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Timothy K. Perttula

Introduction

The most distinctive material culture item of the Caddo groups living in East Texas were the ceramics they made for cooking, storage, and serving needs, and also included as necessary funerary goods. The styles and forms of ceramics found on sites in the region hint at the variety, temporal span, and geographic extent of a number of ancestral Caddo groups spread across the landscape. The diversity in decoration and shape in Caddo ceramics is substantial, both in the utility ware jars and bowls, as well as in the fine ware bottles, carinated bowls, and compound vessels, and these characteristics are related to distinctive communities of identity and practice and the recognition of social networks from ceramic assemblages, where potters shared a group identity that can be reconstructed through the analysis of suites of technological and stylistic attributes (cf. Eckert et al. 2015:2).

Caddo potters made ceramics in a wide variety of vessel shapes, employing distinctive technological traditions of temper choice, surface finishing techniques, and firing conditions, along with an abundance of well-crafted and executed body and rim designs and surface treatments. From the archaeological contexts in which Caddo ceramics have been found, as well as inferences about their manufacture and use, it is evident that ceramics were important to the Caddo in the cooking and serving of foods and beverages; in the storage of foodstuffs; as personal possessions; as beautiful works of art and craftsmanship (i.e., some vessels were clearly made to never be used in domestic contexts); and as social identifiers. Certain shared and distinctive stylistic motifs and decorative patterns marked closely related communities and constituent groups. Other motifs may have originally been more personal, perhaps deriving from body tattoo motifs.

The Caddo made both fine wares with engraved and slipped decorative elements, with burnished or polished surfaces, including bottles and many bowls of different forms, and utility wares with wet paste decorative elements (i.e., brushed, incised, punctated, etc.). These kinds of ceramics were designed to serve different purposes within Caddo communities and family groups—from that of a cooking pot to the mortuary function of a ceremonial beaker—and this is reflected in differences in paste, surface treatment, firing methods, decoration, and vessel form between the two wares. Decorations and slips, both red (*hatinu*) and black (*hadikuh*) were added before, as well as after, baking in an open fire, and commonly the vessels were then burnished and polished; red ochre and white (*hakaayuh*) kaolinite clay pigments were often added to the decorations on bottles and carinated bowls; green (*hasahkuh*) pigments have also been documented on some engraved vessels (see Fields and Gadus 2012:Table 6-3). Webb (1959:157) noted that a number of vessels at the Belcher site (16CD13) had a “pale green pigment...smeared irregularly on the surface of 15 burial vessels.”

The goals of this article are straightforward. First, I will examine the use of clay pigments in the ceramic vessel sherd assemblages from the Late Caddo period stratified platform mound at the Hatchel site (41BW3) on the Red River in Bowie County, Texas (Perttula 2014, 2015a) (Figure 1), then discuss the variable occurrence of either red or white clay pigments on different fine ware vessel forms at the site. Finally, although not comprehensive (that effort still awaits), I consider the spatial and temporal diversity in clay pigment use among different Caddo sites and communities in East Texas.



Figure 1. Sites mentioned in text with data on use of clay pigments on ceramic vessels.

Use of Clay Pigments at the Hatchel Site

Red and white clay pigments on ceramic vessel sherds are present in almost all of the different platform mound zones (Zones A-J) at the Hatchel site, and in the pre-mound habitation zone (Zone K). Based on the range of decorated sherds and vessels in the various zones, the pre-mound Zone K likely dates about ca. A.D. 1200, while the initial platform mound zones (I-J) date from ca. A.D. 1450-1500. Zones E-H likely date from ca. A.D. 1500-1600, and the latest platform mound zones (A-D) date from ca. A.D. 1600-1691. The Teran expedition of 1691 visited the Nasoni Caddo community on the Red River that includes the Hatchel site and mapped an earthen mound with a *templo* or temple structure on it that is believed to be the platform mound at the Hatchel site (Sabo 2012:438 and Figure 15-1).

There are 337 ceramic vessel sherds with either red (n=135), red and white (n=1), or white (n=201) clay pigments in the mound zones (Table 1). The pigments were used on bottles, carinated bowls, and compound bowls. By far the largest numbers of sherds with pigments are in zones G and H, but these zones also have the highest number of decorated sherds (Pertulla 2014:Table 1). About 5.9 percent of the decorated sherds from Zone G have a clay pigment, compared to 9.4 percent in Zone H. In fact, the proportion of sherds with pigments in zones E-H is 7.3 percent, compared to 4.5 percent in zones below H-J, 2.9 percent in Zone K, and only 1.6 percent in zones A-D. The use of clay pigments by Caddo potters on ceramic vessels declined considerably after ca. A.D. 1600, after having peaked in use between ca. A.D. 1500-1600.

