

Mean Ceramic Dating From Pensacola's First Lighthouse Keeper's Residence

By

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In the winter of 1998, Brockington & Associates excavated the site of the first lighthouse keeper's residence (8ES64) at the Pensacola Naval Air Station. This paper presents the secondary ceramic analysis we conducted. Our work is based on previous ceramic dating strategies by South and Carlson, describes sherd and vessel analytical techniques, and builds on recent work by Patricia Samford.[Figure 1]

Over 15,000 artifacts were recovered during the phase III excavations at 8ES64. Of these artifacts, approximately 23% were historic ceramic sherds. Laboratory technicians partially identified 580 vessels from four selected features: 613, 614, 653, and 715. Minimum vessel analysis was based upon ceramic type, decoration, and rim thickness and profile. These analyses helped to determine the quantity, use diversity, and status of the ceramic assemblage. In addition, ceramic sets were identified based upon different vessels having the same decorative pattern. The presence of sets indicates that some ceramic ware was purchased together. Using the ceramic data from 8ES64, we used a wealth of previous ceramic research to identify patterns, dates, and status trends in this assemblage.

Over the past twenty years, archaeologists have refined their use of documented ceramic

typology to accurately date eighteenth through twentieth century sites. Decorative techniques, body structure, and paste types are characteristics used to identify historic ceramics. The use of documented production spans for these ceramics have assisted researchers in composing Mean Ceramic Dates based on the work of Stanley South, to accurately yield date ranges for the occupation periods of historic archaeological sites.

Utilizing the dateable ceramic minimum vessels reconstructed from the four features, Mean Ceramic Dates were calculated. The dates were obtained by applying South's MCD formula, and the modified formulas later created by Carlson.[Figure 2] Looking at the results of the calculations, the date generated for Feature 613 indicates an occupation on the site before the lighthouse was constructed. This contradiction between the MCD and the historical records might be explained an earlier, as yet unidentified occupation on the site. However as it seems unlikely that this occurred and more unlikely that Ingraham, either a bachelor or recently married, arrived on the site with a wealth of ceramics, it appears that the MCD is inaccurate. To better understand this disparity, a hopefully more accurate form of mean ceramic dating was attempted.[Figure 3]

In a 1997 article published in Historical Archaeology, Patricia Samford developed a dating scheme for a specific decorative techniques on ceramics. Developed in England, transfer printed wares allowed detailed designs to be applied in mass quantities at relatively inexpensive costs, revolutionizing the ceramic industry in the late 18th and early 19th centuries.

Samford used 3,250 pottery vessels to develop a dating technique on English transfer

printed wares. Her method is based upon the specific decorative patterns on the vessels. She identified several different decorative attributes of transfer printed ceramics to examine in her study.

The primary focus was on the central motif and the border, or marley design. Samford also notes that field dots, negative printing, and flown colors are key elements that can be utilized to date transfer printed ceramics.

Central design motifs on Staffordshire ware “reflected the social and decorative trends of the time” (Krannert Art Museum 1988). Social movements throughout Europe in the latter 18th and 19th centuries spawned aesthetic influences into European and American tastes and fashion. Samford categorizes artistic influences on transfer printed wares into 13 different groups. Those groups are Chinese, British Views, Chinoiserie, Pastoral, Exotic Views, American Historical, American Views, Sheet Pattern Floral, Central Floral, Classical, Romantic, Gothic, and Japanese.[Figure 4] The following slides illustrate Samford’s design elements on vessels from 8ES64.

English potters utilized existing designs from Chinese porcelains and replicated them onto their own ceramics. Numerous of plates were created after the 1790's using the exact same pattern which were previously owned only by the rich who could afford the Chinese porcelains. The most commonly produced pattern of printed wares was the Blue Willow, which is a direct descendant from the imported Mandarin pattern. This pattern was first replicated in 1790, and is still produced today. Chinoiserie is a category used to distinguish those ceramics whose decorations are based upon European interpretations of oriental designs, as opposed to the

directly adopted Chinese wares. The mean production dates for Chinoiserie designs begin two years after the mean production date for Chinese designs end.[Figure 5]

British views showed the beauty of England by displaying present day English cities, colleges, estates, and country homes. These design were produced from 1793 to 1868. [Figure 6] English potters developed American View ceramics to gain a share into the American economy. These ceramics showed current American landmarks, buildings, monuments, and cities. Potters developed wares showing specific American historical events, such as battles and signing of treaties, along with ceramics which showed state seals and U.S. state names. These wares were grouped into the American Historical category, and have range of production from 1785 to 1880. [Figure 7]

Three series of social movements in Europe, Classical, Romantic, and Gothic, can be reflected in the central designs of printed wares from each period. Resembling the Greek Revival movement of the late 18th to early 19th century, classical period ceramics contain elements such as columned temples, urns, draped figures in togas, acanthus leaves, and the geometrical Greek Key design.[Figure 8] The Romantic period developed as a contrast to the Greek Revival in the 19th century. Popularity in nature increased during this period, and central motifs displaying landscapes and scenery characterized the Romantic period. Oftentimes large buildings or castles absent of specific architectural detail serve as the background, commonly showing some water source such as a river or waterfall in the mid-ground. [Figure 9] The foreground of the Romantic period wares showed people or animals, giving a sense of scale to the scene. Using a traceable maker's mark, it can be determined that the vessel on the left, MNV397, was manufactured by

