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A Preliminary Comparison of Two Caddo Mound Sites in Southwest Arkansas

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Previous Arkansas Archeological Survey excavations at the Hedges site in the Ouachita River valley and the Hughes site in the Saline River valley uncovered evidence of burned structures adjacent to the mounds. An overview of the artifact analyses indicates that the sites were roughly contemporaneous, with intensive use by ancestral Caddo Indians during the Late Caddo period, between the AD 1400s and 1600s. This presentation summarizes the research findings to emphasize comparisons in timing, activities, and community plans.

Introduction

In a previous study of Caddo architecture (Trubitt 2009), I highlighted several dimensions of variation: circular or straight-sided structures; mound, near-mound, or non-mound location; buildings burned or unburned after use; and if burned, covered with “clean” earth or with midden debris. At that time, I saw similarities in two contemporaneous Caddo mound sites located in adjacent river drainages in southwest Arkansas that would benefit from further comparison. I and my assistants and lab volunteers have concluded analyses of artifacts from Ann Early’s excavations at Hedges (3HS60), a site in the Ouachita River valley, and from my excavations at Hughes (3SA11), located in the Saline River valley (Figure 1). At both sites, excavators uncovered stratified deposits next to the main mounds that included burned buildings covered with midden deposits with ceramic sherds, chipped stone tools and debris, animal bone, and charred plant remains. While the full monograph is not yet complete, this paper summarizes highlights of the artifact analyses to show similarities in dating and activity patterns at these two Late Caddo period communities.

Excavations at Hedges and Hughes

In 1973 and 1974, Ann Early led a brief Arkansas Archeological Survey test excavation project at the Hedges site in Hot Spring County (Early 1974). Fieldwork included mapping two low mounds (Mound A, an elongated oval platform measuring 42 x 25 x 2 m, and Mound B, a low conical burial mound eroded by the river). Conversations with local collectors indicated

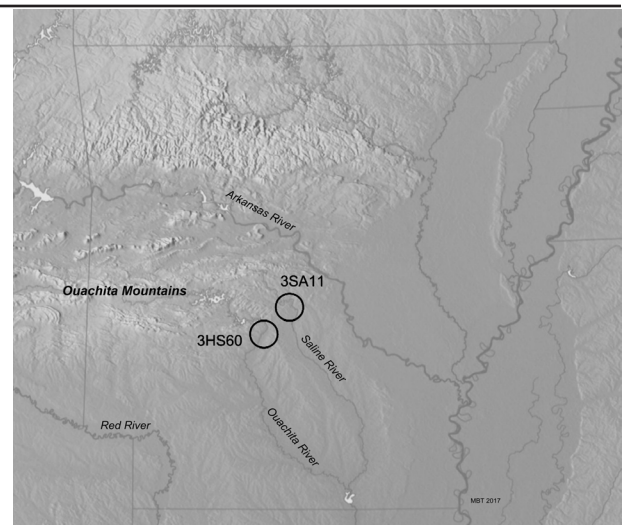


Figure 1. Location of 3HS60 (Hedges) in Arkansas’s Ouachita River valley and 3SA11 (Hughes) in the Saline River valley (base map from Tom Patterson, Physical Map of the Coterminous United States).

at least three cemetery areas as well (Figure 2). Auger testing showed deep midden deposits south and west of Mound A.

Subsequent excavations south and west of Mound A included Test Pit 1 (a 2 x 2 m unit), a Block Excavation (of six 2 x 2 m units), and a Trench (1 x 6 m). While no complete structures were exposed, archaeologists uncovered stratified deposits with burned cane and thatch, ash, daub, and post molds in all three excavation areas (Figure 3). The 90 cm of stratified deposits in Test Pit 1 included Feature 1 with patches of burned cane, thatch, bark, and wood, and scorched sand, ash, and daub. Residues of a second burned structure were found below that (as stratum 20, burned daub and floor deposit with post molds that cut into the underlying stratum 21). In the Block Excavation, a

