

LOOKING BEYOND THE OBVIOUS: IDENTIFYING PATTERNS IN COLES CREEK MORTUARY DATA

Megan C. Kassabaum

While the lack of grave goods has been the focus of most scholarly discussion of Coles Creek burial practices, the mortuary analyses presented here focus on recognizing correspondences among sex, age, and burial position. Using assemblages from three Coles Creek sites (Greenhouse, Lake George, and Mount Nebo), I find that while there is significant intersite variability among Coles Creek mortuary programs, certain age groups are consistently treated differently from each other and from everyone else. Thus interments were being made with deliberate care and consideration for those involved and are not nearly as haphazard and disorderly as previously thought.

Two characteristics of prehistoric societies in the southeastern United States are commonly used to support arguments for the presence of chiefly political and social organization. One of these characteristics is the large-scale construction of earthworks (particularly large platform mound and plaza complexes); the other is elaborate mortuary ceremonialism and sumptuous burial goods. Some claim that the earliest indications of chiefdoms can be recognized in the indigenous Coles Creek tradition (ca. A.D. 750–1200) of southwestern Mississippi and east-central Louisiana (Kidder 1998, 2004; Steponaitis 1986). Around A.D. 700, people in this region began building large-scale earthworks similar to those of later, decidedly hierarchical Mississippian polities. However, previous investigators of mortuary remains from these Coles Creek sites report a paucity of burial goods and absence of ornate individual burials (Ford 1951; Giardino 1977; Neuman 1984).

Due to the distinct presence of one traditional marker for hierarchical social organization and the reported lack of another, the issue of Coles Creek social differentiation remains a matter of interest to Southeastern archaeologists. While a relatively small number of Coles Creek sites have been satisfactorily excavated, further analysis of data from these previous archaeological investigations may still reveal significant insights. In this paper, I present a reanalysis of three previously excavated Coles Creek cemeteries in the lower Mississippi Valley as a step toward a better understanding of the Coles Creek mortuary program and social organization (Figure 1). My goals are to (1) review the previous interpretations of Coles Creek

mound-building and burial practices; (2) investigate whether meaningful patterns exist in the burials from Greenhouse (16AV2), Lake George (22YZ557), and Mount Nebo (16MA18); and (3) offer suggestions as to how the results of my analyses can be combined with future research to more fully understand Coles Creek social organization.

Site Descriptions

The small number of Coles Creek sites that have been systematically excavated limits the body of information available about mortuary practices. Moreover, although small numbers of burials have been reported from numerous Coles Creek sites throughout the lower Mississippi Valley, few have provided large enough assemblages to allow for the identification of statistical patterns. The Greenhouse, Lake George, and Mount Nebo sites were chosen for this analysis principally based on the availability of high-quality data from a significant number of excavated burials.

Greenhouse, located in Avoyelles Parish, Louisiana, was first described and excavated by Gerard Fowke in 1926 (Fowke 1928:411–433). Twelve years later, the site was systematically excavated as part of a Works Progress Administration (WPA) project directed by James Ford (1951). The 3.2-ha Greenhouse site consists of seven mounds (A–G) arranged around a central plaza (Figure 2). The three most prominent mounds (A, E, and G) are roughly rectangular platforms that form a triangle with the longest axis along the shore of a lake. The four smaller mounds (B, C, D, and F) lie between the large mounds and could possibly have been rectangular platform mounds as well, but they no longer retain that shape.

During the WPA project, three mounds were heavily excavated: A, C, and F. Excavations in Mounds A and F revealed that the earthworks were constructed over a thick midden in as many as seven stages, most of which supported structures (Ford 1951:32–36). Nine burials were recovered from Mound A and two from Mound F. Mound C differed markedly from Mounds A and F. Although there was one layer of loaded soil on top, Mound C was made up almost entirely of black midden that accumulated on the original ground surface during the occupation. Two surfaces were identified within the midden and showed evidence of posts, hearths, and other living features, but no specific structures could be identified (Ford 1951:42). In

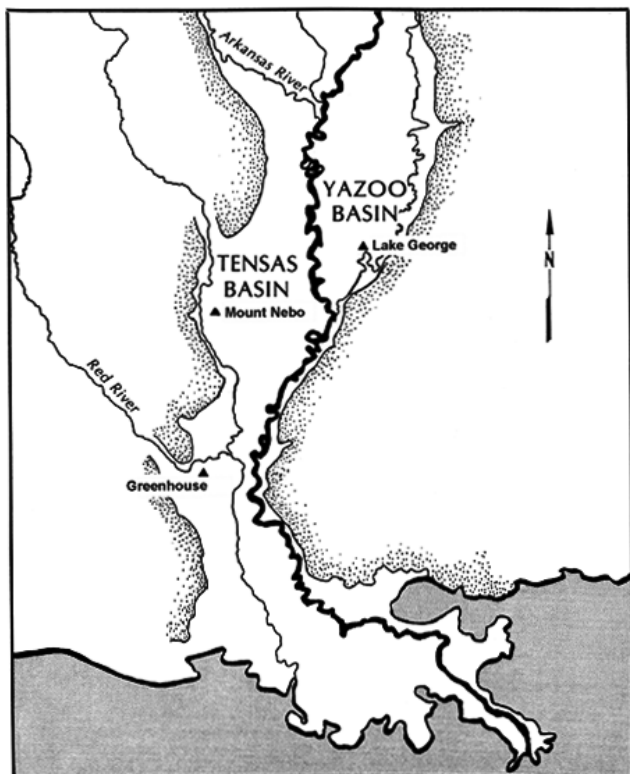


Figure 1. Map of the lower Mississippi Valley showing associated river basins and the location of the three sites used in this analysis (adapted from Brain 1991:Figure 5.2).

addition to the large amount of habitation debris, the upper levels of Mound C contained 93 burials. Although in some cases it is difficult to tell, it appears that most of these burials were secondary interments of large numbers of people deposited at once, a pattern consistent with the emptying of a charnel structure (Ford 1951:37, 42–44). A number of distinct spatial clusters may represent different burial episodes throughout the construction of the mound. With few exceptions, there is no evidence of pits or other markers of individual graves (Ford 1951:42–44).