Table 1. Clay pigments on vessel sherds from mound zones at the Hatchel site.*

Zone	red pigment		red-white pigment	white pigment	
	Bt	CB/CPB	CB	Bt	CB/CPB
A	1	-	-	-	-
B	2	4	-	-	-
C	-	-	-	-	-
D	1	1	-	1	3
E	3	-	1	-	1
F	3	2	-	1	14
G	6	8	-	3	37
H	37	42	-	9	114
below H	12	6	-	-	15
I	-	-	-	-	-
J	-	1	-	1	-
above K	-	-	-	-	1
K	-	1	-	-	-

*six sherds are from deposits that cannot be associated with a zone in the platform mound. Five have red pigment and one has a white clay pigment.

Bt=bottle; CB=carinated bowl; CPB=compound bowl

The use of clay pigments by zone and temporal periods at the Hatchel site was not consistent, but changed through time. In the mound itself, by proportion, red pigments were most commonly used after ca. A.D. 1600, as 69 percent of the sherds with pigment had a red clay pigment (Table 2). In the earliest platform zones, dated ca. A.D. 1450-1500, about 53 percent of the sherds with pigment in the assemblages had a red clay pigment. Conversely, between ca. A.D. 1500-1600, sherds with a red clay pigment comprise only 36 percent of the assemblages; the one sherd with both red and clay pigments also occurred at this time. The use of a white kaolin clay pigment peaked between ca. A.D. 1500-1600, as 64 percent of the sherd sample with pigment had the white pigment smeared in the engraved lines (Table 2). The use of white clay pigment dropped to 31 percent after ca. A.D. 1600.

Table 2. Clay pigment use by zones and temporal periods in the platform mound at the Hatchel site.

Zones/temporal periods	Pigments			N
	Red	Red-White	White	
A-D/ca. A.D. 1600-1691	9	-	4	13
E-H/ca. A.D. 1500-1600	101	1	179	281
below H-above K/ca. A.D. 1450-1500	19	-	17	36
K/ca. A.D. 1200	1	-	-	1
Totals	130	1	200	331

A red clay pigment was preferred by Caddo potters at the Hatchel site for use on bottles, especially between ca. A.D. 1450-1500 and after ca. A.D. 1600 (Table 3). The use of a white clay pigment on bottles was most common between ca. A.D. 1500-1600, as 21 percent of the bottle sherds with evidence of pigment use had a white clay pigment during this period. In the case of carinated bowls and compound bowls at the Hatchel site, a white clay pigment was more regularly used on these vessel forms. In the ca. A.D. 1450-1500 deposits, carinated bowls and compound bowls with a white pigment comprise 70 percent of the sherds from these vessel forms, compared to 76 percent of the sherds in the ca. A.D. 1500-1600 deposits, but only 37.5 percent of the sherds from these vessel forms in the ca. A.D. 1600-1691 mound zones (Table 3).

Table 3. Clay pigment use by vessel forms and zones/temporal periods.

Temporal period	Pigments				
	Red Bt	CB/CPB	Red-White CB	White Bt	CB/CPB
ca. A.D. 1600-1691	4	5	-	1	3
ca. A.D. 1500-1600	49	52	1	13	166
ca. A.D. 1450-1500	12	7	-	1	16
ca. A.D. 1200	-	1	-	-	-
Unassociated zones	4	1	-	-	1
Totals	69	66	1	15	186

Bt=bottle; CB=carinated bowl; CPB=compound bowl

Pigment use at the Belcher site (16CD13) on the Red River in northwestern Louisiana, contemporaneous with the use of the Hatchel platform mound, was also extensive. More than 63 percent of the 116 engraved ceramic vessels in the Belcher phase component at the site had pigments in the engraved lines (Webb 1959:157). Webb noted a correlation between vessel forms, ceramic types, and use of either white or red pigment. Carinated bowls of the Belcher Engraved type had white pigment (as they commonly did at the Hatchel site), while bottles of the Hodges Engraved type had red pigment. In the vessel assemblage as a whole, 36 engraved bottles and bowls had red pigment, while 37 bowls and effigy bowls had white pigment (Webb 1959:157).

