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Robyn

MOUND M: CHRONOLOGY AND FUNCTION AT MOUNDVILLE

by
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A THESIS

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Abstract

Investigating the chronology and function of mounds at Moundville has been an important research objective in the past several decades. This thesis addresses these issues for Mound M, located on the southwestern edge of the plaza. Although excavations were conducted on Mound M in the early 1970s, this project represents the first in-depth look at the resulting notes and artifacts. One objective of this study was to examine the available records and to determine excavation procedures and progress. In this regard, the thesis serves as a site report for the Mound M excavations. A second objective was to determine the mound's construction chronology using mound stratigraphy and ceramic analyses. Results of the analyses indicate that Mound M was constructed early in the site's history and was abandoned prior to the Moundville III phase. The final objective was to address the mound's classification as a mortuary temple mound. A comparative analysis of artifacts between Mounds M and Q produced no clear evidence that the two mounds were used for similar purposes. The only indication that Mound M was used as a mortuary temple mound is the presence of one human bone. Ethnographic information on historic temples further indicates that the "temple" mounds at Moundville may have been used differently than historic temples.

CHAPTER 1. BACKGROUND AND SIGNIFICANCE OF THE MOUND M RESEARCH

The complex chiefdom centered at Moundville, Alabama has been a focus of intensive study since C. B. Moore's (1905, 1907) investigations at the turn of the century (Figure 1). Inquiries into the social and political dynamics of the Mississippian chiefdom have produced an abundance of archaeological data and interpretations of the Moundville site (Knight 1989, 1990, 1992a; Peebles 1971, 1974, 1979, 1981; Scarry 1981, 1995; Steponaitis 1980, 1983; Welch 1991). Despite the number of previous investigations, questions remain regarding chronological and functional aspects of the site. Specifically, these questions involve the establishment of construction chronologies for many of the mounds and the patterns of activities associated with mound summits during successive phases of construction.

A current project at Moundville, under the direction of Vernon J. Knight, Jr. (1992a), addresses issues of mound function and construction chronology. Among the objectives of the project are determining the chronology of mound construction at Moundville, determining the point at which the site's formal architectural configuration was imposed, and examining the nature of activities associated with summit architecture (Knight 1992a:7). Knight (1992a:1) proposes that by the completion of the Mound Project, controlled excavation data will be available for the

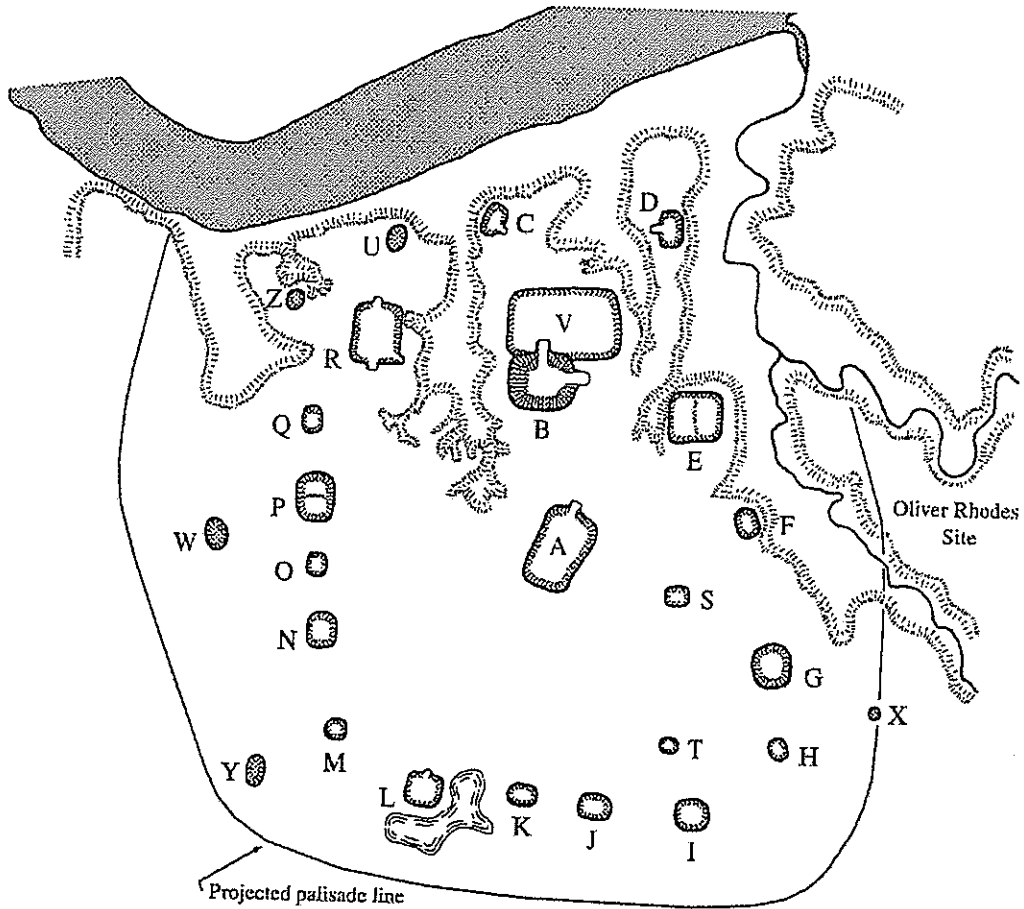


Figure 1. Map of the Moundville Site Showing the Location of Mound M in the Southwest Corner of the Plaza.

majority of the extant mounds at Moundville. Interpretations concerning construction chronology and mound function will be largely derived from carbon-14 dating and analyses of ceramic and lithic artifacts. The ceramic analysis will contribute to the dating of individual stages of mound construction as well as to comparisons in frequencies between service and utilitarian wares in mounds serving a mortuary function versus those serving as elite residences. Lithic materials can be similarly

contrasted, establishing activity patterns associated with each general class of mound based on the frequencies of elite stoneworking materials and prestige goods items.

The research presented here pertains directly to Knight's research interests and the Mound Project at Moundville. The construction chronology and function of Mound M, a mound not expressly included in Knight's investigations, is examined. Many of the same questions and methods addressed in Knight's research are utilized in the investigation of Mound M, specifically ceramic and lithic analyses.

The rationale for determining Mound M's function and chronology stems from the need to examine the hypothesized ordered arrangement of the mounds around a rectangular, central plaza (Peebles 1971, Knight 1992a). The arrangement of mounds sheds light on the inhabitants' social and political organization both chronologically and functionally. From a chronological perspective, the arrangement reflects the initial organization of the chiefly center and its changes in organization over time. Relevant information includes the point in time at which the center was established, changes in the resident population, and the potential restructuring of status space. Functionally, the mounds may reflect a planned arrangement involving social partitioning of the site.

Peebles (1971) noted that around the central plaza, mounds with burials alternate with mounds without burials. He speculated that the burials may have represented elite members of society connected to ritual practices performed on the mounds. Therefore, Peebles (1971:82) proposed that "if further excavations are conducted on these mounds the structures which would be found would mark the mounds without burials as 'domiciliary' mounds and the mounds with burials as

‘temple’ mounds.” Peebles (1971:82) also noted that if a north-south line was drawn through Mounds A and B and then a series of parallel lines were drawn across the north-south line along the axis of the winter solstice, one could identify the pairing of “temple” mounds across the plaza, separated by “domiciliary” mounds. Lastly, Peebles (1971:83,87) comments on the use of “status space” at Moundville in which individuals of differing status were buried in separate areas of the site.

Knight (1993) recently discussed Moundville as an example of a diagrammatic ceremonial center, with the spatial layout of mounds reflecting social distinctions. Several of Peebles’ (1971, 1983) observations concerning mound arrangements are addressed. Specifically, Knight discusses the bilateral symmetry of mounds across the plaza and the concept of status space. Expanding on Peebles’ (1971) observations on the utilization of status space, Knight (1993:11,12) presents evidence suggesting that the northern half of the site reflected higher status than the southern end. Knight (1993:12-15) also suggests that in addition to the paired alternation of mounds across the central plaza, that mortuary temple mounds are paired with adjacent elite residential mounds. Underlying these mound pairs are distinctions between segments of the community, theoretically constructed as corporate groups.

In light of the above observations, one goal of this research project is to determine how Mound M fits into the hypothetical arrangement of mounds at Moundville. In particular, does Mound M following the suggested configuration concerning paired “temple” mounds across the plaza separated by domiciliary mounds (Knight 1993, Peebles 1971)? If it does, Mound M would contain burials and fall into

the category of a “temple” mound. Once evidence has been presented concerning Mound M’s function, further investigations, beyond the scope of this project, can address larger issues involving social partitioning of the site.

Current research on Moundville expands upon and questions Peebles’ categories of mound function. One concern is the applicability of Peebles’ terms “temple” and “domiciliary” to describe functions for each of the mounds. Peebles assigned these functions based on the presence or absence of burials in the mounds. However, evidence in recent research indicates that these terms may be misleading (Markin 1994). Also, current researchers now consider that some mounds may have served special community functions (Knight 1992a:1).

The working hypothesis for current research on Moundville is basically the same one Peebles outlined in 1971 concerning the differences between mounds with burials and those without. However, rather than forcing categories of function on the mounds prematurely, we are trying to recognize empirical distinctions between the mounds and are exploring what those differences might mean. Consideration must be given to potential evidence for changes in mound function over time (Knight 1989:9; Markin 1994:15-19). In addition, chronological information is needed to determine which mounds were used contemporaneously and at what point in the site’s history the mounds began to be abandoned.