Lake George is situated on the shore of a lake in the Yazoo basin of west-central Mississippi (Williams and Brain 1983:1). Although the mounds had deteriorated significantly by the time C. B. Moore visited Lake George in the early twentieth century, he was able to record more than 30 mounds inside the walled, 22-ha site (Moore 1908:590). Today, only 25 mounds and parts of the earthen wall and ditch complex can be discerned (Williams and Brain 1983:1) (Figure 3).

Excavations at Lake George took place between 1949 and 1960 and included major work on and around Mounds A, C, F, and P (Williams and Brain 1983:23–68). Excavations revealed that while only a small portion of the earthworks at Lake George dated to the Coles Creek period, nearly all the Lake George mounds showed evidence of repeated structural occupations. A

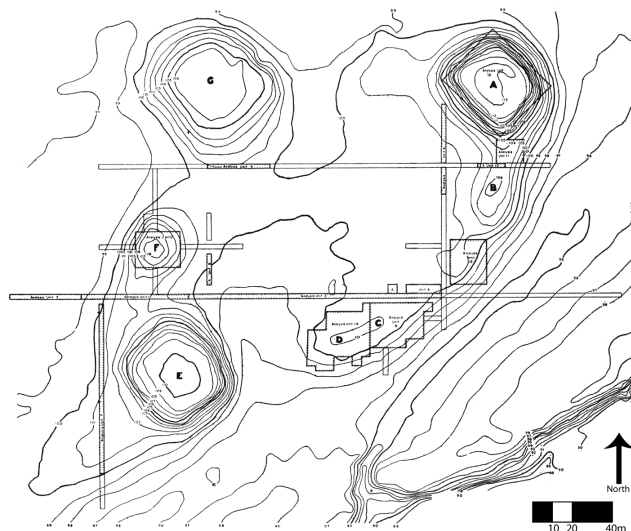


Figure 2. Map of the Greenhouse site showing the topography, mound locations, and areas excavated (adapted from Ford 1951:Figure 3).

1958 test unit in Mound C, a Coles Creek mound, revealed 22 burials, and hence the truncated, pyramidal mound became the focus of the 1959 and 1960 excavations (Williams and Brain 1983:39). Built on a thick midden, this two-stage platform mound appeared to have been used primarily as a burial mound during the first stage and as a foundation for a number of structures during the second stage (Williams and Brain 1983:55–56). During the one and a half seasons of excavation at Mound C, approximately 200 skeletons were recovered. Like those at Greenhouse, these burials appear to have occurred as mass interments such as would result from the periodic emptying of a charnel house. Again, distinct spatial clustering is visible, though the Lake George Mound C burial clusters are identified by depth of deposit and various irregular and ill-defined pits (Williams and Brain 1983:42).

The Mount Nebo site sits in the Tensas basin of Madison Parish, Louisiana, and consists of only one mound, approximately 3.5 m tall and covering roughly 0.3 ha (Giardino 1982:101; Neuman 1968:9) (Figure 4). During salvage excavations in 1968 and 1969, it was determined that this mound was constructed in seven stages (Giardino 1977:1). While the beginning of mound construction dates to the Baytown period (ca. AD 400 – 750) (Stage G), the majority of the mound was constructed during the Coles Creek period in six stages (Stages F–A). Two of these stages, F and A, are of particular importance here because together they contained roughly 100 human burials. Giardino (1982:116–118) notes that during the early Coles Creek period (Stage F), bodies were most often interred in the extended prone position with the skull toward the south and during the late Coles Creek period (Stage A),

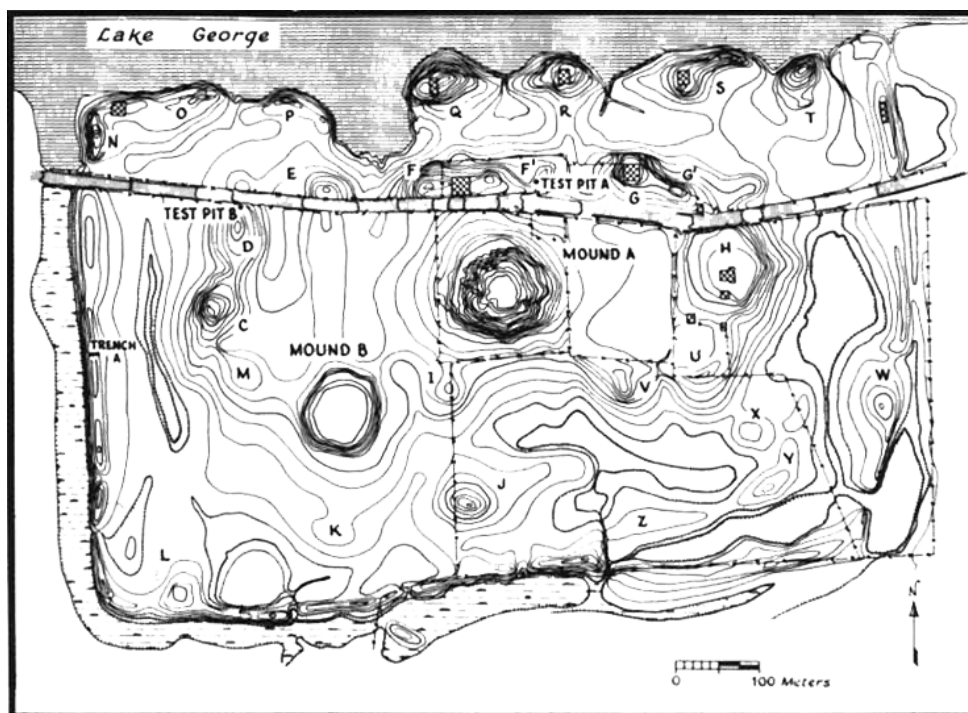


Figure 3. Map of the Lake George site showing topography, mound locations, and areas excavated (from Williams and Brain 1983:Figure 1.2).

bodies were most often interred in the extended supine position with the skull toward the north. Additionally, Giardino (1982:118) notes the presence of small non-crematory fires at the gravesites in late Coles Creek levels and the distinct lack of evidence for fires in early Coles Creek levels. Giardino's (1982:117) conclusion that "there are significant differences between the burial custom of Stage A and Stage F" represents the first significant recognition of patterning in the Coles Creek mortuary record.