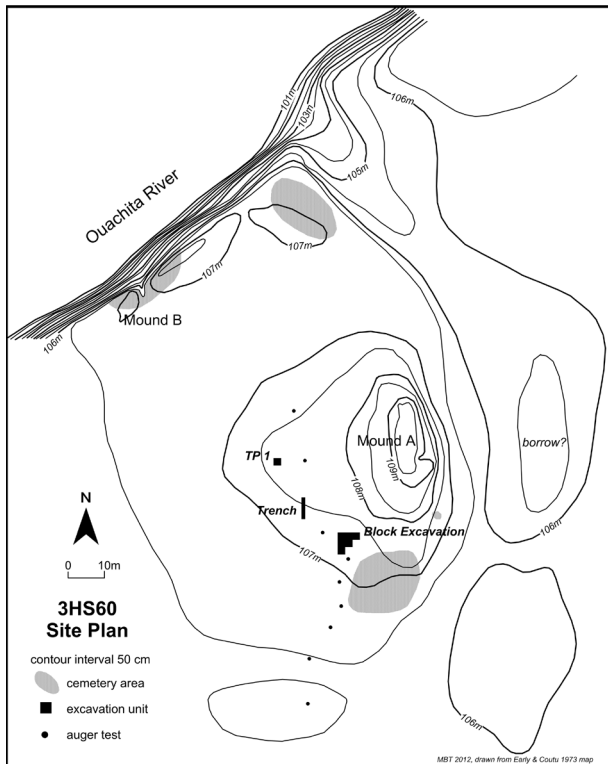


Figure 2. Hedges site plan (after Early and Coutu 1973 field drawing).

midden deposit was uncovered below the plow zone. Below the midden was Feature 4, a daub and charcoal concentration with post molds, interpreted as a burned structure. Another lower burned structure (Feature 6) was identified in one unit as a red clay lens (stratum 8) with associated post molds that cut into the underlying subsoil. Midden deposits and burned soil were also uncovered in the Trench, interpreted as the remains of a burned structure (Feature 5) with one or two burned floors and an ash lens. A lower burned floor was exposed but not excavated at about 60 cm below surface. The elevated area next to the west side of Mound A (shown by the 107 and 107.5 m contours) represents an artificial buildup of deposits as burned structures were covered by midden deposits.

Based on the artifacts, ancestral Caddo Indians used the site during the Mid-Ouachita and Social Hill phases of the Late Caddo period, ca. A.D. 1400-1650. Ann Early (1993:116; 2002) later used Hedges material in her definition of the Social Hill phase. Absolute dates from the site are few. Dan Wolfman (1982, 1990) published results of archaeomagnetic samples from 15 sites in southwest Arkansas as part of his research



Figure 3. East wall profile, Hedges Block Excavation TU3, December 1973 (Arkansas Archeological Survey photograph).

to develop a regional “polar curve” and extend the utility of archaeomagnetic dating in archaeology. He calculated the resulting date from a burned structure floor (Feature 5) at Hedges at A.D. 1450-1535. More recently, we directly dated charred maize kernels from the Block Excavation midden deposit (above Feature 4) using the accelerator mass spectrometry technique to cal A.D. 1650-1660 (Trubitt 2012a).

The Hughes site in Saline County is near the eastern edge of the Caddo archaeological area. Archaeologists – and artifact collectors – have known about the site for over a hundred years. It was visited by Edward Palmer in 1883 as part of the Smithsonian Institution’s Mound Survey (Jeter 1990:293-296; Thomas 1894:246-247). Palmer’s description of daub and charcoal/ash deposits indicate there must have been at least one burned structure in the site’s large two-stage mound. Other lower mounds had apparently been leveled even before Palmer’s visit; the property was part of a nineteenth-century farm. Hughes was placed on the National Register of Historic Places in 1985. While on private land and protected by the property owner, unauthorized digging into the mound has been a concern.

I conducted excavations at Hughes as part of the 2002 Henderson State University/University of Arkansas archaeological field school. Students mapped the site with an electronic total station, showing the large two-stage mound as a 35 x 55 x 5.5 m construction (Figure 4). Because of the tree cover at the site, we used systematic shovel testing to identify