In addressing the issue of chronology, a focus is placed on determining the point in time at which the mounds were initially arranged around the central plaza and at which the gradual abandonment of the mounds began. Current research suggests

that the formal arrangement of all of the mounds was imposed during the latter part of the Moundville I (A.D. 1050-1250) phase (Knight 1989). In other words, construction and use of almost all of the mounds at Moundville began early in the site's history. Furthermore, it is postulated that during the late Moundville II (A.D. 1250-1400) and Moundville III (A.D. 1400-1550) phases, almost all of the mounds located on the south side of the plaza were abandoned. All of the plaza-periphery mounds located on the southern edge of the plaza have been examined, except Mound M (Knight 1989).

Addressing the issue of function, the inference of functional classes for the mounds at Moundville can be tested through comparative analysis of artifacts. Markin (1994) recently compared artifact assemblages from primary deposits in Mound Q, a "mortuary temple" mound, with assemblages from Mound G, an "elite residential" mound. The focus of Markin's research involved the relationship between elite stoneworking and mound architecture. A comparative index of artifact occurrence was established to measure the differences in variety and relative frequencies of certain stone artifacts for the Moundville II and Moundville III phase occupations in each mound. Specifically, Markin examined stone artifacts related to crafts and non-local trade including chert tools and debitage, sandstone saws and abraders, greenstone tools and fragments, discoidals, paint palettes, sheet mica, copper, and pigments of galena, glauconite, hematite, and limonite. Markin based the index of occurrence on methods used by Timothy Pauketat in the American Bottom of Illinois (1986:table 6). Pauketat found that the volume of feature fill at Mississippian homesteads strongly

correlated with the number of ceramic jar sherds. Therefore, Pauketat used the quantity of jar sherds as a background standard in measuring frequencies of variables at Cahokia. Since Markin was investigating stone materials, a background measure of stone was needed rather than one based on ceramic jars. Markin found that the combined weights of brown and tabular hematitic/limonitic sandstone strongly correlated with counts of ceramic jar sherds in the Moundville contexts under investigation. Therefore, the index of occurrence was calculated by dividing the counts of a specific stone by the combined sandstone weights for a given provenience.

Markin's results show that the frequencies of certain stone materials between the two mounds are significantly different. Concerning such materials as chert bladelets, sandstone saws and abraders, greenstone celts, polished greenstone chips, sandstone discoidals, non-local stone, and pigments, Mound Q was found to contain frequencies three times as great as those found in contemporaneous phases of Mound G. Based on the observed differences, Markin concluded that "if Mound G served as an elite residence mound, Mound Q probably served a different function" (Markin 1994:14).

A second aspect of Markin's work involves the investigation of changes in frequencies of certain stone artifact classes over time within the primary deposits of Mound Q. Markin found that the occurrence of stone items indicating craft activities and the use of pigments and paint palettes increased after the Moundville I phase and then decreased after the Moundville II phase. In contrast, the occurrence of non-local stone, specifically Ft. Payne chert, remained stable in the Moundville I and Moundville

II phases and then increased after the Moundville II phase. Despite these fluctuations, Markin concludes that no change in function occurred on Mound Q. Instead, these shifts are attributed to fluctuating patterns of trade.

Markin's research also reveals some problems in categorizing Mound Q as a mortuary temple mound. In comparison to ethnographic accounts of Southeastern temples, Markin notes that Mound Q does not exactly fit the inferred model (1994:23). Craft activities are not mentioned in conjunction with any of the temple mounds described in Markin's research. However, the nature and abundance of craft materials associated with the structures of Mound Q suggest the mound's use in ceremonial activities. Markin concludes that "such items indicate that Mound Q was not as restricted in use as, or at least was used differently than were historic temples" (1994:25). These data suggest that the division of mounds at Moundville into the categories of mortuary temple and elite residential mounds may be misleading.

Unfortunately, the artifact collection from Mound M is too small to allow a statistical comparison of artifacts similar to Markin's (1994) research. However, general qualitative comparisons of lithic and ceramic artifacts between mounds is possible. Artifacts from Mound M will be compared to artifacts from Mounds Q to shed light on the functional aspect of the mound.

CHAPTER 2. PROFILES OF SOUTHEASTERN TEMPLES

One goal of the investigation of Mound M is to determine if the mound fits into the same functional class as other mounds at Moundville containing burials. Although these mounds are currently regarded as mortuary temple mounds, the nature of activities associated with their summit architecture is not well understood. In trying to identify possible meanings of this functional classification at Moundville, it is useful to examine the work of previous scholars. Many papers in the anthropological literature examine southeastern temples from ethnographic accounts and the archaeological record. Various scholars have reported different interpretations concerning the activities and materials associated with southeastern temples. This discussion focuses on material objects likely to preserve as artifacts in the archaeological record at prehistoric sites. From the material items, an activity profile can be constructed concerning the kinds of objects one might expect to find when excavating prehistoric temples.

A common element in each of the interpretations examined here is the use of temples as repositories for human remains. The interred individuals are members of the nobility, specifically former chiefs and occasionally their relatives. Other elements associated with temple activities include the accumulation of wealth, represented by

exotic and mundane materials, the presence of ritual or supernatural objects, and the storage of weapons or war trophies.

The earliest interpretation considered here is by MacLeod (1926) in his investigation of priests, temples, and mummification in the Southeast. MacLeod comments on various European accounts including Garcilaso's descriptions of the De Soto Entrada in the first half of the sixteenth century and Dumont's observations of the Biloxi and Pascagoula in 1730. Each of the ethnographic accounts discussed by MacLeod mentions human remains inside the temples. MacLeod also mentions that temples were used as storehouses for treasure, citing an example from Garcilaso. Garcilaso reports that the inhabitants of Talimeco and neighboring villages mentioned "that all the chiefs of the country, and principally those of their province, made their grandeur to consist in the magnificence of their temples" (MacLeod 1926:212). This is the only specific reference in MacLeod's paper to the use of temples for storage, but he does state that "all over the Southeast as far north as the Maryland Eastern Shore later data indicate the use of the mortuary temples and their annexes, as treasure houses" (1926:212). MacLeod's consideration of the ethnographic literature does not elaborate on additional uses of historic temples. In particular, no mention is made regarding religious paraphernalia or supernatural items. The narrow view of temples seems to result from MacLeod's focus on the human remains and temple ceremonialism. Some of the topics addressed include the role of bone pickers, temple guardians, and high priests in native societies. Despite the lack of information concerning non-perishable artifacts, MacLeod's paper represents one of the first

attempts to examine southeastern temple contexts in the ethnographic record. In regard to a profile of historic temple activities, MacLeod's investigations suggest temple involvement in caring for the elite dead and storing valuable items.

Willoughby's (1932) interpretations of ethnographic accounts expands on MacLeod's considerations of historic temples. In addition to human remains in temples, Willoughby presents evidence for the accumulation of wealth, the presence of ritual items, and the storage of weapons. The temple at Talimeco, again described by Garcilaso (1993), is discussed. In addition to the human remains included in MacLeod's discussion, Willoughby addresses Garcilaso's description of chests in the temple. The chests were placed in the center of the temple and used to store mundane items of wealth such as skins and clothing as well as more exotic items like pearls. Also, within the Talimeco temple, side rooms were used to store weapons and shields. Willoughby also refers to accounts of temples of the Virginia Algonquians by Hariot, Strachey, Smith, and Beverley (Willoughby 1932:13). These temples also contained idols, one of which represented their god, or Okee. In addition, a perpetual fire was maintained in the temple by priests. A description of the temple of the Natchez given by Du Pratz (Swanton 1911:161-163) also mentions terra-cotta idols. For the Taensa, Le Petit (Swanton 1911:269) mentions even more ritual items located in the temple including stone and clay idols, depictions of serpent heads and tails, stuffed owls, crystals, and jaw-bones from large fish. Willoughby's consideration of the ethnographic literature provides a broad range of activities associated with historic

temples. Not only were they used as repositories for the dead and storehouses for items of wealth, but they also contained ritual objects and large numbers of weapons.

Waring (1977) discusses aspects of temples and their involvement in the Southern Cult, ceremonialism surrounding the honored dead. Based on elaborate burials, mortuary-cult figurines, and ceremonial elements found in association with temple mounds at Etowah, Moundville, and Spiro, Waring believes that the temples functioned as focal points for special rituals involving ancestor worship. Motifs of the Cult, depicted on objects of stone, copper, and shell, are examined. One motif is the cross and sun-circle representative of the sun and the perpetual fire kept in the temples. Other motifs depict symbolic representations of animals, imagery of death, and war imagery. From Waring's interpretations, one would expect temples to contain burials with elaborate grave goods, ritual figurines, and objects of wealth depicting imagery of the Southern Cult.

Brown (1975, 1985) uses the ethnographic literature to support his ideas concerning the cult house model of temples. The cult house model advocates the importance of temples in activities in addition to those surrounding the placement of the dead. Brown expands temple functions into the economic sphere and the role of redistribution in society. Objects found in temples indicate the manipulation of human remains, the accumulation of wealth, the housing of ritual or supernatural paraphernalia, and the storage of war objects. Exotic items found in temples include pearl beads, shell cups, shell gorgets, copper plates, as well as items made from greenstone and mica. Ritual objects include figurines, ceremonial weapons, crystals,

and fossils. Brown (1975:8) points out that many of these exotic and ritual items were of non-local origin. According to Brown (1975:15), temples served as treasuries for the managers of exchange in society. Chiefs and other powerful elites controlled the acquisition of non-local, prestige items and any subsequent redistribution of these items in society. These managers of exchange kept their power through prosperous exchange and the ability to organize successful war parties. Waring's Southern Cult comes into play with ancestral worship and war imagery associated with individuals buried in the temples. This ancestor Cult, with all the art and motifs associated with it, served to honor the dead and to sustain an ideology for the living (Brown 1975:16). Therefore, the function of temples expands beyond just repositories for the dead and storage of wealth items. Economic and political power is also associated with temples and found archaeologically through the presence of non-local items associated with individual burials and in storage.

