrapped, paddles. Simple-stamp patterns produced by what appear to have been thong-wrapped paddles, with concave grooves, occur on some early Cashie I sherds, but such vessel fragments are uncommon in the evaluated assemblages. Stamp orientation on simple-stamped vessels varies, but uni-directional, diagonal application, and bi-directional, diagonal over-stamping, is most prevalent. Although plain finished/smoothed rim variants occur on simple-stamped vessels, stamping most frequently appears over the entire exterior of the vessel, including the rim lip. Rims are generally flattened by stamping on the lip and folded rims were relatively common during the Cashie I period. To date, folded rims have not been observed on Cashie II rims sherds recovered in good context.

Fabric-impressed types exhibit a range of variation in the specific fabric weave used in the surface finishing process. Presently, systematic studies to determine the fabric weave types encountered on Cashie series vessels is needed. Although the majority of the assessed fabric-impressed vessels have completely impressed exterior surfaces, a few examples incorporate plain finished/smoothed rims. Fabric-impressed rim lips, unlike simple-stamped vessel rims, are generally rounded or pointed rather than flattened and folded rims were common on fabric-impressed vessels during the Cashie I period.

Fabric-impressed vessels rarely include impressions on upper rim interiors. No fabric-impressed sherds are found in the extensive Cashie II phase assemblage from the Neoheroka Fort site, circa 1712—1713.

Cashie I series assemblages include relatively high frequencies of both fabric-impressed and simple-stamped types, but simple-stamped sherds and/or vessels are most frequent. While a number of fabric-impressed ceramic types are known on the North Carolina Coastal Plain in both the Early (e.g., Deep Creek and Deptford series) and Middle (e.g., Mount Pleasant and Hanover series) Woodland periods, simple-stamping apparently occurred in the northeastern Coastal Plain region only during the Early (e.g., Deptford and Deep Creek series) and Late (e.g., Cashie and Colington series) Woodland periods. The cultural influences or technological mechanisms that led to the resurgence in popularity of simple-stamping in the Late Woodland period are not presently understood, but may relate to regional socio-political or economic inter-relationships such as those suggested by Irwin et al. (1998[DRAFT]). Coincidentally, or perhaps not, the revived simple-stamp tradition is found in the shell-tempered Colington series in the Tidewater subregion during the same period between, circa A.D. 800 and about 1725. The Colington series is directly associated with Contact and post-Contact, Carolina Algonkian peoples on sites dating from 1584—1725 (see Haag 1956; Phelps 1981, 1983, 1984).

Based on assessment of presently available Cashie II ceramic assemblages, fabric-impressed vessels were not made after A.D. 1712—1713, at least among the Lower Tuscaroras. This shift, along with a pronounced reduction in vessel form diversity and vessel wall strength by A.D. 1712—1713, represents a chronological distinction between Cashie I and Cashie II phase ceramics. While Cashie I assemblages from different sites contain various percentages of all surface treatment types observed within the series, Cashie II assemblages are composed primarily of simple-stamped and plain (i.e., paddle-stamped and smoothed) vessels. As with fabric-impressed vessels, incised sherds not found in known Cashie II assemblages. This “debased” phenomenon distinctly contrasts with that of the shell-tempered Colington series where fabric-impressing, based on our study a circa 1650—1725 period

assemblage recovered from the Cape Creek site (31Dr1), apparently remained popular, along with simple-stamped, plain and incised types, well into the first quarter of the 18th century.

Perhaps as significant as any observed exterior treatment of Cashie I vessels, is the ubiquitous addition of an interior finishing treatment that presently appears regionally unique to the series. Although a minor frequency of Cashie I vessels do not include this interior treatment, most Cashie I vessels have "floated" interiors. Such treatment subdues visual evidence of larger pebble or granule-size temper inclusions, which typically protrude from less well-finished or badly weathered/use-worn interior walls. A minority of Cashie I vessels, with finer, granule-size range temper inclusions, have been observed with well-scraped, but not floated, interiors. Interestingly, Cashie II vessels and sherds from the Neoheroka Fort site do not include the distinctive floated interior treatment commonly found with Cashie I ceramics.

Decorative treatments are common, but artistically conservative with the Cashie I series. Vessel decoration is most often restricted to the rim or neck areas with various punctate treatments common to the series. The range of punctated rim designs include: circular (solid and hollow), semicircular (solid), ovoid (solid), and linear (solid rectangular) forms, which were obviously produced with a range of unmodified and carved tool types, such as flat tipped, pointed or hollow implements. Punctations, where applied, occur in both single and multiple rows around exterior rims and are found primarily on the simple-stamped type. Partial vessels and sherds with zoned punctate designs around the body do occur, but such pieces are comparatively rare. Incised vessels are as infrequent as punctated types. The only fully incised vessel form encountered thus far is a flat-base beaker form with complex geometric designs on all exterior surfaces. Incised lines on this vessel, as well as the incised sherds evaluated in the study sample, were generally produced with narrow pointed tools and vary from 1.0—2.5 mm in width. Decorative treatments (punctates, incising), except on the commonly decorated smoking pipe bowls and some stems (see Magoon 1998), are not found in Cashie II ceramic assemblages.