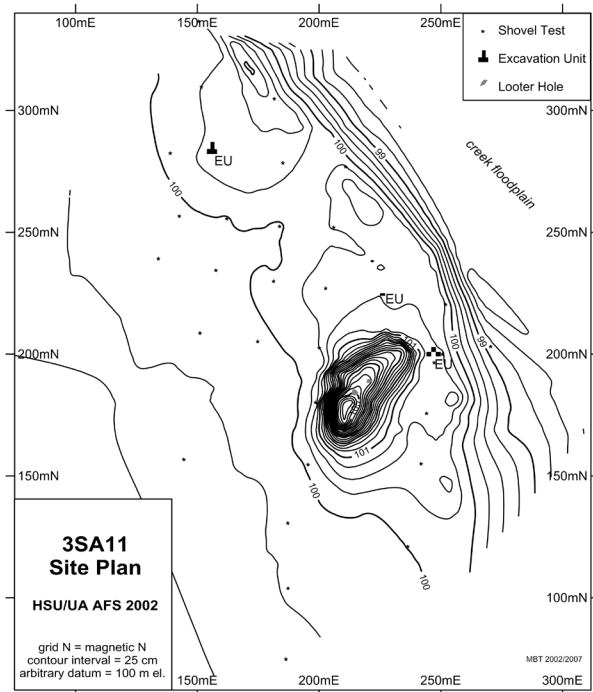


Figure 4. Hughes site plan.

spatial patterning within the site. Shovel testing across about 3.8 hectares showed artifact concentrations and uncovered features in two areas. We investigated these further with excavation units. In a 4 x 5 m excavation block on the north edge of the site, students uncovered a large burned clay hearth (Feature 1; Figure 5). This was likely part of a structure not fully exposed by our fieldwork. A 1 x 2 m excavation unit north of the mound sampled a dense area of midden. Northeast and near the mound, excavators uncovered stratified deposits in three 2 x 2 m units, with burned timbers, burned earth and daub, and quantities of ceramic sherds, chipped stone debris, and animal bone. Although no post patterns were seen, the burned clay, daub, charcoal and burned timbers (Feature 2/3/4, Feature 7, and Feature 8/16) were interpreted as a series of burned structures (Trubitt 2009, 2012b). Three charred wood samples were dated using the conventional radiocarbon technique. The lowest structure (Feature 8/16) dated to cal A.D. 1270-1390 while the overlying one (Feature 7) dated to cal A.D. 1450-1620 (Trubitt 2012b). As at Hedges, the elevated area northeast of the mound (100.5 m contour) represents an artificial buildup of midden deposits covering burned structures.



Figure 5. Sectioning Feature 1, EU N282E154-156, Hughes site, July 2002 (Arkansas Archeological Survey photograph).

Artifact Analyses

Our analyses of artifacts from Hedges and Hughes (Table 1) have had two goals: first, to place the use of these communities in a temporal and cultural framework; and second, to gain a better understanding of activity patterns in these near-mound areas.

Chipped stone included tools and chipping debris. I examined arrow points to identify types that have served as “time markers” elsewhere. There were points and point fragments made from novaculite and chert at both sites (Figure 6). Bassett were the most common arrow point style at Hedges. These are basal-notched triangular points with prominent barbs and small rounded or pointed stems. The predominant arrow point form at Hughes was the Maud type, a triangular point with a concave base, in both the un-notched *var. Maud* and the side-notched *var. Hopper*. Both types occur on Late Caddo sites in east Texas, northwest Louisiana, and southwest Arkansas (e.g., Kay 1984:184-187; Kelley 1997:65-66; McKinnon 2017:91-102; Perttula 2017:206-207; Webb 1959:162-163). In the Ouachita River valley, Bassett points have been found with late Mid-Ouachita phase ceramic types, estimated to date to the late fifteenth century, and Maud points have been found with Buckville and Social Hill phase ceramics, estimated to date to the fifteenth to early seventeenth century (Early 1988:107-109; 1993:122-123; 2002; Trubitt 2012b). In addition, there were several antler projectile points from the sites (Figure 7). Antler tine points are not commonly preserved on Caddo sites, but they have been found in Belcher and

	Hedges (3HS60)		Hughes (3SA11)	
	Ct #	Wt g	Ct #	Wt g
Ceramics	7611	40100.7	13703	23669.0
Chipped Stone	3767	10602.0	3396	3301.4
Ground Stone	24	5117.2	44	5186.8
Faunal	3454	7677.7	5660	6795.2
Floral/C14	227	9137.4	3689	4559.0
Daub/Burned Clay	513	4501.0	8628	9992.8
Historic/Modern	199	440.4	2592	8528.3
Rocks/Minerals	950	19336.6	88	1113.2
Totals:	16745	96913.0	37800	63145.7

Note: Totals include 1973 and 1974 testing at Hedges, and 2002 shovel testing, pothole cleanup, and test excavation at Hughes. The rocks/minerals category from Hughes represents the curated sample.