Chester DePratter (1983:111-153) presents a thorough examination of the ethnographic literature concerning temples in the Southeast. DePratter divides internal features of southeastern temples into seven different categories: fire, temple guardians, effigy guardian figures, mortuary contents, accumulated goods, burial access, and idols and spirits. References to various chiefdoms are examined to determine which of the seven categories are mentioned in the accounts. Some accounts only mention items of wealth in the temples, likely because that particular aspect was the only one of interest to the observer. Other accounts provide information concerning all seven categories. The four accounts given by members of

the De Soto Entrada are compared to one another concerning the temples at Talimeco and Cofitachequi. These accounts, including Garcilaso's, depict temples as associated with the bodies of the honored dead, the accumulation of mundane and exotic items of wealth, ritual and supernatural paraphernalia, and the storage of weapons (DePratter 1983:132). These types of items appear to be relatively standard throughout the Southeast.

Based on the ethnographic evidence presented here, what types of materials might one expect to find archaeologically from temple mounds at Moundville? Certainly, of primary importance is the presence of human remains. Other items should reflect the main aspects of southeastern temples discussed above. Ritual or supernatural objects should be present in the form of effigy figures, symbolic depictions of animals, ceremonial weapons, and perhaps crystals or fossils. Material wealth should also be present including a large number of non-local materials. Examples of these items might include objects made from greenstone, mica, and copper. Lastly, one might expect to find an accumulation of weapons, although bows and shields would not survive into the archaeological record.

An important category of activities absent in the ethnographic literature is evidence for crafting. There is no mention by the writers of ethnographic accounts of specialized stone-working or craft activities occurring within or around temples. However, evidence for such activities have already been found on Mound Q at Moundville (Markin 1994). This discrepancy may suggest that Mound Q, as well as

other mounds at Moundville containing burials, was used differently than temples described in the ethnographic literature.

CHAPTER 3. EXCAVATIONS ON MOUND M

Previous Excavations

C. B. Moore organized the first large-scale excavations at Moundville around the turn of the century. Moore spent about one month at Moundville in 1905 and in 1906, placing "trial holes" into most of the mounds and several off-mound areas. As part of his investigations, Mound M is described as the remnant of a small domiciliary mound with a summit measuring 36 feet by 22 feet. Thirteen trial holes were dug into the mound without recovering any significant material (1905:199). Moore also comments on previous excavation in the mounds stating that, "Although there had been considerable digging into the smaller mounds of Moundville previous to our visit, no record has been kept of the results (1905:130)." Therefore, there is a possibility that excavations into Mound M were made prior to Moore's visit.

1970 and 1971 Excavations on Mound M

Background Information

A two-year excavation project, under the direction of David DeJarnette, was conducted on Mound M during 1970 and 1971. This work was largely accomplished through a series of four field schools (spring and fall 1970, summer and fall 1971). The field schools were conducted as a class, designated Anthropology 16 in the spring of 1970 and as Anthropology 69 in the summer of 1971, at the University of Alabama.

Other excavations at Mound M, during the summer of 1970, were conducted through a program sponsored by the Girl Scouts of America. The Deep South Girl Scout Council in Mobile, Alabama organized a group of twenty girls from all over the country to participate in the excavation. Jerry Nielson served as the supervisor for the field season.

Each season of excavation produced a collection of field records, photographs, and artifacts. Until recently, this collection had not been examined and over the course of twenty-five years some of the data were lost. Missing data include some artifacts, field notes, and photographs from each season of excavation. The most extreme example of this loss pertains to the fall season of 1971 for which the only remaining data are the artifacts with their provenience information. For each of the excavation seasons, all of the available written records and photographs were used in conjunction with interviews from excavation participants to reconstruct excavation procedures and progress over the two-year period. Interview questions covered topics such as excavation procedures, impressions of mound stratigraphy, what was found in terms of features and artifacts, and excavation progress by the end of each season. Interviews were conducted with John O'Hear, Eugene Futato, Bruce Bizzoco, George McClusky, and Jerry Nielsen.

General Provenience Information

Excavation procedures on Mound M generally followed the guidelines set forth by the Alabama Museum of Natural History (1938) for archaeological investigations in

Alabama. This guidebook, written in January of 1938, was prepared as a standard of methods and procedures for all archaeological investigations in the state. In the spring of 1970, DeJarnette and the University of Alabama field school began excavations on Mound M. The first step in this investigation involved the construction of a contour map of the mound, using an alidade. Next, a series of excavation units were staked out on a grid system (Figure 2). The grid system, for reasons not recorded or remembered, was oriented northeast-southwest over the southwestern slope of the mound. Two main axes or zero lines were established using wooden stakes, one oriented northeast-southwest and one oriented northwest-southeast. From the zero lines, wooden stakes were placed five feet apart so that each excavation unit measured twenty-five square feet. Individual stakes were then identified in relation to their distance from both main axes. Excavation units were designated by the grid coordinate corresponding to the unit's northeast stake, the one in the upper right hand corner as read from the base of the mound facing northeast. A unit 40 feet north of the northwest-southeast axis and 5 feet east of the northeast-southwest axis would be identified as unit 40R5.

The first step of excavation was the removal of the humus. Level designations were then assigned in four inch increments below the ground surface of the northeast stake, the same stake from which the unit derives its grid designation. All levels were kept horizontal rather than sloping according to the ground surface. Excavated dirt was screened through either hand held sifters or a motorized sifter with 1/4 inch

screen. Artifacts were bagged by level, and in the spring and summer of 1970 each bag was given a field specimen number.

Spring 1970 Season

Documentary materials from the spring of 1970 consist of two student notebooks, made by John O'Hear and Sam Shannon, five slides, four photographs, and provenience information from 167 artifact bags. Careful examination of these materials along with details filled in by Mr. John O'Hear of Mississippi State University, and Mr. Eugene Futato of the Office of Archaeological Services in Moundville, Alabama, led to several conclusions regarding the first field season on Mound M. This field season took place between February 17, 1970 and May 19, 1970. Students in the field school included Eugene Futato, Charles Hubbert, Larry Miller, John O'Hear, Sam Shannon, and Danny Wise. One day a week the students attended a lecture on campus by DeJarnette and one day a week they worked on Mound M. The season began with students staking out a grid system on the mound and mapping the mound. Also, a temporary fence was constructed around the excavation units (Figure 2). Eighteen units were opened before the end of the season, twelve in the first row and six in the second (Figure 2). In the first row of units, those corresponding to unit numbers 40L25 through 40R30, no more than four levels (16 inches) were completed for any given square. In the second row of units, no more

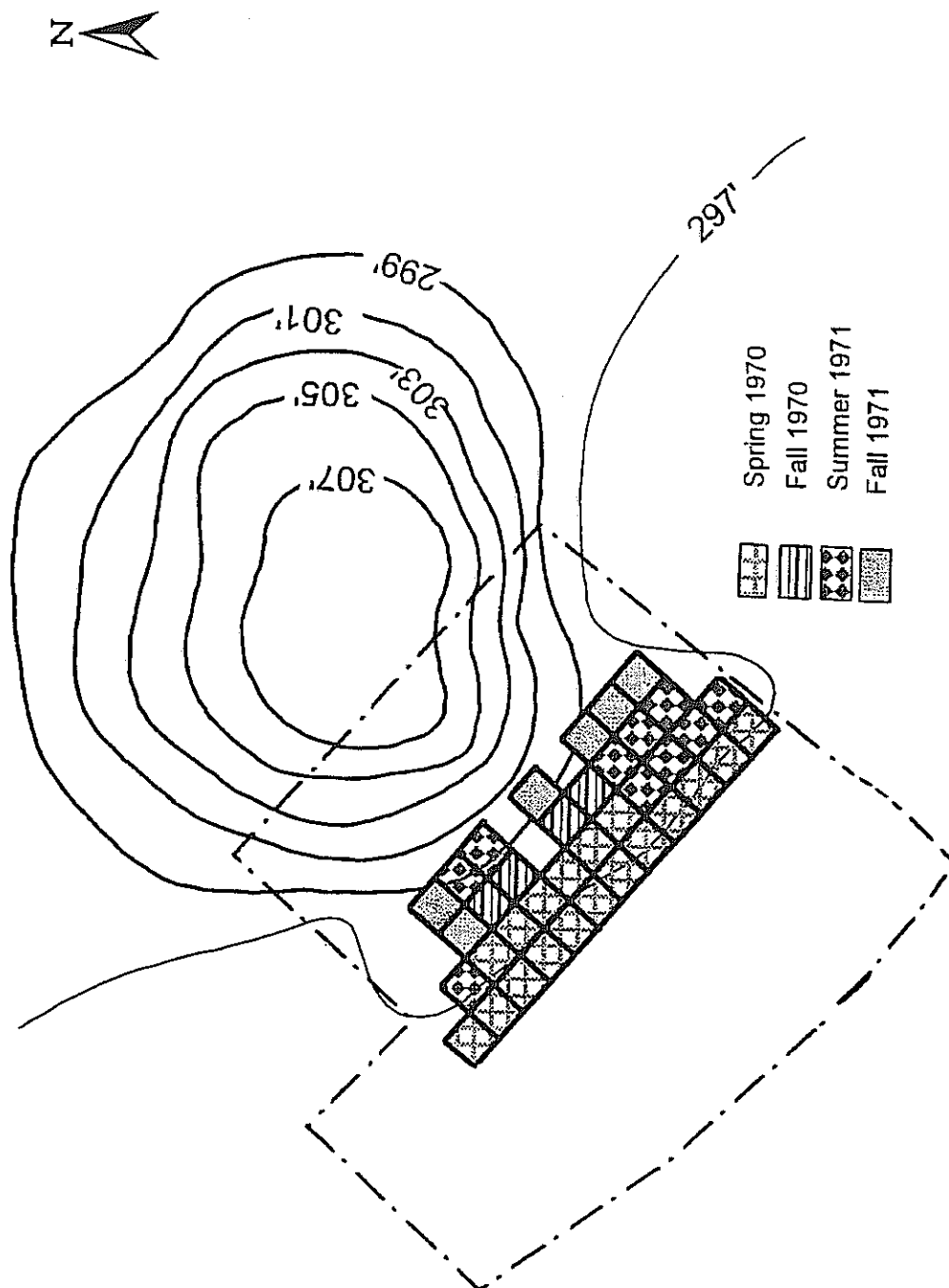


Figure 2. Contour Map of Mound M Showing Excavation Units (coded by season) and Temporary Fence.

than seven levels (28 inches) were excavated. Two features were identified on the mound, one of which was Burial 3100. These features will be discussed later.