Previous Interpretations of Coles Creek Burial Practices

As these three examples demonstrate, the largest mounds at Coles Creek civic-ceremonial centers were continuously used for up to several hundred years, they were usually built in stages, and often, during each stage, at least one structure was erected on top of the mound (Neuman 1984:167; Steponaitis 1986:386). Past interpretations of these buildings as elite residences or important civic-ceremonial structures have led some archaeologists to believe that Coles Creek sites provide evidence of a significantly more differentiated and institutionalized social organization than that of earlier Woodland cultures (e.g., Barker 1999; Kidder and Fritz 1993; Nassaney 1992; Roe 2007; Sears 1954; Steponaitis 1986). They argue that the consistent reuse of these platform mounds shows the existence of more

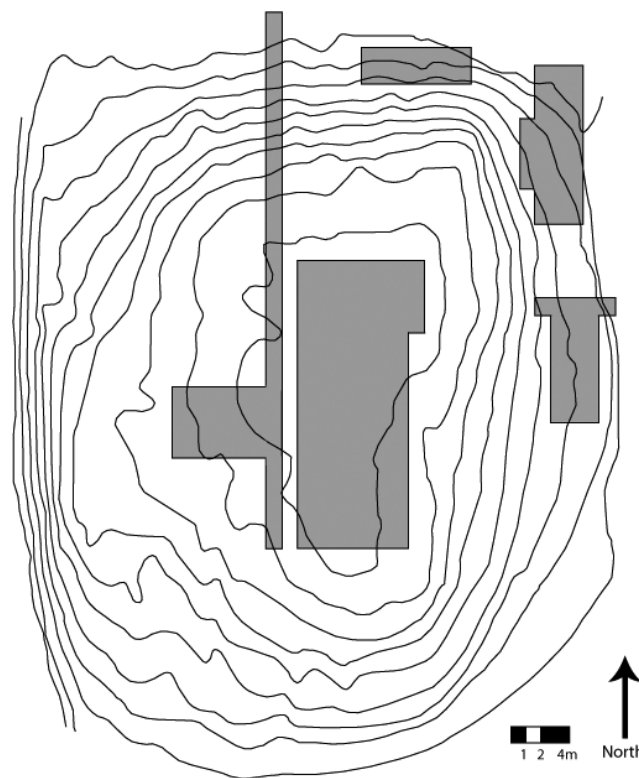


Figure 4. Map of the Mount Nebo site showing topography and areas excavated (adapted from Belmont 1982).

formal positions of leadership or political offices by allowing the power associated with them to exceed the life of the individual elite (Steponaitis 1986:386). Furthermore, they argue that this important sociopolitical change is also evidenced by changes in the internal structure of Coles Creek centers (Kidder 1998, 2004; Roe 2007:24–25). For example, sites such as Osceola (16TE2), Raffman (16MA20), Greenhouse, and Lake George have been interpreted as showing a trend from open, public plazas to plazas characterized by purposeful restriction of access (Ford 1951:102; Kidder 1998; Roe 2007:25).

While recent arguments from settlement pattern changes and earthwork construction seem to lean toward the existence of a more institutionalized social hierarchy during the Coles Creek period, evidence from the mortuary record does not appear to support this conclusion (Cotter 1952; Ford 1951; Giardino 1977; McGimsey 2003; Neuman 1984; Williams and Brain 1983; cf. Barker 1999). The original excavation reports from Coles Creek burial sites are dominated by descriptions of disorderly and communal burials. For example, in his report on the Greenhouse site, Ford (1951:37, 41, 42–44) describes the burials in Mounds A, F, and C, respectively, as “placed in the strata of normally deposited refuse with no indication of pits, grave goods, or other special care,” “placed without any particular care,” and “dumped on the surface more or less carelessly, raked into shallow surface depressions ... [and] disposed of with little care or order.” Furthermore, in his conclusion, Ford (1951:106–107) summarizes the burial practices:

In each locality the skeletons appear to have been disposed of carelessly: there is no clear evidence that they were intentionally buried, there are no grave goods, and semi-disarticulation suggests that the bodies had been exposed for some time before interment.... The 93 found in Mound C were apparently all placed at the same time and were in a state of disorder such as might have resulted from a rude and careless emptying of a house of the dead or a large scaffold which held that number of desiccated bodies.... It can hardly be certain that the Greenhouse finds represent any intentional and planned disposal of the dead.

This sentiment is echoed by Neuman (1984:179) when he states, “It is difficult to think of a reason for this disorderly array of skeletons.” Likewise, Williams and Brain (1983:45) describe the burials at Lake George by stating, “There is no marked difference in the burial pattern—if, indeed, one can think in terms of a ‘pattern,’ for the overwhelming characteristic of both layers of burials is the obvious lack of order. The dead seem to have been treated inconsistently and often with minimal care.” And finally, Cotter (1951:15; see also Cotter 1952:115–118) describes the distribution of human remains at the Gordon site (22JE501) as “instances of scattered human bone fragments and

even deposition of an entire skeleton ... without pit associations or any evidence of formal ‘burial.’” Similar descriptions exist for the Mount Nebo site (Giardino 1977:77) and the Morton Shell Mound (16AB3) (McGimsey 2003:56, 68, 148–156; Neuman 1984:198–199; Robbins 1976:2).

In the years following these initial reports, lower Mississippi Valley scholars have attempted to find patterns within this data. Some claim that Coles Creek burial practices represent a substantial shift from the inconsistent and group-oriented pattern of the earlier Troyville culture (e.g., Barker 1999; Kidder 2002; Neuman 1984; Steponaitis 1986); however, most of these claims are subjective and qualitative (cf. Barker 1999), coming from synthetic sources about lower Mississippi Valley cultural chronology and articles specifically devoted to showing Coles Creek settlements as the hierarchical precursors to Mississippian chiefdoms. There is thus a noticeable discrepancy between the primary accounts of the burials at any given Coles Creek site (as careless and group-oriented) and the broad summaries of Coles Creek burial practices in the more general literature (as more careful and individual-oriented). I can only explain this discrepancy as either a case of reading patterns that do not exist into the data due to the expectation that they may be there or a situation in which patterns only become clear when looked at on a regional level or with a different set of assumptions. Regardless, the inconsistency in interpretation of Coles Creek mortuary remains leaves questions of general patterns and their potential meaning(s) unsatisfactorily answered. By focusing on concrete patterning within the sex and age data from Greenhouse, Lake George, and Mount Nebo rather than on often-ambiguous markers of status, I hope to fill this significant gap in our knowledge.