Table 1. Artifact Totals.

Chakanina phase contexts in the Red River valley (e.g., Kay 1984:191-192; Kelley 1997:87-89; McKinnon 2017:46; Webb 1959:167-169).

There was well-preserved animal bone found at both sites. None of the faunal material from Hedges has been formally analyzed, but Lucretia Kelly analyzed a faunal sample from Hughes in 2011. She found that mammals made up the largest category, with deer and squirrels most common. Residents used turtles and mussels but there were relatively few bones from birds and fish. There was a predominance of terrestrial animals as compared with aquatic ones. In addition to the bone or antler points, there are several other worked bone tools in the form of antler tine knapping tools and pierced mussel shell hoes from Hedges and Hughes.

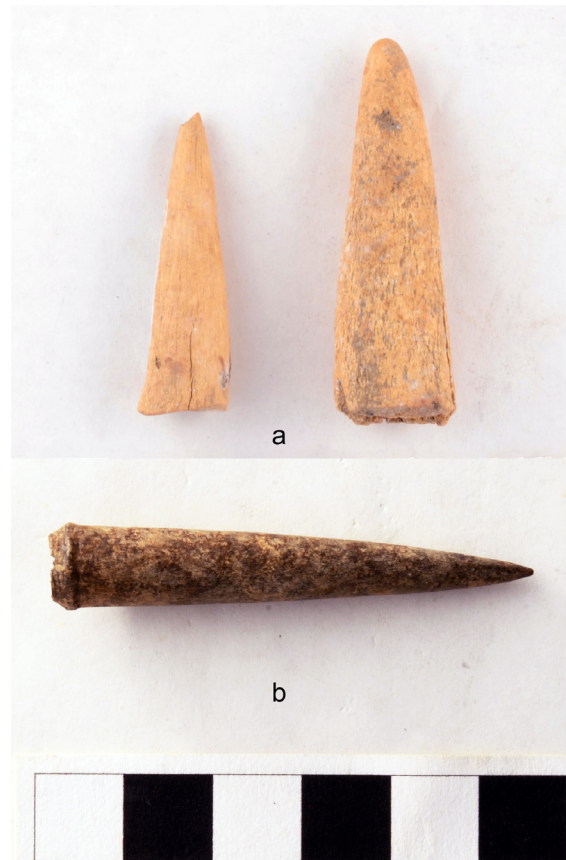


Figure 7. Bone points: (a) Hedges; (b) Hughes (Arkansas Archeological Survey photographs).