Summer 1970 Season

Summer of 1970 represents an unusual field season in that the work force consisted of a group of Girl Scouts rather than University students. The Girl Scouts worked on Mound M from July 27, 1970 to August 6, 1970, for a total of eleven days. Jerry Nielsen was the supervisor for this season. Existing documentation includes Jerry Nielsen's daily notebook, three feature forms, and provenience information for 132 artifact bags. Excavation continued in eleven of the units, all of which had been previously opened in the spring of 1970, with the majority of units located in the lowermost trench (Figure 2). In each unit, no more than three additional levels were excavated. Three features were found during this season.

Fall 1970 Season

Excavations in the fall of 1970 were once again undertaken by DeJarnette and the University of Alabama field school. Daily supervisors of the fieldwork were Jerry Nielsen and Craig Sheldon. Materials available from this season include Nielsen's and Sheldon's field notes, two feature forms, two slides, and provenience information for 106 bags of artifacts. Between September 22 and December 8, 1970, eight units were excavated (Figure 2). Four of the units from previous excavations, 45L5, 45L10, 45R5, and 45R10, were continued for one to two levels (4-8 inches). The remaining

four units opened during this season were located higher up on the mound's slope. These units were excavated between two and seven levels (8-28 inches). Two additional features were identified during this season.

Summer 1971 Season

More information is available from the 1971 summer season than from any other season of work on Mound M. Once again Jerry Nielsen and Craig Sheldon were the daily supervisors. The existing documentation for this season is the most complete collection of records of the entire two-year span of work. Student notebooks were available from Bruce Bizzoco, Nancy Brock, Glenn Gossett, Thomas Kilgo, George McClusky, and Edward Smith. Other documentation included nine feature forms, forty-four photographs, four slides, and provenience information for 126 bags of artifacts. Excavation continued in six units (45L15, 45L10, 45L5, 45, 50L10, 50R5) to an average depth of 48 inches below surface. Ten additional units were opened during this season (45L20, 45R15, 45R20, 45R25, 45R30, 50R15, 50R20, 50R25, 55L10, 55L5) (Figures 2 and 3). Five of these squares were located in the second row of excavation units, three were located in the third row of units, and two were located in the fourth row on the mound's slope. Each of these units, except units 45L20 and 55L10, was excavated to between 24 and 28 inches below surface. Both 45L20 and 55L10 were excavated to between 48 and 52 inches below surface. Six feature

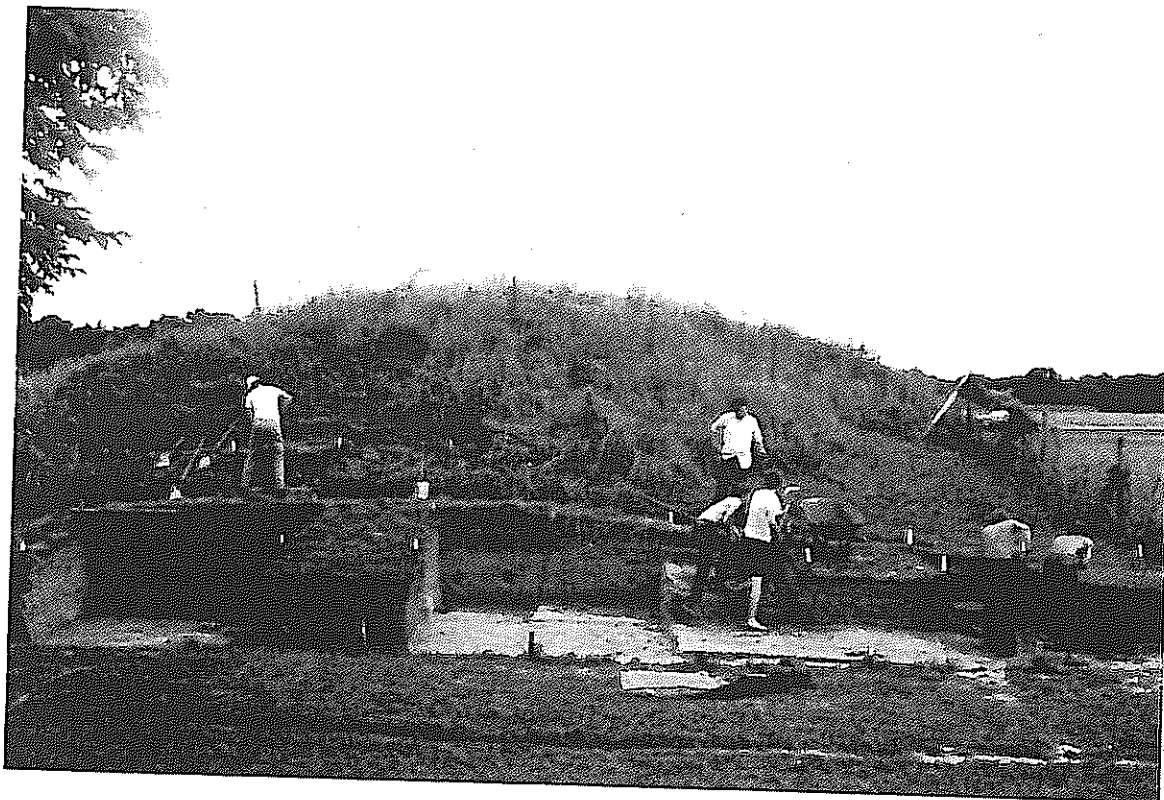


Figure 3. Summer 1971 Excavation.

numbers were assigned this season, although two of these features were initially identified in previous seasons.

Fall 1971 Season

Sparse information is available documenting the excavations during the fall of 1971. The only source of information is the provenience records located on 115 bags of artifacts. Artifacts exist for ten units (Figure 2), only four of which were previously excavated (50L10, 50R10, 55L5, and 55L10). Each of the previously excavated units was continued for between two to three levels. Units 50L15, 55L15, 55R5, 55R15, 55R20, and 55R25 were opened during this season, with excavations between 12 and

52 inches below surface. Five of these units are located in the forth row of units on the mound's slope. No additional information is available for this season.

Description of Features and Burial

During the two-year excavations on Mound M, twelve features (Figure 4), including one burial, were recorded. Table 1 lists each feature, giving its description, location, and the season when it was found. This section serves to clarify some confusing points concerning the numbering of features and to explain feature associations.

Table 1. Description of Features from Mound M Excavations.

Feature Number	Provenience	Feature Description	Season Found
Burial 3100	45R5, level 6	human mandible	Spring 1970
1	40R5, level 5	large potsherds	Spring 1970
2	40L25, 40L20, 40L15, levels 5-9	non-aboriginal disturbance	Summer 1970
3	40, level 5	small pit and metal object	Summer 1970
4	40L25, 40L20, 40L15, 40L10, 40L5, 40R5, 40R10, 45L10, levels 4-7	historic ditch	Summer 1970
5	45L10, levels 7-8	primary midden	Fall 1970
6	50R5, level 4	pit	Fall 1970
7	50R5, level 12	dark band of soil	Summer 1971
8	45R30, level 4	charred wood	Summer 1971
9	45, level 8	shallow pit	Summer 1971
10	45, level 8	animal bones	Summer 1971
11	45L20, level 4	historic ditch	Summer 1971
12	Roadway Excavation	pit	Summer 1971
12/13	45L20, 45L15, 45L10, 50L10, levels 9-12	midden deposit	Summer 1971
13	50L10, level 13	"gray zone" fire pit	Summer 1971