Thus far, seventeen distinct vessel forms have been identified in both Cashie I and Cashie II sub-phase assemblages combined. While all seventeen forms occur in Cashie I contexts, only seven vessel forms are represented in the presently reconstructed Cashie II assemblage. Currently, it is not known whether the observed decrease in vessel form diversity in the historic period is a matter of sampling or truly a historic period, chronological phenomena. As a large number of smashed vessels from the Neoheroka Fort site have not been fully analyzed and/or reconstructed, other forms may very well be present in the fort's Cashie II assemblage. Cashie I and II jars and pots were produced with coniodal, sub-conoidal and rounded bottoms, in four basic forms that differ primarily in the degree or shape of neck restriction (slide Forms 1-5). The majority of reconstructed jar and pot forms assessed for this study have simple-stamped or plain surface treatments. Plain finished jars and pots are a distinct minority during the Cashie I period and no fabric-impressed examples have been identified thus far. Plain (i.e., paddle-stamped and smoothed) jars co-occur in nearly equal frequencies with simple-stamped jars in the Neoheroka Fort assemblage (Cashie II).

Five bowl forms have been recovered. Deep, flat-base bowls (slide Forms 6 and 7) have both simple-stamped and fabric-impressed variants, while a shallower simple bowl form (slide Form 9) has only been observed with a fabric-impressed surface treatments. A second, shallower, simple bowl form (slide Form 8) has been recovered in plain and simple-stamped types. Flat-base and simple bowl forms have only been recovered from Cashie I contexts. A single hemispherical "bowl" form (not illustrated) from Cashie II context has only been encountered with a smoothed finish. This form incorporates a rather unusual simple loop handle. Single and double ended "pouring vessels" have only been recovered from Cashie I contexts thus far (slide Form 10 is the single-spout form). All pouring vessels have pinched or pointed rims and fabric-impressed surface treatments.

Two small beaker forms have been recovered from both Cashie I and Cashie II contexts. These comparatively thin-walled vessel forms (slide Form 11) include either simple-stamped or incised surface treatments. The most complicated incised designs found within the entire Cashie series have been

observed exclusively on this vessel. Small beakers with straight sidewalls, unrestricted orifices, and flat or gently sub-rounded bases, reminiscent of "cup" forms, are most commonly found with simple-stamped surface treatments. Cashie I and II pots, jars and beakers are primarily simple-stamped or plain finished, while Cashie I bowls and pouring vessels primarily occur with fabric-impressed surface treatments. Thus, there may be some meaningful association between surface treatments and vessel forms, at least based on the presently studied sample. Further, the presence/absence of decorative treatments (i.e., punctated, incised, etc.) appear to vary in frequency between specific vessel forms. Although this pattern is apparent in the sample assemblage assessed for this study, additional comparative data are needed to further clarify and evaluate potential cultural meanings (e.g., functional use, ceremonial use, etc.) as well as the chronological or spatial variations associated with these perceived differences.

A final vessel form, the "dipper," has been tentatively attributed to the Cashie I series. These small boat-shape pieces have a fine sand-tempered or temperless paste that is unlike the normal range of variation observed in the Cashie series. The dippers appear to have been hand-modeled or possibly shaped around a form, such as a carved wooden block. All such pieces have distinctly pinched rims and fabric-impressed exteriors. Incising occurs around the entire top edge or lip of the rim. The present specimens were recovered from the Jordan's Landing site. Similar dippers, however, have been recovered from Colington phase contexts at sites on Phelps Lake and Roanoke Island, as well northwest of the Cashie phase site distribution from ancestral Siouan affiliated sites in the North Carolina Piedmont. The distinctive difference in temper, as compared with other Cashie I or Cashie II series vessels, may indicate that this vessel form was imported into Cashie territory through the pre-Contact period trade network. The small size of the vessel, however, may have dictated the utilization of a significantly finer tempered paste. A finer paste was likely more conducive to a free-form construction technique such as that used in prehistoric/early historic period clay pipe making on Cashie phase sites. Cashie I and Cashie II smoking pipes were produced with either a fine sand-tempered or temperless pastes, similar to that observed in the dippers (see Magoon 1998). More site data from variable cultural

contexts are needed to fully understand the significance of these vessels in Cashie phase ceramic assemblages.

The revised Cashie series typology presented in this generalized summary study is simply a working typology and a current overview. Many questions remain to be answered, some of which can be addressed through further detailed analyses of presently recovered assemblages. Other questions must await the reclamation of additional site-specific data. Moreover, additional in-depth analyses are needed to adequately explain or understand Cashie I and Cashie II ceramic traditions, as well as various techno-functional issues only briefly touched on in this paper. In conclusion, we hope that the overview presented here will eliminate some of the perennial problems associated with the identification of the Cashie series, particularly in relation to other regional ceramic series.

Let us end with a few cautionary words. American Indian ceramic assemblages were not mechanically produced in a central manufacturing location. They were the products of individual potters, in diverse locales with differential resources, all attempting to produce their products based on culturally determined "ideals." The result of their collective efforts in a given society was a series of ceramic types varying around a set of culturally accepted "norms," meaning surface finish, temper, decoration, paste, etc. Sets of "norms," which we, as archaeologists, equate with series and type definitions, can only be understood when archaeologists control the total context in which they occur. Overlap in attributes such as temper no doubt occur between different regional ceramic series produced with clastic tempering elements, but it is the responsibility of the researcher to understand the context which makes the type or series meaningful in culture, time and space.

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Provided upon request.