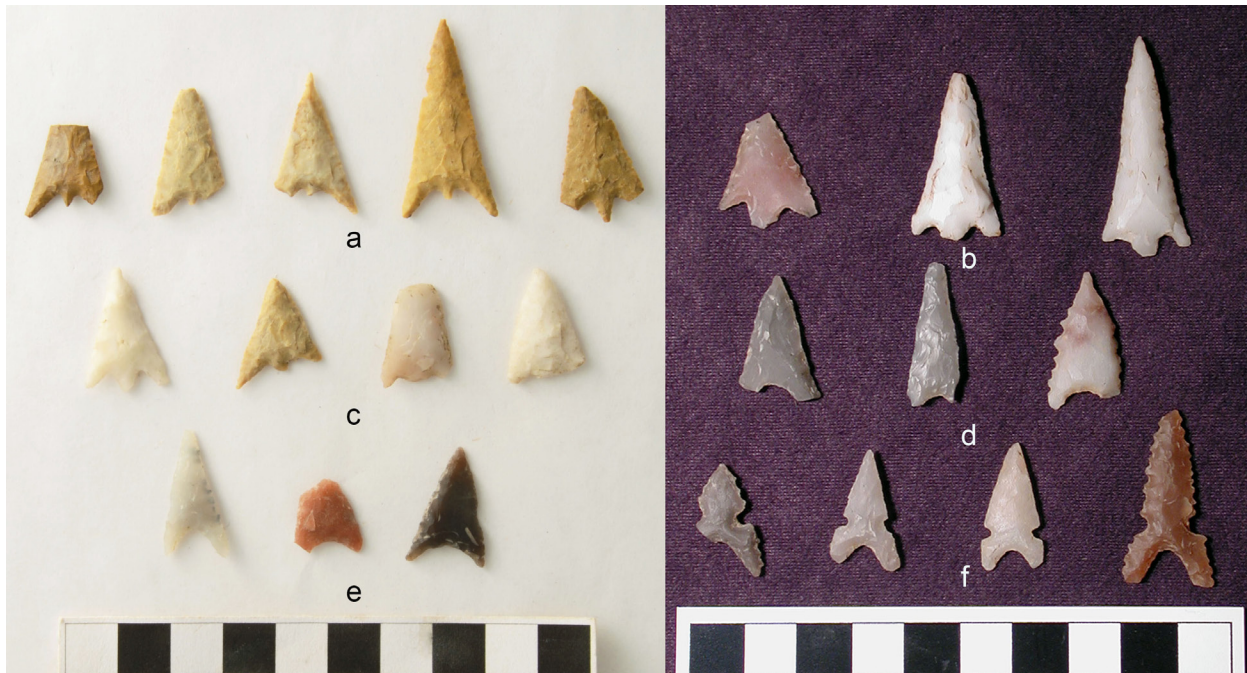


Figure 6. Sample of arrow points from Hedges (left) and Hughes (right): (a-c) Bassett; (d-e) Maud var. *Maud*; (f) Maud var. *Hopper* (Arkansas Archeological Survey photographs).

	3HS60				3SA11			
	Ct.	Wt. (g)	Ct. %	Wt. %	Ct.	Wt. (g)	Ct. %	Wt. %
Shell	4768	19528.5	63	56	3710	14570.4	87	88
Grog	2310	12126.3	30	34	408	1557.2	10	9
Other/Mixed	533	3515.4	7	10	126	505.9	3	3
Total	7611	35170.2	100	100	4244	16633.5	100	100

Note: totals include analyzed sherds (>1/2"), plain and decorated, from all contexts. Shell+grog was identified as a separate category (and included here in Other/Mixed) for Hedges decorated body sherds and rims only.

Table 2. Sherd Temper Comparisons.

Several ornaments were found, including a bone hairpin from Hedges, and three fragments of worked bone (earspool fragments) from Hughes. Other artifacts included a ceramic disk fragment, a drilled black stone bead, and a drilled and polished triangular ornament of black stone from Hedges. We can interpret that crafting took place here, based not only by the ornaments but by the presence of several small chipped stone drill bits at both sites (see also Kelley 1997:68-69).

Ceramic sherds formed the largest category of artifacts recovered during excavations at both sites. Two whole vessels (a jar and a seed jar) have been reconstructed from sherds found in the floor debris from the Feature 1 structure at Hedges (Figure 8). Most of the pottery from both sites took the form of sherds. Temper categories included shell, grog, and a mixed/other category (shell+grog was identified as a separate category only for the Hedges decorated and rim sherds, resulting in a higher proportion of “mixed/other” tempers there). Shell was used to temper a majority of sherds at both sites, but a larger proportion of grog-tempered sherds came from Hedges (Table 2). Adding shell as a temper was an innovation that occurred late in the Caddo period, and its appearance has been used as a “time marker” (Perttula et al. 2011).

Using stratigraphic information from both sites, we can see evidence for this increased use of shell as temper (Figure 9). In particular, grog tempering is predominant in the Hedges Test Pit 1, and especially its lowest Stratum 21. There is an increase in the proportion of shell temper from lower to upper deposits in the Hedges Block Excavation area, and in the near-mound northeast excavation units at Hughes. This corresponds to an increased use of shell temper later in the occupations of both sites. The available dates from these

two sites are somewhat at odds with this ceramic data. In particular, the radiocarbon date for the midden above Hedges Feature 4 is later than the archaeomagnetic date estimate for Feature 5, while the proportion of shell tempering is larger in the Feature 5 sample. The Hughes dates (from Feature 7/middle deposit and Features 8 and 16/lower deposit) fit with the stratigraphic relationship there, but the pre-1400 dates on the lower feature seem earlier than expected from the ceramics.

We examined decorated ceramic sherds using both type/variety and the descriptive classification systems. In the descriptive system, Classes A and B refer to predominantly incised or trailed line patterns (A has vertical or diagonal rectilinear patterns while B uses horizontal and curvilinear patterns). Class C refers to punctated decorations. Class D has brushing as the major decoration. Class E is engraved patterns; F has stamped decorations; G is reserved for slipped pottery; and Class H refers to applied, ridged, and noded decorations. Comparing decorative classes at the Hedges and Hughes ceramic assemblages (Figure 10), we find that small sherds with incised designs insufficient to differentiate as A or B are common at both sites. Class C (punctuation) and Class D (brushing) are more heavily represented at Hughes than at Hedges. Engraved sherds (Class E) make up more of the Hedges assemblage (8 percent for Hedges, 3 percent for Hughes).