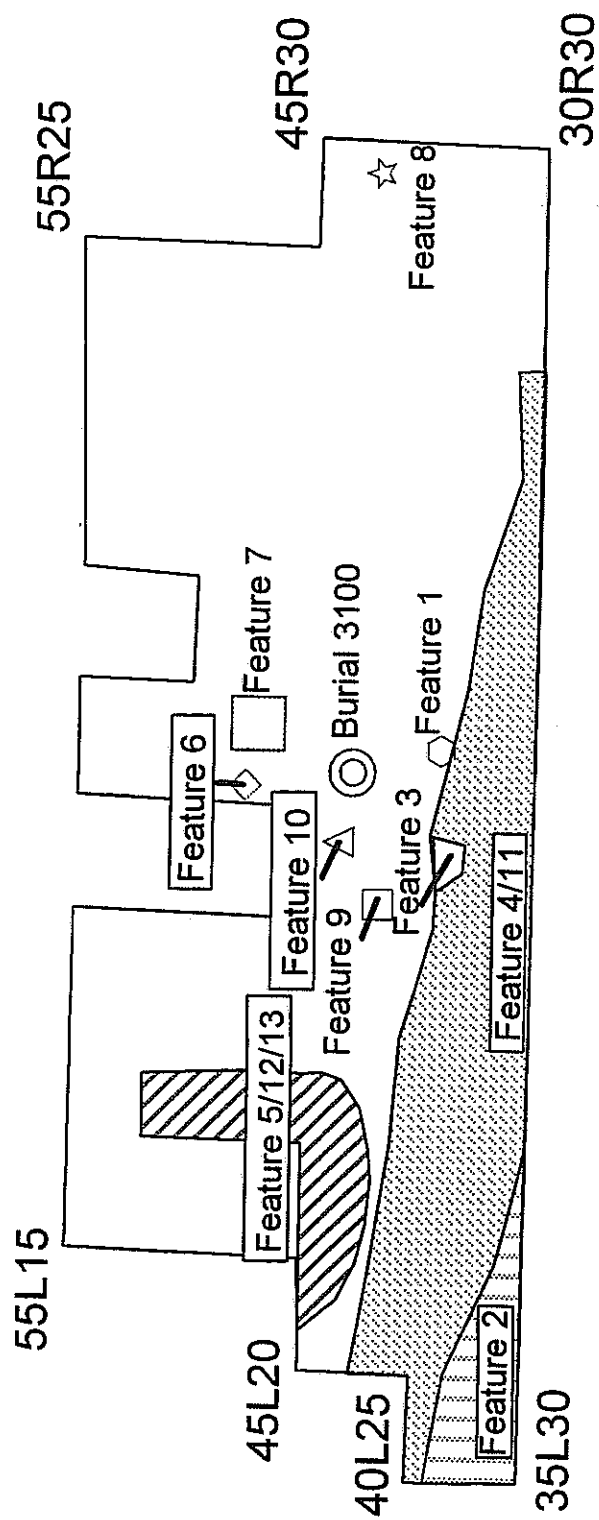


Figure 4. Location of Features from Mound M Excavations.

Two of the features found on Mound M were given multiple feature numbers over the two-year excavation period. One of these features is a historic drainage ditch at the base of the mound which, according to Clarence B. Moore, was dug between 1857 and 1862 (Moore 1905:131). The ditch was uncovered in the summer of 1970, at which time it was given feature number 4. One year later, during the summer of 1971, a part of this same ditch was assigned feature number 11. The new feature number was most likely assigned because the newly uncovered portion of the ditch was located in the second row of units while the previously excavated section was largely confined to the first row of units.

Another feature given multiple numbers was a primary midden deposit. This deposit represents an area where cultural debris was discarded directly after use rather than moved and discarded elsewhere, as occurs with mound fill deposits (Schiffer 1972:161). Feature numbers 5, 7, 12, and 13 were all used to designate this midden. Feature number 5 was assigned in the fall of 1970 to describe a pit or possible midden deposit. At that time, it was unclear to the excavators that Feature 5 was actually a part of the midden deposit termed the "gray zone." Subsequently, the "gray zone," was given a different feature number in a later season. The gray zone, first identified in the fall of 1970, was described as a gray sand or gray clay mottled with charcoal. Artifacts recovered from this deposit included charred animal bone, large potsherds, a polished stone discoidal, greenstone shatter, and flakes. Although the gray deposit was noted in the fall of 1970, no feature number was assigned. In the summer of 1971, a feature number was assigned to the midden deposit; however, both feature

number 12 and number 13 were used. The confusion apparently developed when feature number 12 was used earlier in the season to designate a pit located in the adjacent campground roadway excavations. Some of the excavators on Mound M may not have been aware of this usage and, therefore, believed that the number 12 was still available. Other excavators obviously were aware of the previous use of the number 12 and referred to the midden as Feature 13. Adding to this problem was the use of feature number 13 to designate a fire pit associated with the midden. Despite the multiple uses of feature numbers 12 and 13, it is easy to distinguish the features from one another in the excavation notes. One last feature number, number 7, also refers to the midden deposit. This number was assigned in the summer of 1971 to identify a dark band of soil that the excavators thought was separate from the gray deposit. However, after studying the feature forms and notes, it is clear to me that Feature 7 is part of the midden deposit.

Thus, several of the twelve features on Mound M were from the same contexts and can be grouped together. Features 1, 3, and 4 were associated with the historic ditch at the base of Mound M. This ditch was part of a series of drainage ditches designed to channel water along cotton fields in what is now Moundville Archaeological Park. The ditch represents the largest feature uncovered over the excavation period. As outlined above, feature numbers 5, 7, 12, and 13 were all used to designate the primary midden deposit. Also associated with the midden was Feature 13 and possibly Features 9 and 10. Feature 13 is described as a fire pit located in the midden. Features 9 and 10 were, respectively, a pit and a group of several

pieces of charred animal bone. There was no mention of a distinct soil change in the area of these features, yet they occurred at a level comparable to the midden deposit. Features unassociated with other features were Features 2, 6, and 8. These features are, respectively, a non-aboriginal disturbance, a pit, and a piece of charred wood.

Interpretation of Archaeological Contexts

Despite the lack of complete excavation records, the archaeological contexts of Mound M can be adequately interpreted. These interpretations are based on the field notes, photographs, and slides previously described for each of the field seasons. In addition, certain details were filled in from interviews with participants John O'Hear, Eugene Futato, Bruce Bizzoco, George McCluskey, and Jerry Nielsen.

Unfortunately, little information concerning the stratigraphy of Mound M is available. There is only one indication of a primary deposit on the mound, termed the "gray zone" (Figure 4). Aside from the one primary deposit and the features, the rest of the fill is not differentiated in any manner. The midden is deposited over subsoil at its lowermost point and then slants upwards over the mound slope. This deposit was created, therefore, after construction of the mound had already begun. There is no other mention of primary soil deposits indicating the flanks of successive construction stages.

Aside from the historic ditch, the gray zone, and the other features, no distinctions are made regarding the bulk of excavated soil. However, looking at several of the photographic slides of the excavations as well as comparing stratigraphy

of other mounds located on the southern tier of the site, some distinctions can be made. First of all, the majority of soil excavated near the base of Mound M probably represents erosional slump that has accumulated around the base of the mound. Erosional overburden was noted in the profiles of nearby Mounds I and J during excavations in 1937 (Knight 1989). This overburden was created by years of cultivation and flank erosion. Mound M did not escape these processes. It appears that over the years, the summit and flank of Mound M have eroded to produce an area of mixed soil at the base of the mound. The units located farthest away from the flank of the mound were excavated in five or six levels, between 20 to 24 inches below the surface, before reaching subsoil. It is likely that the depth of these deposits, just off the mound's flank, are evidence of erosional slump. To add credibility to this argument, the original inclinations of Mounds E, F, G, Q, and R were measured from profiles compiled during recent excavations. These five mounds were found to have original flank slopes on the average of 26° . Since it is not unreasonable to assume that the original flank of Mound M had a similar slope, this measurement was applied to a reconstruction of the mound's profile. A reconstructed slope angle of 26° , when traced over a reconstruction of Mound M's present slope, shows sufficient space at the top of the mound for erosion to have occurred and sufficient build-up of soil at the mound's base for the accumulation of erosional soil. Figure 5 illustrates this point, showing a schematic reconstruction of the mound's current profile with a hypothetical original profile above it. With this in mind, most of the soil excavated from the lower

two and possibly three rows of units on Mound M can be viewed as slumped overburden.

Another addition to the contexts previously discussed is the possible presence of a pre-mound midden located under the slump fill. Photographs of units 45R25, 45R30, and 50R25, level 6, show a dark, horizontal band in the profile. Changes in soil color are mentioned in Bruce Bizzoco's student notebook for unit 45R30, level 6. Also noted is the presence of a possible pit located in the same square, although no feature number was assigned. This possible pit and dark band may be indicative of pre-mound activity.

Figure 5 represents an interpretation of Mound M's construction showing the two mound stages, the gray midden deposit, the area of eroded moundfill, the overburden, and the possible premound midden. Based on evidence from the pottery analysis, the gray zone is associated with the first construction stage.

Archaeological Investigations Near Mound M

It is worth mentioning that several excavations have taken place in the immediate vicinity of Mound M. The first documented investigations near Mound M are C. B. Moore's excavations in 1906 (Moore 1907:343). He focused on what was termed the "remnant of a conical mound of clay" located 325 feet WSW from Mound M (ibid). In this area, now identified as Mound Y, Moore discovered fifty-nine burials.