Methods

My initial challenge in working with the mortuary records from Greenhouse, Lake George, and Mount Nebo involved compiling all available data on the skeletal remains in a manner that would easily allow for comparison and pattern identification. The data from Greenhouse and Lake George were taken from the Native American Graves Protection and Repatriation Act (NAGPRA) inventories (Peabody Museum of Archaeology and Ethnology 2000; Rebecca Saunders, personal communication 2007) and published site reports (Ford 1951; Williams and Brain 1983). Data from Mount Nebo were taken from Marco Giardino’s master’s thesis (1977). Although the original methods for recording the burial type and age-sex data for each of the sites were quite different, I made every effort to standardize the data without losing accuracy. For the

Table 1. Numbers (and percentages) of burial positions at Greenhouse with respect to sex.

	Bundle		Extended		Flexed		Semiflexed		Skull		Unknown		Total	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Male	3	13	9	39	3	13	3	13	4	17	1	4	23	24
Female	4	13	22	73	0	0	2	7	0	0	2	7	30	31
Unknown	11	26	8	19	5	12	1	2	12	28	6	14	43	45
Total	18	21	39	41	8	8	6	6	16	17	9	9	96	100

purpose of this study, the following burial types were used: bundle, extended-prone, extended-supine, extended (unspecified, prone or supine), flexed, semiflexed, skull, fragment, and unknown. The age categories include infant (0–5 years), subadult (6–17 years), young adult (18–30 years), middle adult (31–50 years), and old adult (51+ years).

The goal of my analysis was to see past the lack of grave goods and the absence of elaborate individual burials that are often used to define status differences in mortuary studies and instead to focus on other aspects of the burial record. Giardino (1982:100–101) argues that “burial styles or methods for disposal of the dead are the result of patterned cultural activity and therefore can be viewed as human artifacts” capable of augmenting our understanding of social conditions. Following this suggestion, I sought to identify patterns in burial type with regard to sex and age at Greenhouse, Lake George, and Mount Nebo. This more extensive and less common consideration of the “human artifacts” in the burial record is particularly appropriate for the study of Coles Creek social organization precisely because the burials are routinely lacking in grave goods and other associated artifacts.

For each site, tabulations (counts and percentages) were made for all burial positions by sex (Tables 1–3) and age (Tables 4–6). It is important to note that due to the small number of skeletons for which sex could be identified, the sex-related patterns are not as compelling as the age-related patterns. The sex of nearly half of the individuals at Greenhouse and Mount Nebo and 83 percent of the individuals at Lake George could not be determined. When only those individuals who could be sexed are considered, there are more women than men at Greenhouse, more men than women at Lake George, and equal numbers of both sexes at Mount Nebo. Though Barker (1999:219) uses the demographic profile of the Lake George population to

argue for the representation of status differences in the Coles Creek burial record, the small number of reliably sexed individuals and the inconsistency of the sex-based patterning at these sites implies that these differences are not likely to be meaningful to the general interpretation of the Coles Creek mortuary program.¹

The age-related patterns, however, are more convincing (Tables 4–6). Both Greenhouse and Mount Nebo show markedly low numbers of infants and subadults, while the large number of infants present in the burial population at Lake George is at or above the expected demographic profile of a prehistoric population (Blakely 1971; Weiss 1973:14–30). While it is impossible to say, given the available data, whether this inconsistency is the product of taphonomy, differential preservation, discrepancies in excavation technique, or conscious choice on the part of Coles Creek peoples (Hutchinson 2006:159), the inclusion of infants suggests a potential difference in the burial practices of the populations at Lake George as compared to those at Greenhouse and Mount Nebo.

More interesting patterns emerge, however, when considering age as it relates to burial type (Tables 4–6). Due to the large number of age categories, I carried out a correspondence analysis on the burials from each site to identify and interpret age-related patterns. In relatively simple terms, correspondence analysis is a statistical method for identifying the degree to which the values of one categorical variable (age) correlate with the values of another (burial type). By plotting these associations in two-dimensional space, correspondence analysis produces a graphical representation of the relationships among the values, such that points appearing close together (or in the same portion of the graph) tend to be positively associated while those that are farther apart are either not associated or negatively associated (Shennan 1997:308–360).

Table 2. Numbers (and percentages) of burial positions at Lake George with respect to sex.

	Bundle		Extended-prone		Extended-supine		Flexed		Fragment		Skull		Total	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Male	3	14	4	19	9	43	1	5	1	5	3	14	21	11
Female	0	0	7	70	3	30	0	0	0	0	0	0	10	5
Unknown	13	8	16	10	82	53	9	6	18	12	18	12	156	83
Total	16	9	27	14	94	50	10	5	19	10	21	11	187	100

Table 3. Numbers (and percentages) of burial positions at Mount Nebo with respect to sex.

	Bundle		Extended-prone		Extended-supine		Flexed		Semiflexed		Skull		Unknown		Total	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Male	5	21	5	21	6	25	3	13	1	4	1	4	3	13	24	26
Female	9	38	6	25	5	21	0	0	1	4	1	4	2	8	24	26
Unknown	7	16	5	11	13	29	0	0	0	0	8	17	12	27	45	48
Total	21	23	16	17	24	26	3	3	2	2	10	11	17	18	93	100

Correspondence Analysis Results

Of the 98 burials at Greenhouse, most were in the extended position (no differentiation was made between extended-prone and extended-supine in the original excavation records, thus the distinction could not be made here). Looking at the visual representation of the Greenhouse data (Figure 5), a number of clear associations emerge: Infants are buried in the flexed position, subadults are associated with skull burials, young adults are buried in the semiflexed or bundled positions, and adults (middle, old and unclassifiable) are associated with the extended position.