Some decorative patterns can be recognized as defined ceramic types from the Caddo area. For example, the Hedges Stratum 21 assemblage had many incised and punctated sherds, with grog (or occasionally grog+shell or shell) temper, with Class B rim (Beloit or Bethel) and body (Bard) patterns, identified as Military Road Incised jars (Early 1993:103). Common at both sites were rows of diagonal slash incising (Class A,



Figure 8. Reconstructed pots from Hedges Feature 1 structure floor (Arkansas Archeological Survey photograph).

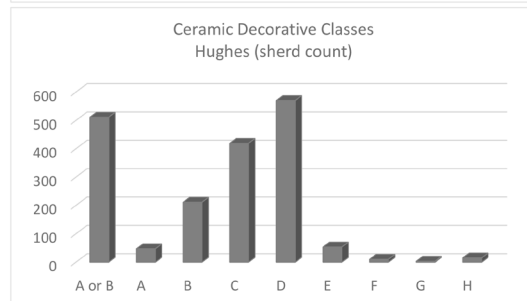
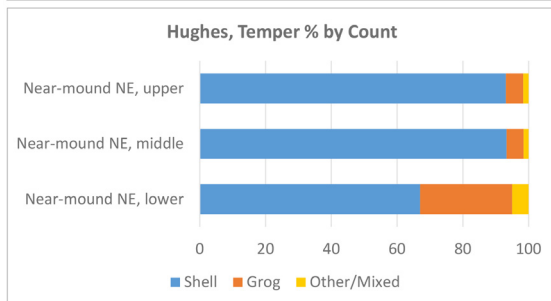
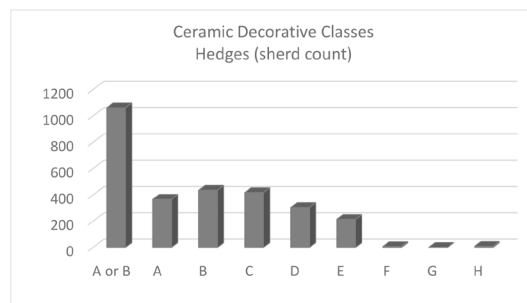
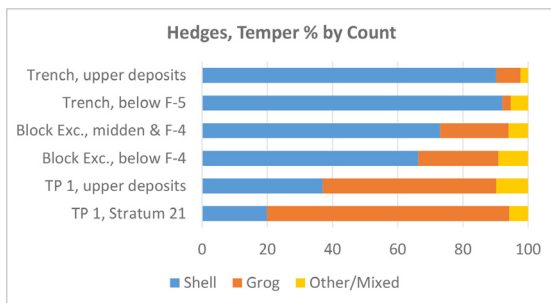


Figure 9. Stratigraphic comparison of ceramic tempers, showing increase in proportion of shell tempering through time (Hedges, n=6501 sherds; Hughes n=3268 sherds).

Figure 10. Comparison of ceramic decorative classes (Hedges, n=2810 sherds, Hughes, n=1839 sherds).

Agnes or Alfred patterns) or punctations (Class C, Chattanooga pattern) on rims, and curvilinear trailing or incising and nodes on bodies (Class B, Babson, Baker, or Belmont patterns). At both sites, these sherds were tempered typically with shell or shell+grog. This combination of decoration and temper is characteristic of Foster Trailed-Incised jars (Early 1988:74-75; Schambach and Miller 1984:121-122). Other patterns seen on shell-tempered rims and bodies at both sites include the Chatham rim pattern common on Cowhide “Stamped” jars and the Caney body pattern often found on Caney Punctated jars. Engraved patterns included carinated bowl rims with Elaine, Elwyn, and Ezra patterns characteristic of Friendship Engraved *var. Freeman* and *var. Meador* and Cook Engraved types (Early 1993:87-90).