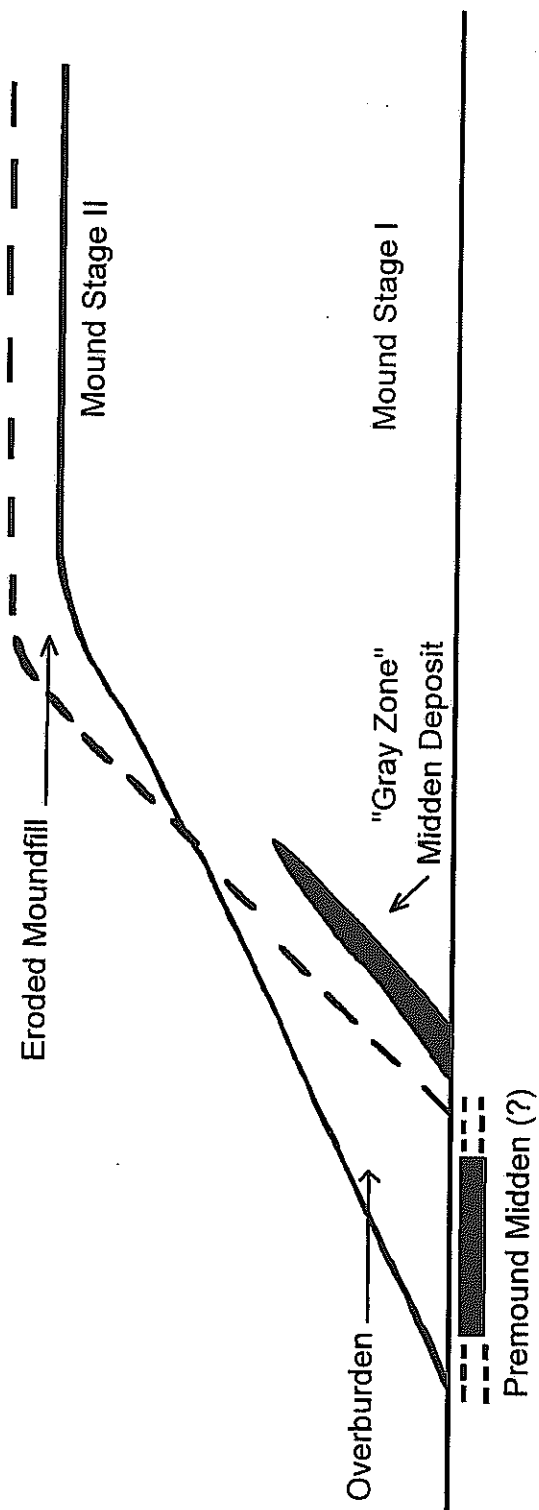


Figure 5. Schematic Profile Reconstruction of Mound M.

The area surrounding Mound M was not investigated again until the large-scale excavations in the 1930s. During this time, several locales around Mound M were excavated. In December of 1930 and January of 1931, the Alabama Museum of Natural History excavated three areas in the same field Moore investigated to the south of Mound M. Peebles (1979:21) reports three distinct sections of investigation. In an area southeast of Mound M, twelve burials and two artifacts were found. To the south of Mound M, thirteen burials and fifty-one artifacts were discovered. To the southwest of Mound M, 137 burials and 274 artifacts were uncovered. Peebles (1979:22) also states that the excavators most likely uncovered part of the palisade, although no mention of such a discovery is made in the documentation. This assumption about the palisade was based on Peebles' analysis of an aerial photograph of the site taken in the 1930s. On this photograph, a drainage ditch can be traced around the southwestern portion of the site, just south of Mound M. Peebles believed that this depression coincided with the former location of the palisade.

Other excavations in the 1930s included part of the massive roadway excavations to the north of Mound M (Peebles 1979). The roadway excavations were conducted in 1939 to expose a strip of land to be destroyed by a projected road around the park. This strip of land was 50 feet wide and almost one and a half miles long. Excavation blocks, measuring 50 feet by 50 feet, were established along the entire strip of land. One particular block, block 15+00 to 15+50, located to the northwest of Mound M, was one of the most complex areas uncovered along the entire 7,000 feet of investigation. This block contained thirty-nine burials, one

structure, and artifacts such as stone discoidals and three copper fishhooks (Peebles 1979:842-851). Adjacent blocks revealed one more burial, several firebasins, and scattered postmolds and wall trenches.

Excavations did not resume in the area of Mound M until DeJarnette's field schools in 1970 and 1971. At this time, Craig Sheldon supervised excavations southwest of Mound M in an area termed the "firebreak." This locale was investigated with the assistance of C. Earle Smith, an archaeobotanist at the University of Alabama. Smith was interested in growing and subsequently burning certain types of weeds in this field for research purposes. Since a firebreak needed to be created prior to burning, DeJarnette's field school excavated this area. Part of a burned structure was uncovered along with numerous potsherds and bone fragments.

In the summer of 1971, four burials were uncovered to the east of Mound M in the construction area of an access road to the campground. Associated artifacts included three broken pots, a duck head effigy, copper fragments, a copper disc, and lithic materials. Also found in this area were several postmolds and segments of a wall trench, possibly the location of two house foundations.

CHAPTER 4: ARTIFACTS

Ceramic Artifacts

Background to Ceramic Analysis

Excavations at Mound M produced 5,728 potsherds over a two-year period. These sherds were analyzed at the Department of Anthropology at the University of Alabama. The ceramic analysis for the Mound M artifacts followed the type-variety classification developed by Steponaitis (1983). Each sherd was analyzed according to temper, surface finish, decoration, vessel modes, and decorative modes. An analysis of vessel shapes was also included in this analysis (Appendix A). The majority of ceramics recovered from Mound M occur in the Mississippian period (Table 2).

Table 2. Late Prehistoric Chronology for the Black Warrior River Valley (Scarry 1995:5).

Protohistoric	Alabama River	A.D. 1550-1700
Mississippian	Moundville III	A.D. 1400-1550
Mississippian	Moundville II	A.D. 1250-1400
Mississippian	Moundville I	A.D. 1050-1250
Late Woodland	West Jefferson	A.D. 900-1050

The ceramic analysis provides evidence for the interpretation of Mound M's construction chronology. Similar analyses have been undertaken for Mounds H, I, J, K, and L, also located on the southern edge of the plaza (Knight 1989). Artifact

collections from these mounds result from flank trenching in the 1930s by the Civilian Conservation Corps. The excavation profiles from the trenches were used to interpret mound construction in order to recontour the mounds close to their original dimensions. Knight's analyses indicate that Mounds H, I, J, and K were constructed during the Moundville I or early Moundville II phases and that they were all abandoned by the Moundville III phase (Knight 1989:9). Mound L represents the only exception. This mound not only contains pottery from the Moundville I and Moundville II phases, but also has a definite Moundville III component (Knight 1989:9). These conclusions support the current hypothesis that the formal arrangement of mounds at Moundville was imposed early in the site's history, by the early Moundville II phase (Knight 1993:13). The ceramic analysis from Mound M also supports this hypothesis. Specifically, pottery types and modes suggest that most of Mound M was constructed during the Moundville I phase, with a smaller addition during the Moundville II phase, and was abandoned prior to the Moundville III phase.

Table 3 lists the local sherd types represented at Mound M. According to Steponaitis (1983), most of these types date to the Moundville I phase. However, there are a few sherds dating to the Moundville II or Moundville III phases. Also present are a few non-local types, listed in Table 4, as well as a considerable amount of residual types, listed in Table 5. Residual types describe sherds that cannot be defined as local or non-local types based on temper and decoration. The implications of the ceramic evidence will be discussed following brief descriptions of each sherd type found at Mound M.

Table 3. Local Sherd Types from Mound M Excavations.

Sherd Type	Count
Alligator Incised, <i>var. unspecified</i>	1
Baytown Plain, <i>var. Roper</i>	21
Bell Plain, <i>var. Hale</i>	710
Carthage Incised, <i>var. Akron</i>	1
Carthage Incised, <i>var. Fosters</i>	2
Carthage Incised, <i>var. Summerville</i>	3
Carthage Incised, <i>var. unspecified</i>	15
Mississippi Plain, <i>var. Warrior</i>	4,513
Moundville Engraved, <i>var. Elliots Creek</i>	19
Moundville Engraved, <i>var. Havana</i>	2
Moundville Engraved, <i>var. Hemphill</i>	3
Moundville Engraved, <i>var. Middleton</i>	1
Moundville Engraved, <i>var. Stewart</i>	1
Moundville Engraved, <i>var. Tuscaloosa</i>	3
Moundville Engraved, <i>var. unspecified</i>	54
Moundville Incised, <i>var. Carrollton</i>	8
Moundville Incised, <i>var. Moundville</i>	91
Moundville Incised, <i>var. Oliver</i>	10
Moundville Incised, <i>var. Snows Bend</i>	3
Moundville Incised, <i>var. unspecified</i>	57
Mulberry Creek Cord Marked, <i>var. Aliceville</i>	1
Total	5,519

Table 4. Non-local Sherd Types from Mound M Excavations.

Sherd Type	Count
Barton Incised, <i>var. Barton</i>	1
Carter Engraved, <i>var. unspecified</i>	3
Coles Creek Incised, <i>var. unspecified</i>	1
French Fork Incised, <i>var. unspecified</i>	1
Langston Fabric Impressed, <i>var. unspecified</i>	2
L'Eau Noire Incised, <i>var. unspecified</i>	2
Mazique Incised, <i>var. unspecified</i>	2
Total	12

Table 5. Residual Sherd Types from Mound M Excavations.