Use of Clay Pigments at other East Texas Caddo Sites

For comparative purposes, I compiled information on the use of clay pigments in several Early Caddo, Middle Caddo, Late Caddo, and Historic Caddo period ceramic vessel assemblages in East Texas; many other assemblages warrant study for clay pigment use, but this research awaits completion. This includes the Middle Caddo period Washington Square Mound and Sanders sites (Perttula et al. 2010, 2016); the Pine Tree Mound and Mockingbird Late Caddo, Titus phase, sites (Fields and Gadus 2012; Perttula et al. 1998), Late Caddo Frankston phase vessels from the upper Neches River basin (Perttula 2011); and Historic Caddo vessel assemblages at the Goode Hunt and Clements sites (Perttula 2015b) (see figure 1).

About 27 percent of the engraved vessels from Early Caddo period features at the George C. Davis site (41CE19) on the Neches River have clay pigments rubbed in engraved decorative elements. Of these vessels, 86 percent have a red clay pigment; the red pigment was clearly preferred by the Caddo potters at the George C. Davis site, particularly on Holly Fine Engraved vessels (Perttula 2016). The red clay pigment was added to one Hickory Engraved jar, two Holly Fine Engraved bottles, two Holly Fine Engraved bowls, and one Holly Fine Engraved carinated bowl. The one vessel with a white clay pigment in the assemblage is a Holly Fine Engraved bottle.

In the case of the Middle Caddo period vessel assemblages, about 21 percent of the engraved vessels at each site had a clay pigment rubbed in the engraved lines. Between 60-75 percent of these vessels have a red pigment (Table 4). At the Washington Square site, bottles and carinated bowls have red pigment, while the white pigment was applied to the engraved lines of two compound bowls (Perttula et al. 2010). Carinated bowls and bowls at the Sanders site have a red clay pigment, and one carinated bowl has a white clay pigment (Perttula et al. 2016).

Table 4. Clay Pigment use in other ancestral Caddo sites in East Texas.

Site	Red pigment	White pigment
<i>Early Caddo period</i>		
George C. Davis (41CE19)	6	1
<i>Middle Caddo period</i>		
Sanders (41LR2)	3	1
Washington Square (41NA49)	3	2
<i>Late Caddo period</i>		
Pine Tree Mound (41HS15)	21	24
Mockingbird (41TT550)	1	19
Upper Neches, A.D. 1400-1560	37	3
Upper Neches, A.D. 1560-1680	4	7
<i>Historic Caddo period</i>		
Goode Hunt/Clements (41CS23/ 41CS25)	12	3

At the Pine Tree Mound site, pigment use in the engraved fine wares was quite common, as 56 percent of the engraved vessels had an applied pigment (Fields and Gadus 2012:Table 6-3). Although pigment use was rather equally spread between the red and white clay pigments in the vessel assemblage, unlike the other assemblages discussed in the text except for the ca. A.D. 1450-1500 deposits at the Hatchel platform mound (see Tables 2-3), almost all the bottles (86 percent) had a red clay pigment, while 86 percent of the carinated bowls and 89 percent of the compound bowls had the white clay pigment, one of the highest proportion of white clay pigment use in these vessel forms in the East Texas ceramic assemblages under consideration herein. The only higher percentage of white clay pigment use is in the Mockingbird site vessel assemblage (see Table 4). There, 95 percent of the engraved vessels with pigments have a white clay pigment, including all of the carinated bowls (n=12), compound bowls (n=5), one bottle, and one bowl; another bowl had a red clay pigment (Perttula et al. 1998). Forty-three percent of the engraved vessels in the assemblage have a pigment applied to the decorative elements.

Other Late Caddo period Titus phase vessel assemblages in the Little and Big Cypress Creek basins in East Texas are dominated by vessels with white clay pigment, especially on carinated bowls and compound bowls as well as jars; bottles mainly have red clay pigments (Perttula et al. 2012a, 2012b, 2012c). Bowls in these assemblages, which rarely have pigments, have both red and white pigments; ollas tended not to have an applied pigment of either color (Perttula et al. 2012a:35).

In the upper Neches River basin, by contrast, a temporal series of Late Caddo Frankston phase fine ware vessels are dominated by vessels with a red clay pigment, at least from ca. A.D. 1400-1560 (see Table 4). In those assemblages, 92.5 percent of the fine ware vessels with pigment have a red clay pigment, and this includes bottles, bowls, and effigy bowls. After ca. A.D. 1560, only 36 percent of the vessels with pigment have a red clay pigment, and instead use of a white clay pigment predominates; most of these vessels are carinated bowls (Perttula 2011:279-280).