Adams Warranted Staffordshire between 1804 and 1840. The final period of the three social movements, the Gothic revival, was influenced by the interest in the Middle Ages. The wares of this period displayed stone towers, arches, battlements, and ruins, which date between 1818-1890. There were no vessels at 8ES64 which had Gothic motifs on the central design.[Figure 10]

Dating between 1781 and 1859, Pastoral view designs are similar in scale to the Romantic period wares. The distinct difference between the two is that Pastoral ceramics show rural settings emphasizing animals or people working. The depiction of floral motifs were common transfer printed center designs during the 19th century. Samford separates floral motifs into two categories, Central Floral and Sheet Floral. [Figure 11] The Central Floral design, the more common design of the two, contained a group of flowers centrally located on the vessel, often having a blank area separating the central motif from the marley. Having dateable maker's marks, MNV's 418 and 419 were produced by Clews Staffordshire potters between 1818 and 1834. Sheet Floral motifs contain a small repeating pattern of covering the entire vessel extending to the edge of the marley.

Samford's final category for Central Designs is the Japanese Aesthetic. Staffordshire potters produced ceramics inspired from Japanese prints and fabrics. The decorative focus was an asymmetrical image or scene of birds, butterflies, and exotic plants, often times accompanied with asymmetrical collages of half circles or fans filled with bamboo, birds, and other decorative patterns. No Japanese Aesthetic vessels were observed from 8ES64 [Figure 12]

Of the 580 vessels identified at 8ES64, 221 were transfer printed wares. Applying

Samford's outline for dating transfer printed wares to our vessels, I attempted to calculate an accurate date range for the occupancy of the lighthouse keeper's residence. Of the 221 transfer printed minimum vessels from 8ES64, 84 were eliminated from the study due to having small vessel size (usually being a small, single sherd), where the design and pattern would be indeterminate. This reduces the sample size to 137. Eighty-four vessels had central motifs which could be applied to Samford's categories. Approximately 64% of the vessels identified by their central motif fell into three categories: Chinese, Central Floral, of Romantic. Twenty-five out of the 26 Chinese decorated vessels were of the Blue Willow design. [Figure 13]

During Samford's analysis of transfer printed wares, researchers may encounter a problem of not having the central design piece(s) recovered. This may be overcome by using a dating technique examining different design patterns on the border or marley of the vessel. She defined four primary marley types They are Continuation of Main Scene, Continuous Repeating Patterns, Noncontinuous Repeating Florals, and Vignettes. Within Samford's Continuous Repeating Patterns category, she noted three distinct subgroups, each having its own specific date range. Dateable subcategories of vignettes were also observed by Samford. Those are based upon the item which is placed within the frames, such as flowers, musical instruments, statues, or landscapes.[Figure 14]

Fifty-two of the transfer printed vessels from the Navy Lodge site had identifiable marley designs. Sixty-three percent of the dateable marleys were grouped into Samford's Continuous Repeating Pattern, with just over half of them being a repeating floral pattern. Marleys with vignettes were uncommon on the site, representing approximately 12% of the vessels.[Figure 15]

Samford also notes several other key characteristics which can be utilized for dating ceramics. Negatively printed vessels appear to have been printed in reverse to normal vessels. An example of this would be a vessel that has a background that would appear blue, and the decorative design would appear in white. Forty-one of the transfer printed wares at 8ES64 had negative print designs. Flown wares produced a soft cloudy effect to the decoration on the vessel. Often the decoration would appear blurry, and the scene may seem distorted. There were no flown wares recovered from 8ES64. [Figure 16] Two or more colors on a transfer print was a decorative technique that was not invented until 1840. Usually, multicolored transfer prints have the central design in one color, and the marley in a different color. From 8ES64, only 6 vessels had two colored transfer prints.[Figure 17]

Unfortunately, a few ceramics had to be excluded from the sample because they did not fit within any dating category developed by Samford. This ameba shaped pattern does not qualify for a decorative category or another dating scheme. Fortunately, the number of unknown patterns were limited to only a few vessels, and therefore did not bear significantly on the study [Figure 18].

After identifying all decorative elements on the recovered transfer printed wares, 31 different types of vessels were identified. Using a combination of decorative traits, mean production date ranges could be refined even further. Identified maker's marks were also used to produce an accurate date range. Ten vessels contained reference maker's marks. [Figure 19] Using all these factors, the mean ceramic date for the overall site and the four separate features was calculated. Based upon the Samford analysis, 8ES64 has an overall mean ceramic date of

1832. The four features are much more consistent with their dates in the Samford dating technique compared to the other three computed. There is only a variation of three years in the Samford equation, between Features 653 and 715. Feature 613, has a Samford MCD of 1832, which corresponds more accurately to the historical documentation of the light house versus the other MCD's.

Through the use of examining the decorative elements on transfer printed ceramics, a more consistent date was produced for the lighthouse keeper's residence at Pensacola. The date produced, 1832, correlates with historical records such as census records and historical newspaper accounts. At this time, we have not been able to account for the high number of ceramic sherds and vessels that were recovered from the site. It seems highly improbable that one household (less than 10 individuals) owned that many plates, saucers, and tea cups over the occupation time. Records show that five hurricanes, from 1837 to 1856, hit Pensacola, and may be responsible for breakage of several vessels. However it seems more likely that these vessels resulted from an unidentifiable military presence at the site during the 1830's or 1840's.

Even though the dates based upon transfer printed wares appear to be more refined, they do not allow for the use span of these ceramics. Ceramics have a relatively long use span within a household. With the expansion of future documentation on the Staffordshire industry, Samford's decorative pattern analysis may be applied to Mean Ceramic Dating to produce an even more accurate tool for dating archaeological sites.

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