We can identify a number of types at the sites (Table 3), and the ceramic similarities indicate contemporaneous occupations at Hedges and Hughes. There are a few Woodland period sherds at Hughes, and a scatter of Middle Caddo period (East phase) sherds at both sites. There is a substantial Late Caddo period (Mid-Ouachita phase) deposit recognized in Stratum 21 at Hedges, with a light scatter of the same types at Hughes. The main occupation at both sites fits into the Late Caddo period. The Social Hill phase was defined in the middle Ouachita River valley in part based on the Hedges ceramics. Because of the similarities in the ceramics and other material culture, I anticipate extending the Social Hill phase into the Saline River valley.

The link between decorative patterns and temper recipes with ceramic types and varieties is less than straightforward. For example, we might sort small, brushed shell-tempered sherds as Grace Brushed or Mound Tract Incised and Brushed if we look from the perspective of southeast Arkansas, or as Karnack Brushed-Incised if we are thinking about Caddo types from southwest Arkansas. There were a few sherds found at Hughes that resemble ceramics from sites in the Arkansas and Mississippi river valleys. These include rim sherds with an applied “filleted” rim treatment similar to some Bell Plain bowls, two red-slipped shell-tempered sherds identified as Old Town Red.

While we did not specifically compare coarse/ utilitarian wares versus fine wares during our analysis,

	Hedges (3HS60)	Hughes (3SA11)
Late Caddo or		Old Town Red
Late Mississippian period:		Bell Plain
		Woodward Plain
		Blakeley/Bailey/Taylor Engraved
	Belcher Engraved	
	Keno Trailed	Keno Trailed
	Foster Trailed-Incised	Foster Trailed-Incised
	Cowhide Stamped	Cowhide Stamped
	Caney Punctated	Caney Punctated
	Karnack Brushed-Incised, or Grace Brushed or	Karnack Brushed-Incised, or Grace Brushed or
	Mound Tract Incised & Brushed	Mound Tract Incised & Brushed
	Cook Engraved	Cook Engraved
	Friendship Engraved <i>var. Freeman</i>	Friendship Engraved
	Friendship Engraved <i>var. Meador</i>	
	Military Road Incised	Military Road Incised
	Hardman Engraved	Hardman Engraved
	Garland Engraved	
Middle Caddo or	Pease Brushed-Incised or	Pease Brushed-Incised or
Middle Mississippian period:	Bossier/Plaquemine Brushed	Bossier/Plaquemine Brushed
	Sinner Linear Punctated	
Woodland period:		LeFlore/Ouachita Plain
		Churupa Punctated
		Marksville Incised/Cooper Boneware
		Williams/Baytown Plain

Table 3. Ceramic Types Identified at Hedges and Hughes.

Caddo potters used different decorative techniques on bowls, bottles, and jars. We can use decoration to infer vessel form. The prominence of incised, punctated, and brushed decorations shows a high proportion of utilitarian wares or jars in both assemblages. Relatively few bottles or fine ware vessel fragments were identified at either site. Sooting was not particularly prevalent, but I did note some large diameter jars represented by partial vessels at both sites. The two reconstructed vessels from the Feature 1 structure floor at Hedges is a reminder that whole vessels were sometimes left in structures (e.g., Harrington 1920:37-39), not just placed in graves.

Community Patterning

The Hedges and Hughes sites show similarities in their community patterns, as seen in the schematic views in Figure 11. Excavations at both sites uncovered residues of burned structures covered with midden next to the main mounds. Sequences of building, using, and terminating these near-mound structures created elevated areas beside the mounds that are visible on the topographic maps of the sites. Covering these burned structures with midden rich in organic debris, potsherds, and food bone represents a different pattern than the clean artifact-free earth used to bury mound structures. Both sites have quantities of food remains (well-preserved faunal collections) as well as hints of crafting activity (e.g., drills and drilled ornaments).

What is lacking from our pictures of these sites are the residential areas and houses that were near the mound centers. Remote sensing was not possible at Hughes because the property is now in woods and that