In the Historic Caddo vessel assemblages from the nearby Goode Hunt and Clements site, both ca. A.D. 1680-1730 Nasoni Caddo cemeteries (Perttula 2015b), pigment use on engraved fine ware vessels ranges from 25-29 percent of the sample of engraved vessels. Eighty percent of these vessels have a red clay pigment, and this includes bottles (n=4, 100 percent), bowls and compound bowls (n=2, 100 percent), and carinated bowls (n=9, 67 percent). Only a few carinated bowls in the vessel assemblages at both sites have a white clay pigment.

Summary and Conclusions

Ancestral Caddo potters in sites and communities in what is now East Texas used clay pigments, either red or white in color, to embellish fine ware engraved ceramic vessels. This was a practice that was established and used for at least nine centuries. The relatively common occurrence of pigments on fine ware vessels suggests that both red and white clay pigments were readily accessible to Caddo potters in communities across East Texas and surrounding locales, and it is likely that there was an active trade/exchange of pigments across the region that were secured from sources of hematite and kaolin clay.

The examination of the fine ware ceramic sherds from the platform mound at the Hatchel site (41BW3), and fine ware engraved ceramic vessels from select Early Caddo to Historic Caddo period assemblages in the region (from ca. A.D. 1000-1730), indicate that there were spatial and temporal differences in the frequency of use of clay pigments by Caddo potters as well as in the pigments of choice to use on different vessel forms. The assemblages examined to date indicate that there was not one shared pattern or tradition in pigment use within sites occupied at different times or within different localities, although the use of red clay pigment appears to have been more common between ca. A.D. 1000-1400. Rather there was a diversity in pigment selection and use that is probably related to the meaning(s) of the two colors in different Caddo communities, and what the meanings were in different times and places.

Lankford (1992) discussed the importance of the use of either red or white colors in social, political, and cosmological contexts in Southeastern North American societies, and such contexts likely also apply to ancestral Caddo groups that lived in East Texas. As Hart and Perttula (2010:208) note, colors likely “symbolize the cosmological underpinnings of worldviews.”

According to Bobby Gonzalez (April 2008 personal communication) “the red pigment means life and is very sacred among the Caddo. The red pigment is now used on peyote staffs, and during ritual ceremonies and prayer meetings, the red pigment is painted on and in the ears as well as on the top of the head in the middle of a man’s hair line, running from front to back; the women and men paint themselves in the morning when the sun comes up.” Caddo peoples bathed the deceased in red clay (Gonzalez 2005:57), and in historic times red was used as a paint or pigments on material items in ceremonies (Hart and Perttula 2010:208). Red ochre is readily associated with blood and life (Miller 2015:61). Therefore, vessels with a red pigment likely are from vessels that symbolize life and its sacredness to the Caddo. It is possible that the red pigment seen on vessels placed in Caddo burials may have been added to the vessels shortly before they were placed in graves with the deceased.

“The white clay is also very sacred to the Caddo and was used for altars during Caddo peyote meetings” (Bobby Gonzalez, 2008 personal communication), and for doctoring cuts, burns, and stomach problems. In historic times, Caddo men painted their faces red and white, and white feathers were a sign of peace (Hart and Perttula 2010:208).

In conclusion, the alternating preference for red or white clay pigments by Caddo potters in different communities at different times may relate to social, political, or religious dualisms in Caddo lifeways. Thus, Lankford’s (1992:76-77) suggestion that the two colors denote the Lower world of change (red) and the Upper world of order (white) has considerable significance in the interpretation of pigment use on ceramic vessels by Caddo peoples. Before ca. A.D. 1400, between ca. A.D. 1400-1560 in the upper Neches, and between ca. A.D. 1680-1730 among the Nasoni Caddo, red clay pigments appear to have been preferred by Caddo potters to embellish the decorations on fine ware vessels. Cosmological and world views of the Caddo began to change in certain communities in East Texas after ca. A.D. 1400, such that new cosmological and world views came to dominate beliefs and mortuary ritual use; one marker of this is different trends in pigment use. Fine ware engraved vessels in a number of mortuary vessel assemblages dating after ca. A.D. 1450 usually then had white pigments rubbed in the design. Finally, George Sabo has noted that color use by Caddo peoples “suggest an association of red and white with an ongoing cycle of life in which birth and death are subsumed” (May 2009 personal communication).

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