Sherd Type	Count
Coarse Grog and Sand Tempered Plain	1
Coarse Grog and Shell Tempered Plain	17
Coarse Grog and Shell Tempered Burnished	1
Grit Tempered Plain	5
Fine Grog Tempered Plain	27
Fine Grog Tempered Red Filmed	1
Fine Grog Tempered Burnished	3
Fine Grog Tempered Engraved	1
Fine Grog and Shell Tempered Plain	81
Fine Grog and Shell Tempered Burnished	1
Fine Grog and Shell Tempered Engraved	13
Fine Grog and Shell Tempered Incised	2
Fine Sand and Grog Tempered Plain	21
Fine Sand and Grog Tempered Engraved	3
Fine Sand and Shell Tempered Plain	8
Fine Sand and Shell Tempered Incised	1
Non-tempered Plain	4
Non-tempered Engraved	2
Non-tempered Incised	1
Sand Tempered Plain	4
Total	197

Local Ceramic Types

Alligator Incised, *var. unspecified* (Figure 6a)

One sherd of this type was recovered. The sherd is grog-tempered and incised with a series of parallel lines. The sherd's small size prevents identification beyond the presence of sloppy, wet-paste incisions. Phillips (1970:38) defines this type for the Lower Mississippi Valley dating it to the Baytown Period (A.D. 300-700). Jenkins (1981:83) dates most varieties of Alligator Incised from the Gainesville Lake area, in the Tombigbee River Valley, to the Miller III phase in the Woodland phase, A.D. 600-

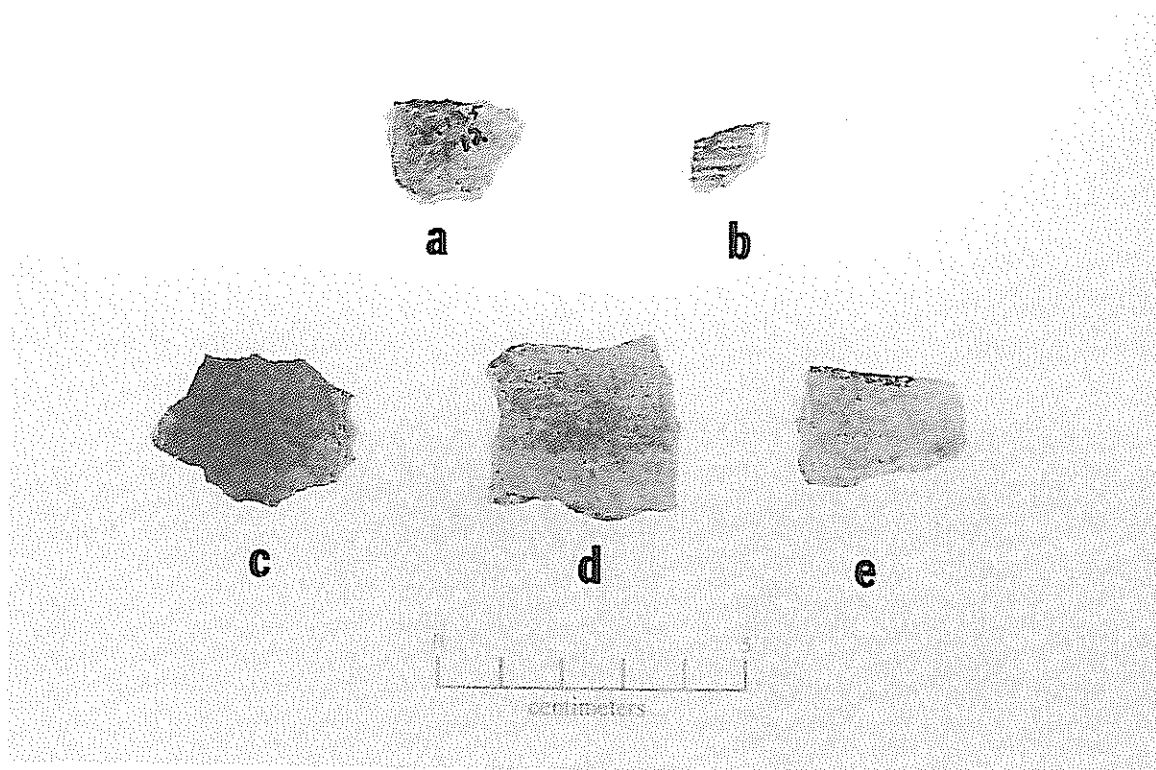


Figure 6. Local Pottery Types From Mound M (a. Alligator Incised, *var. unspecified*; b. Mulberry Creek Cord Marked, *var. Aliceville*; c-e. Baytown Plain, *var. Roper*).

1000. The exception is *var. Geiger*, which dates to the West Jefferson phase, A.D.

900-1050 (Jenkins 1981:82-85; Steponaitis 1983:303).

Baytown Plain, *var. Roper* (Figure 6c-e)

Twenty-one Baytown Plain, *var. Roper* sherds were recovered. This type is grog-tempered with relatively large temper particles. Steponaitis (1983:305) dates this type to the West Jefferson phase, possibly extending back to the Late Miller II phase.

Bell Plain, *var. Hale* (Figures 7, 8, and 9)

Seven hundred and ten sherds were classified as Bell Plain, *var. Hale*, making it the second largest category represented at Mound M (12.4%). This type refers to sherds which are shell-tempered, burnished, and lack tooled decoration (Steponaitis 1983:306). The majority of Bell Plain, *var. Hale* sherds are black filmed, but some in this collection are either red filmed ($n=58$) or white filmed ($n=10$). Vessel shapes represented in the Mound M collection include the slab base bottle, pedestaled bottle, simple bowl, cylindrical bowl, hemispherical bowl, flaring rim bowl, restricted bowl, terraced rectangular bowl, and plate. Additional features identified include beaded rims, scalloped rims, and horizontal lugs. Bell Plain, *var. Hale* vessels date from Moundville I through the Alabama River phase. Finer distinctions are possible based on vessel shape and secondary features (Steponaitis 1983:307).

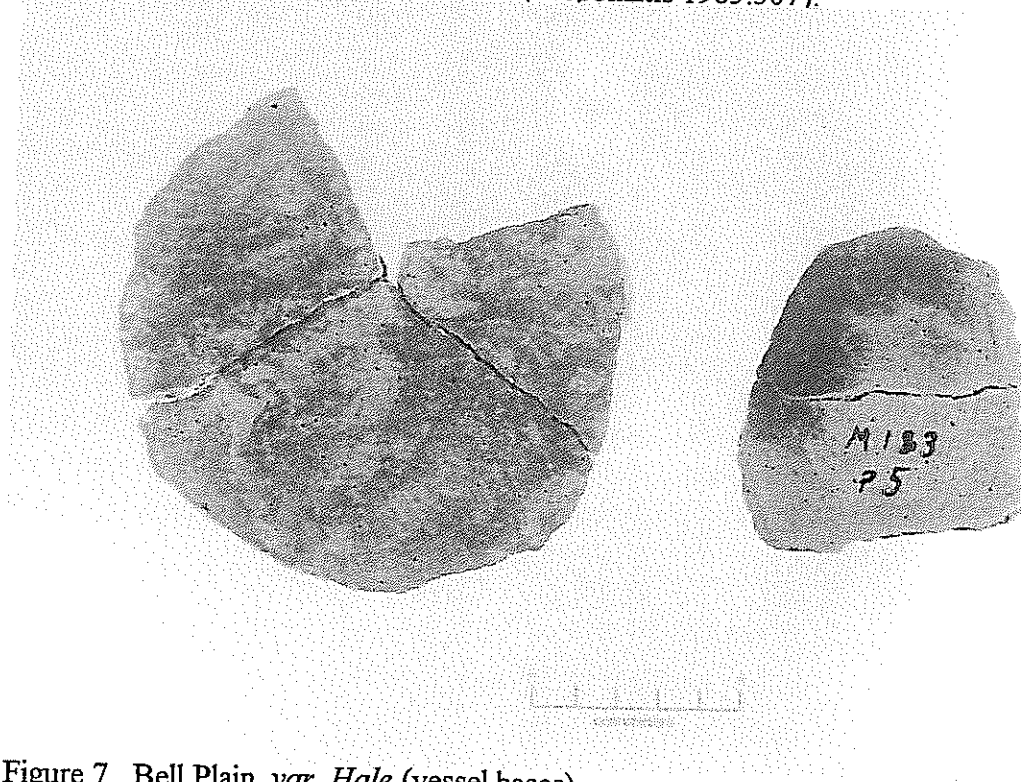


Figure 7. Bell Plain, *var. Hale* (vessel bases).

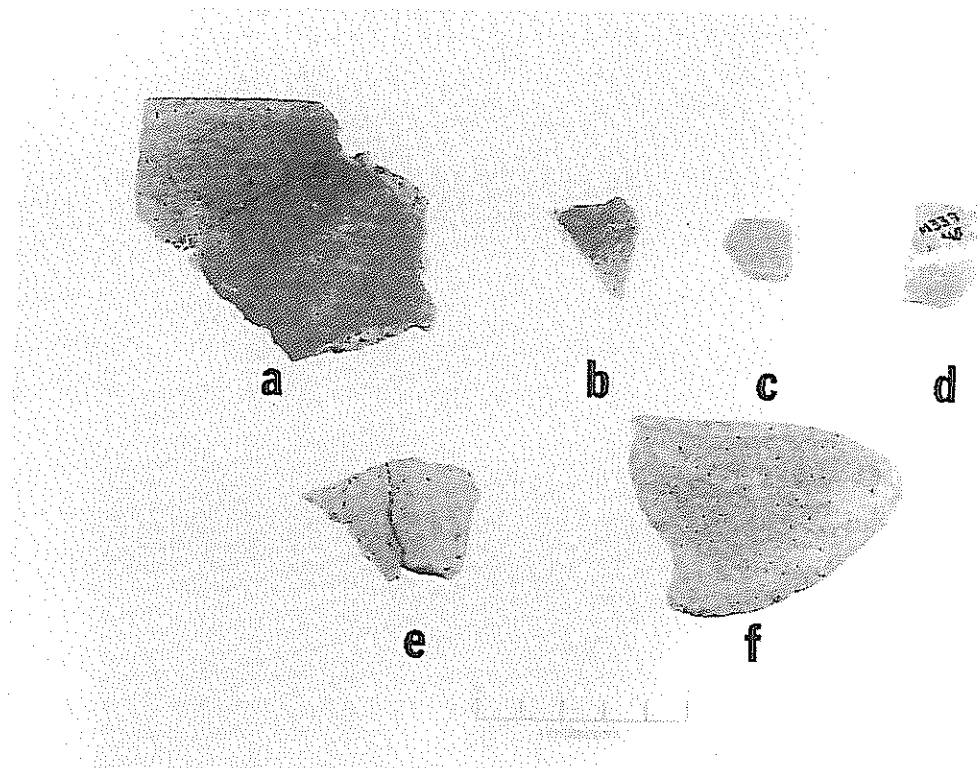


Figure 8. Bell Plain, *var. Hale* (a-d. red filmed; e-f. white filmed).