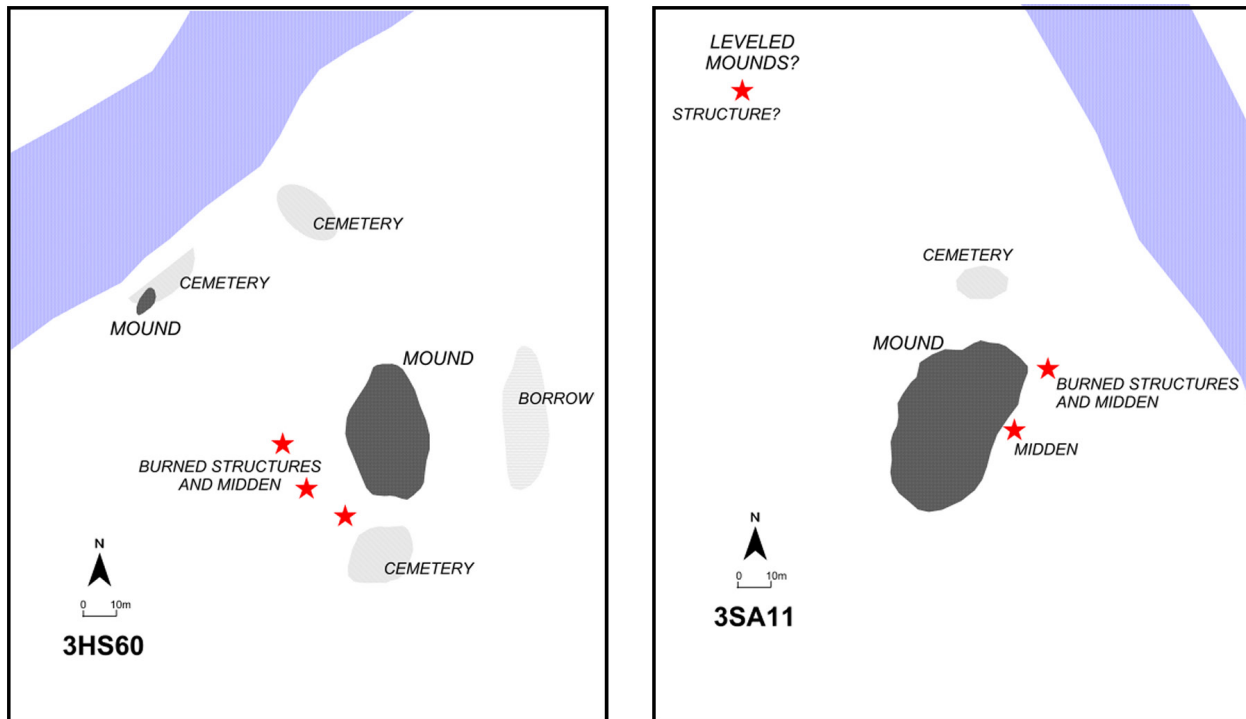


Figure 11. Schematic illustrations comparing community patterning at Hedges (3HS60) and Hughes (3SA11).

technology was in its infancy at the time of the Hedges excavations in the early 1970s, so we do not have the advantages of large-scale geophysical surveying (cf. McKinnon 2017:136). Neither did we have large-scale area excavations at these sites. We did do systematic shovel testing at Hughes, and there was limited auger testing to identify the presence of midden at Hedges. Anecdotal reports of digging by amateurs and collectors at both sites indicates cemetery areas near the mounds. We would expect residential areas and houses as well. Presumably, these would take the form of house clusters around the mound centers. One may be represented by the hearth (Feature 1) exposed on the north end of the Hughes site. If these ordinary houses were not burned (or were not smothered with dirt to preserve charred timbers), all that would be left would be a post pattern, difficult to detect without large excavation areas.

Concluding Thoughts

Interpretation of these two mound sites and their assemblages continues as I complete a monograph describing and comparing the archaeological investigations at these two ancestral Caddo communities. We are forming a picture of the physical

configuration of the sites, the spatial layout of the communities, and the timing and patterning of activities that took place there. While there is earlier use of both sites, the main occupation at Hughes and Hedges took place between about A.D. 1450-1650. The artifacts show similarities, with ceramic types such as Foster Trailed-Incised, Mound Tract Incised and Brushed, Cowhide Stamped, Grace Brushed, and Caney Punctated, and Bassett and Maud arrow points, found at both sites.

Excavations next to the mounds at Hughes and Hedges uncovered sequences of burned structures covered with midden containing quantities of ceramic sherds, chipped stone, charred wood, and food bone. While it is tempting to describe “special” feasting and crafting activities in these near-mound locations, it is difficult to make the argument without comparisons with midden from ordinary houses. The quantities of faunal material in the excavated midden deposits at both sites, however, reminds us that we need to pay more attention to analysis of preserved food remains from sites like these. At the Arkansas Archeological Survey, for example, we have curated collections from older excavations that include charred food plants and animal bone from structure contexts. These await a larger comparative study.

Acknowledgments

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