Similarly, of the 187 burials at Lake George, the majority were extended, with approximately half being buried in the extended-supine position. In this case, the differentiation made in the original records between extended-prone and extended-supine was kept because removing it had significant impact on the conclusions and would have resulted in a loss of accuracy. This implies that the choice between burial in an extended-prone or extended-supine position was a meaningful one for people at Lake George (and potentially at Greenhouse as well, though the data was not recorded in such a way as to reveal those patterns). The correspondence graphs of the data from Lake George also show significant patterning (Figure 6): Infants are associated with the extended-supine and flexed position (as well as representing a significant portion of the fragmentary remains), subadults are primarily skull burials, and adults are associated with the extended-prone and bundle types.

Finally, of the 93 burials at Mount Nebo, the majority were extended. The graphical representation of the data from Mount Nebo again shows significant patterning (Figure 7), although in this case the associ-

ations are slightly different than they were at Greenhouse and Lake George. Infants and subadults seem to be associated with skull burials while adults are associated with the extended, bundle, and flexed types. In this case, the distinction between extended-prone and extended-supine was collapsed because removing it simplified the visual representation of the correspondence analysis dramatically with little to no loss of accuracy.

This age-related patterning become even more interesting when the similarity of patterns among the sites is considered (Table 7). At all three sites, subadults are associated with skull burials and adults were most often buried in the extended position. Greenhouse and Lake George also share strong associations of infants with the flexed position and young adults with bundle burials. Mount Nebo, however, does not follow either of these patterns for infants and young adults. Perhaps an even more significant pattern becomes obvious when comparing the overall appearance of the correspondence-analysis graphs. Infants, young adults, and old adults are always the furthest from the center of the graph, even though the specific burial treatments accorded to each category differ from site to site. In other words, while these three age categories were not treated consistently from site to site, they were consistently being treated differently from each other and from everyone else.

Discussion

These comparative observations allow me to draw broader conclusions about the general mortuary program of the Coles Creek period in the lower Mississippi

Table 4. Numbers (and percentages) of burial positions at Greenhouse with respect to age.

	Bundle		Extended		Flexed		Semiflexed		Skull		Unknown		Total	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Infant	0	0	0	0	3	75	0	0	1	25	0	0	4	4
Subadult	2	12	3	18	2	12	1	6	6	35	3	18	17	17
Adult (total)	13	21	31	49	2	3	5	8	7	11	5	8	63	64
Young	4	44	2	22	1	11	2	22	0	0	0	0	9	9
Middle	1	7	11	73	0	0	1	7	1	7	1	7	15	15
Old	0	0	3	100	0	0	0	0	0	0	0	0	3	3
Unknown	5	36	5	36	1	7	0	0	2	14	1	7	14	14
Total	25	20	55	44	9	7	9	7	17	14	10	8	125	100

Table 5. Numbers (and percentages) of burial positions at Lake George with respect to age.

	Bundle		Extended-prone		Extended-supine		Flexed		Fragment		Skull		Total	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Infant	3	4	3	4	49	62	7	9	11	14	6	8	79	42
Subadult	1	7	3	20	4	27	1	7	1	7	5	33	15	8
Adult	10	13	21	27	36	46	2	3	3	4	7	9	79	42
(total)														
Young	0	0	1	50	1	50	0	0	0	0	0	0	2	1
Middle	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Old	0	0	0	0	1	50	0	0	0	0	1	50	2	1
Unknown	0	0	0	0	0	0	0	0	0	0	1	100	1	>1
Total	14	8	28	16	91	51	10	6	15	8	20	11	178	100

Valley. My analysis shows that the mortuary programs at Coles Creek sites were anything but unpatterned, unintentional, careless, unplanned, and disorderly (cf. Ford 1951; Williams and Brain 1983). On the contrary, age-related patterning at Greenhouse, Lake George, and Mount Nebo is abundant. The burial data from these three Coles Creek cemeteries represent a mortuary program that (1) differs from site to site, (2) is characterized by mass burials such as could result from charnel house cleanings or other similar processing techniques, and (3) consistently expresses age as a strong variable in determining burial position. From this I argue that distinct evidence of institutionalized, ascribed status differentiation in the Coles Creek burial record is lacking. The paucity of individual interments and emphasis on communal burial seems to minimize the importance of the individual in the mortuary program as a whole. That said, the differences that do exist between individuals of different ages confirm that these mass interments were being made with some degree of care and consideration for those involved. Nonetheless, patterning that appears solely based on age can be used as an argument against inherited status—if status within a society was acquired based on inherited social position rather than on individual achievement, then one would expect similarities in burial type to crosscut age groups (Peebles and Kus 1977:431; Saxe 1970:67). This brings me back to the dissonance mentioned earlier, that is, that Coles Creek cultures show evidence of hierarchy in the form of monumental earthwork construction but not in mortuary patterning. There are two potential explanations for

this pattern: (1) that institutionalized social differentiation did not exist and we are misinterpreting the evidence from mound-building, or (2) that institutionalized social differentiation did exist but is not expressed in the burial program during this time.

With regard to the first option, recent literature on Eastern Woodlands mound building calls into question the assumption that “mounds equal hierarchy” and instead emphasizes the diversity that exists within mound-building cultures in terms of their population size and permanence, sociopolitical and economic organization, and level of status differentiation (e.g., Anderson 2004; Brown 2006; Kidder and Sassaman 2009; Milner 2004; Pauketat and Alt 2003; Saunders 2004). Given the high frequency of mound construction in the Lower Mississippi Valley beginning in the Middle Archaic period (Saunders et al. 1994), it is imprudent to use extensive mound constructions alone as evidence for institutionalized social differentiation in the Coles Creek period. Furthermore, we must reconsider some of our assumptions about the meanings of these mounds. Thus far, very few Coles Creek mound-top structures have been satisfactorily excavated, and hence we have very limited data on which to base our interpretations of their function(s). Whether these structures were used by elites as residences or by the general public as communal meeting places should become much more apparent with more complete examination of the assemblages either from the structures’ floors or from associated flank middens.

With regard to the second option, I think it is imperative to examine and evaluate the hypothesis that

Table 6. Numbers (and percentages) of burial positions at Mount Nebo with respect to age.

	Bundle		Extended-prone		Extended-supine		Flexed		Semiflexed		Skull		Unknown		Total	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Infant	1	17	1	17	0	0	0	0	0	0	2	33	2	33	6	6
Subadult	5	31	1	6	3	19	0	0	0	0	5	31	2	13	16	17
Adult	13	26	10	20	14	28	3	6	2	4	2	4	7	14	51	54
(total)																
Young	5	33	2	13	6	40	1	7	0	0	0	0	1	7	15	16
Middle	5	26	4	21	5	26	2	11	1	5	2	11	0	0	19	20
Old	1	25	1	25	1	25	0	0	1	25	0	0	0	0	4	4
Unknown	1	5	4	20	7	35	0	0	0	0	1	5	7	35	20	22
Total	31	24	23	18	36	27	6	5	4	3	12	9	19	15	131	100

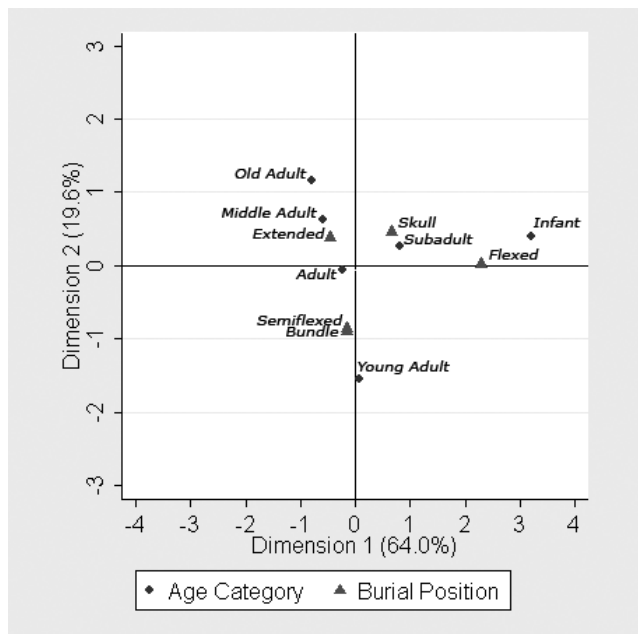


Figure 5. Biplot of the correspondence analysis from the Greenhouse site showing the burial types on the left and age categories on the right. Points that appear close together (or in the same portion of the graph) are positively associated.

Coles Creek mortuary practices may not reflect but, rather, may ideologically mask the differences that existed in life. In contrast, the later, more elaborate Mississippian mortuary practices may represent the presence of an ideology that naturalizes rather than masks such differences (see Bradley 1991; Hodder 1982).

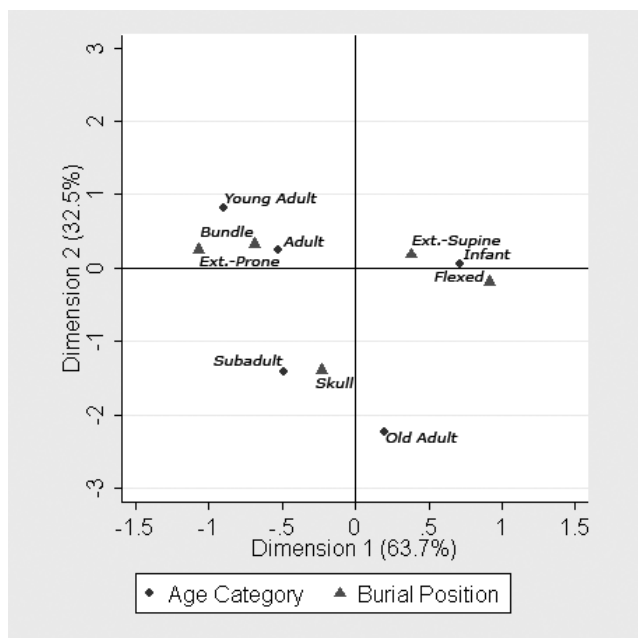


Figure 6. Biplot of the correspondence analysis from the Lake George site showing the burial types on the left and age categories on the right.

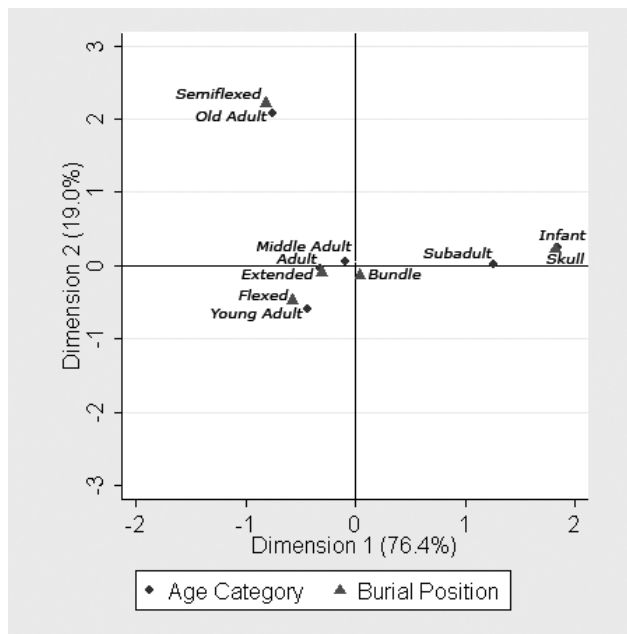


Figure 7. Biplot of the correspondence analysis from the Mount Nebo site showing the burial types on the left and age categories on the right.

In other words, burial practices may only sometimes accurately reflect the deceased's status in life, while at other times they may be used to purposefully distort or hide this status (Barker 1999:211–212; Hodder 1982; Nassaney 1992:115, 131). This masking or distorting of social difference is particularly plausible during the earliest stages of hierarchy because it could be a device to minimize revolt or political contestation (Pauketat 1994:3, 15–18). Evaluating the hypothesis that the status of Coles Creek individuals could have been masked during burial will require looking more closely at what other evidence exists for social differentiation in the archaeological record of the Coles Creek period. Research that examines differences in diet and health within and among Coles Creek populations and the presence or absence of elite and commoner areas within and between sites should produce information about the degree of social differentiation in Coles Creek society.

If mortuary ritual and other forms of symbolic communication may be manipulated to disguise social distinctions, it is reasonable to expect that differences in diet and health trends (especially malnutrition) would not be as simple, or desirable, to manipulate (Cannon 1989:456). While studies of such discrepancies in diet and health data from previously excavated mortuary remains may be productive, such information will be much more important if a significant number of nonmound burials are included. The discovery, excavation, and analysis of such burials, if they exist, would also greatly enhance future analyses of the relationship between age-sex distributions and burial type.

Table 7. Summary of the burial type associations with regard to age for Greenhouse, Lake George, and Mount Nebo.

	Infant	Subadult	Adult	Young adult	Middle adult	Old adult
Greenhouse	Flexed	Skull	Extended	Bundle; semiflexed	Extended	Extended
Lake George	Flexed; extended-supine	Skull	Extended-prone; bundle	Bundle; extended-prone		Skull
Mount Nebo	Skull	Skull	Extended	Flexed	Bundle; extended	Semiflexed

Note: No middle adults were present in the Lake George assemblage. Key associations that crosscut two or more sites are shown in bold.

Finally, there should be additional research into settlement patterns, architectural remains, and subsistence patterns to investigate the separation of subgroups on the landscape, particularly if data from nonmound habitation sites are included. For example, comparisons of domestic assemblages from a variety of Coles Creek sites may or may not expose telling material and architectural differences between groups utilizing the mound and plaza complexes and those living at smaller, outlying sites. Moreover, the excavation of different site types may allow us to identify hitherto undiscovered sets of nonmound burials that may represent a different subgroup of the population altogether (see discussion in Barker 1999:236 and Black 1979:98–101).

Conclusion

Like many archaeological analyses do, this paper has ended in a call for further research in order to answer the broader questions. Nevertheless, my analysis has two very important conclusions. First, I demonstrate that, despite claims to the contrary, there is distinct patterning in the Coles Creek mortuary record. Abundant age-related patterns attest that the people at Greenhouse, Lake George, and Mount Nebo did not inter their dead randomly and without care; instead, they followed distinct patterns in selecting the burial type associated with each individual. Second, I conclude that, while this patterning may not indicate institutionalized status differentiation, we must look elsewhere for evidence of such social demarcation before drawing further conclusions as to the degree of status achieved by individuals in the Coles Creek period. In other words, Coles Creek burial practices must be viewed as only one part of a much larger social process.

Notes

Acknowledgments. This paper was originally presented at the 65th annual meeting of the Southeastern Archaeological Conference in Charlotte, North Carolina. I would like to thank Ian Brown, Charlie Cobb, Dale Hutchinson, John O'Hear, Lori Roe, Margie Scarry, and Rich Weinstein for their support and invaluable comments on earlier drafts of

this paper. Most important, I would like to extend a special thanks to Vin Steponaitis for his continuous encouragement of and assistance with this research.

¹That said, potentially interesting patterns that could be explored more fully using additional data sets should be mentioned. At Greenhouse, 73 percent of women were placed in extended positions, yet only 39 percent of the men were so interred. At Lake George, 100 percent of women were buried in an extended position (and 70% of these were prone), while men were treated much more variably. Thus, at both of these sites, the women are being treated more consistently than the men. Mount Nebo, however, shows relatively consistent treatment of men and women.

References Cited

- Anderson, David G.
2004 Archaic Mounds and the Archaeology of Southeastern Tribal Societies. In *Signs of Power: The Rise of Complexity in the Southeast*, edited by J. L. Gibson and P. J. Carr, pp. 270–299. University of Alabama Press, Tuscaloosa.
- Barker, Alexander W.
1999 Chieftoms and the Economics of Perversity. Unpublished Ph.D. dissertation, Department of Anthropology, University of Michigan, Ann Arbor.
- Belmont, John
1982 Mount Nebo Burials. Unpublished manuscript on file, Research Laboratories of Archaeology, University of North Carolina, Chapel Hill.
- Black, Thomas K., III.
1979 *The Biological and Social Analyses of a Mississippian Cemetery from Southeast Missouri: The Turner Site, 23BU21A*. Anthropological Papers No. 68. Museum of Anthropology, University of Michigan, Ann Arbor.
- Blakely, Robert L.
1971 Comparison of the Mortality Profiles of Archaic, Middle Woodland and Middle Mississippian Skeletal Populations. *American Journal of Physical Anthropology* 34: 191–204.
- Bradley, Richard
1991 Ritual, Time and History. *World Archaeology* 23: 209–219.
- Brain, Jeffrey P.
1991 Cahokia from the Southern Periphery. In *New Perspectives on Cahokia*, edited by J. B. Stoltman, pp. 93–100. Monographs in World Archaeology No. 2. Prehistory Press, Madison, WI.
- Brown, James A.
2006 Where's the Power in Mound Building? An Eastern Woodlands Perspective. In *Leadership and Polity in*

- Mississippian Society*, edited by B. M. Butler and P. D. Welch, pp. 197–213. Occasional Paper No. 33. Center for Archaeological Investigations, Southern Illinois University, Carbondale.
- Cannon, Aubrey
1989 The Historical Dimension in Mortuary Expressions of Status and Sentiment. *Current Anthropology* 30(4):437–458.
- Cotter, John L.
1951 The Gordon Site in Southern Mississippi. Unpublished manuscript on file, National Park Service, Natchez Trace Parkway.
- 1952 The Gordon Site in Southern Mississippi. *American Antiquity* 18(2):110–126.
- Ford, James A.
1951 *Greenhouse: A Troyville-Coles Creek Period Site in Avoyelles Parish, Louisiana*. Anthropological Papers, Vol. 11, Pt. 1. American Museum of Natural History, New York.
- Fowke, Gerard
1928 Archaeological Investigations II. In the *Forty-fourth Annual Report of the Smithsonian Institution Bureau of American Ethnology*, edited by J. W. Fewkes, pp. 399–540. Washington DC.
- Giardino, Marco J.
1977 An Osteological Analysis of the Human Population from the Mount Nebo Site, Madison Parish, Louisiana. Unpublished master's thesis, Department of Anthropology, Tulane University, New Orleans.
- 1982 Temporal Frameworks: Archaeological Components and Burial Styles: The Human Osteology of the Mt. Nebo Site in North Louisiana. *Louisiana Archaeology* 9:99–126.
- Hodder, Ian
1982 The Identification and Interpretation of Ranking in Prehistory: A Contextual Perspective. In *Ranking, Resource, and Exchange*, edited by C. Renfrew and S. Shennan, pp. 150–154. Cambridge University Press, New York.
- Hutchinson, Dale L.
2006 *Tatham Mound and Bioarchaeology of European Contact: Disease and Depopulation in the Central Gulf Coast Florida*. University of Florida Press, Gainesville.
- Kidder, Tristram R.
1998 Mississippi Period Mound Groups and Communities in the Lower Mississippi Valley. In *Mississippian Towns and Sacred Spaces: Searching for an Architectural Grammar*, edited by R. B. Lewis and C. B. Stout, pp. 123–150. University of Alabama Press, Tuscaloosa.
- 2002 Woodland Period Archaeology of the Lower Mississippi Valley. In *The Woodland Southeast*, edited by D. G. Anderson and R. C. Mainfort, Jr., pp. 66–90. University of Alabama Press, Tuscaloosa.
- 2004 Plazas as Architecture: An Example from the Raffman Site, Northeast Louisiana. *American Antiquity* 69(3):514–532.
- Kidder, Tristram R., and Gayle J. Fritz
1993 Subsistence and Social Change in the Lower Mississippi Valley: The Reno Brake and Osceola Sites, Louisiana. *Journal of Field Archaeology* 20(3):281–297.
- Kidder, Tristram R., and Kenneth E. Sassaman
2009 The View from the Southeast. In *Archaic Societies: Diversity and Complexity Across the Midcontinent*, edited by T. E. Emerson, D. L. McElrath, and A. C. Fortier, pp. 667–696. State University of New York Press, Albany.
- McGimsey, Chip
2003 *The Morton Shell Mound Project and Other Stories of Southwest Louisiana History*. 2002/2003 Annual Report, Management Unit III. Regional Archaeology Program, Department of Sociology and Anthropology, University of Louisiana at Lafayette. Submitted to Division of Archaeology, Louisiana Department of Culture, Recreation and Tourism, Baton Rouge.
- Milner, George
2004 Old Mounds, Ancient Hunter-Gatherers, and Modern Archaeologists. In *Signs of Power: The Rise of Cultural Complexity in the Southeast*, edited by J. L. Gibson and P. J. Carr, pp. 300–315. University of Alabama Press, Tuscaloosa.
- Moore, Clarence B.
1908 Certain Mounds of Arkansas and of Mississippi. *Journal of the Academy of Natural Sciences*, ser. 2, 10(4):article 10.
- Nassaney, Michael S.
1992 Communal Societies and the Emergence of Elites in the Prehistoric American Southeast. In *Lords of the Southeast: Social Inequality and the Native Elites of Southeastern North America*, edited by A. W. Barker and T. R. Pauketat, pp. 111–143. Archeological Papers of the American Anthropological Association No. 3. Washington, D. C.
- Neuman, Robert W.
1968 Excavation of 16Ma18. Southeastern Archaeological Conference Newsletter 12(2):9.
- 1984 *An Introduction to Louisiana Archaeology*. Louisiana State University Press, Baton Rouge.
- Pauketat, Timothy R.
1994 *The Ascent of Chiefs: Cahokia and Mississippian Politics in Native North America*. University of Alabama Press, Tuscaloosa.
- Pauketat, Timothy R., and Susan M. Alt
2003 Mounds, Memory, and Contested Mississippian History. In *Archaeologies of Memory*, edited by R. M. Van Dyke and S. E. Alcock, pp. 151–179. Blackwell, Malden, MA.
- Peabody Museum of Archaeology and Ethnology
2000 *Inventory of Culturally Unidentifiable Human Remains and Associated Funerary Objects from Mississippi*. Harvard University, Cambridge.
- Peebles, Christopher S., and Susan M. Kus
1977 Some Archaeological Correlates of Ranked Societies. *American Antiquity* 42(3):421–448.
- Robbins, Louise M.
1976 Analysis of Human Skeletal Material from Morton Shell Mound (161B3), Iberia Parish, Louisiana. Unpublished manuscript on file, Museum of Natural Science, Louisiana State University, Baton Rouge.
- Roe, Lori
2007 Coles Creek Antecedents of Plaquemine Mound Construction: Evidence from the Raffman Site. In *Plaquemine Archaeology*, edited by M. A. Rees and P. C. Livingood, pp. 20–37. University of Alabama Press, Tuscaloosa.
- Saunders, Joe W.
2004 Are We Fixing to Make the Same Mistakes Again? In *Signs of Power: The Rise of Complexity in the Southeast*, edited by J. L. Gibson and P. J. Carr, pp. 146–161. University of Alabama Press, Tuscaloosa.
- Saunders, Joe W., Thurman Allen, and Roger T. Saucier
1994 Four Archaic? Mound Complexes in Northeast Louisiana. *Southeastern Archaeology* 13:134–153.

- Saxe, Arthur A.
1970 Social Dimensions of Mortuary Practices. Unpublished Ph.D. dissertation, Department of Anthropology, University of Michigan, Ann Arbor.
- Sears, William H.
1954 The Sociopolitical Organization of Pre-Columbian Cultures on the Gulf Coastal Plain. *American Anthropologist* 56(3):339–346.
- Shennan, Stephen
1997 *Quantifying Archaeology*. 2nd ed. Edinburgh University Press, Edinburgh, Scotland.
- Steponaitis, Vincas P.
1986 Prehistoric Archaeology in the Southeastern United States, 1970–1985. *Annual Review of Anthropology* 15:363–404.
- Weiss, Kenneth M.
1973 *Demographic Models for Anthropology*. Society for American Archaeology Memoir 27. Washington, DC.
- Williams, Stephen, and Jeffrey P. Brain
1983 *Excavations at the Lake George Site, Yazoo County, Mississippi, 1958–1960*. Papers of the Peabody Museum of Archaeology and Ethnology Vol. 74. Harvard University, Cambridge.