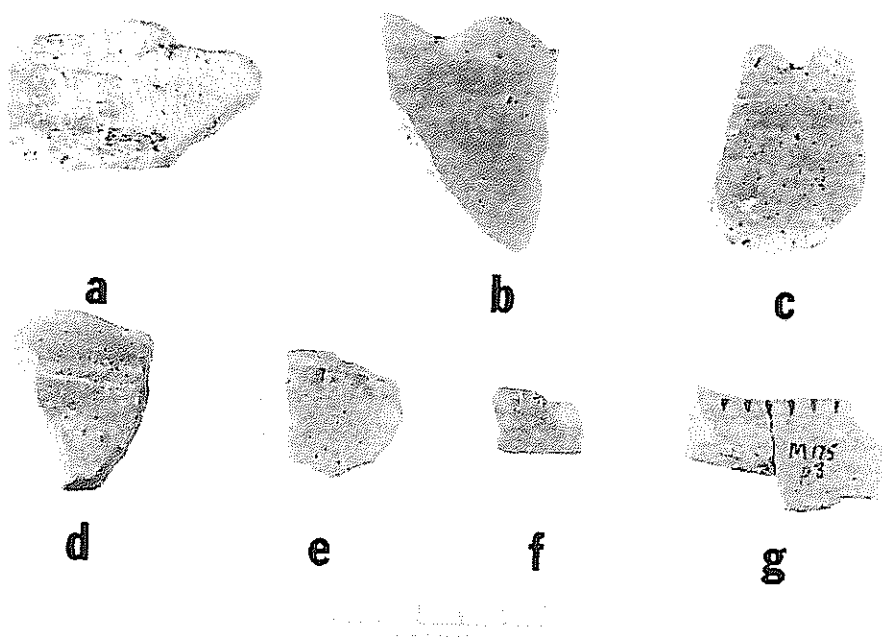


Figure 9. Bell Plain, *var. Hale* (a-d. scalloped rims; e-g. beaded rims).

Carthage Incised

This type is characterized by vessels with broad incisions occurring on a ware equivalent to Bell Plain, *var. Hale*. The incisions are U-shaped in cross-section and typically measure between 1.5 and 2.0 mm wide (Steponaitis 1983:307). Four varieties of this type were identified at Mound M with a total number of 21 sherds. Fifteen sherds were classified as Carthage Incised, *var. unspecified* due to their small size and the unreliability of more precise identification.

Carthage Incised, *var. Akron* (Figure 10a)

Only one sherd of this variety was found at Mound M. The design consists of a horizontal band of two or more lines running parallel to and just below the lip (Steponaitis 1983:307). Loops and/or folds often embellish the parallel lines, one of which is partly identifiable on the Mound M sherd. Carthage Incised, *var. Akron* dates from Moundville I through early Moundville III (Steponaitis 1983:307).

Carthage Incised, *var. Fosters* (Figure 10b,c)

Two sherds were identified as Carthage Incised, *var. Fosters*. Steponaitis (1983:309) describes this variety as consisting of free-standing representational motifs, typically portraying the hand and/or forearm bones. Both of the sherds identified from Mound M depict a section of the hand motif, one of which is incised on the interior rim of a flaring rim bowl. This variety dates to the Moundville III and Alabama River phases (Steponaitis 1983:309).

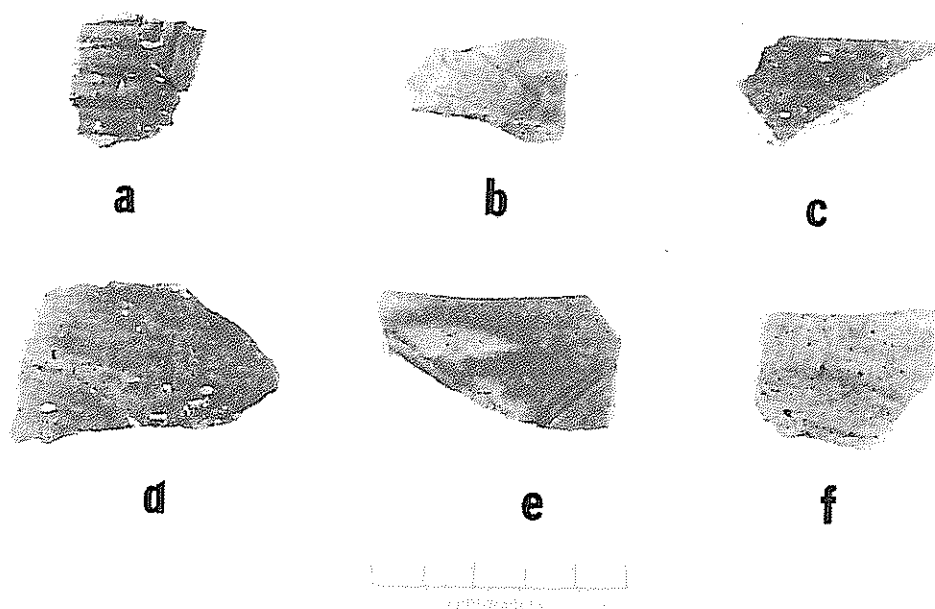


Figure 10. Carthage Incised (a. *var. Akron*; b-c. *var. Fosters*; d-f. *var. Summerville*).

Carthage Incised, *var. Summerville* (Figure 10d-f)

Carthage Incised, *var. Summerville* is defined by incised arches placed end to end around the vessel's circumference (Steponaitis 1983:311). Three sherds of this variety were found at Mound M, dating to the Moundville I and possibly early Moundville II phases (Steponaitis 1983:311).

Mississippi Plain, *var. Warrior* (Figure 11, 12, and 13)

A total of 4,513 sherds were identified as Mississippi Plain, *var. Warrior*. This category is by far the largest category of sherds, representing almost 79 percent of the

predominantly shell-tempered, which may be smoothed, but not burnished, and which lack tooled decoration (Steponaitis 1983). Other varieties of Mississippi Plain, such as *var. Hull Lake*, were not used in this analysis due to the ambiguous nature of temper differences within the type. All of the identified vessel shapes of Mississippi Plain, *var. Warrior* were jars, many of which had handles. Additional characteristics include folded rims (n=35) and folded-flattened rims (n=67) as defined by Steponaitis (1983). While most of the sherds do not exhibit painted decoration, eleven sherds are red filmed and twenty-two sherds are white filmed. Mississippi Plain, *var. Warrior* dates from Moundville I through the Alabama River phase with finer distinctions possible based on vessel shape and secondary decorative features (Steponaitis 1983:314).



Figure 11. Mississippi Plain, *var. Warrior*.

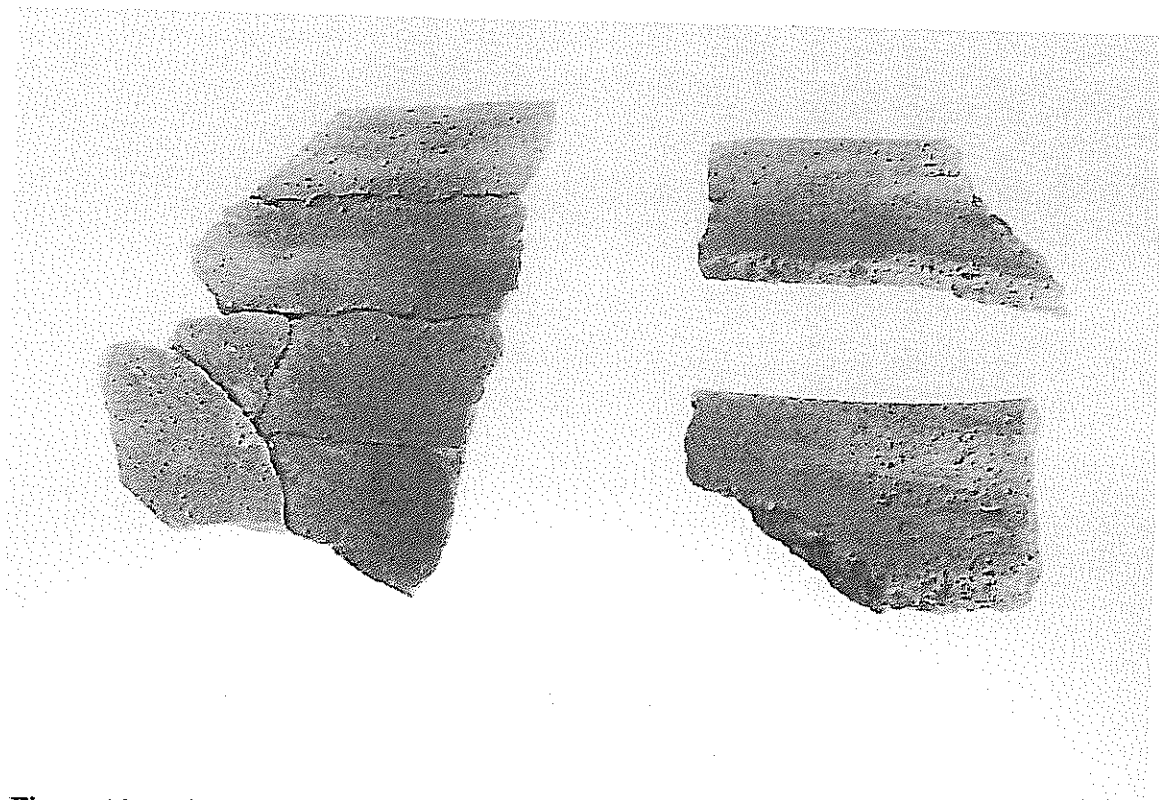


Figure 12. Mississippi Plain, *var. Warrior* (folded-flattened rims).

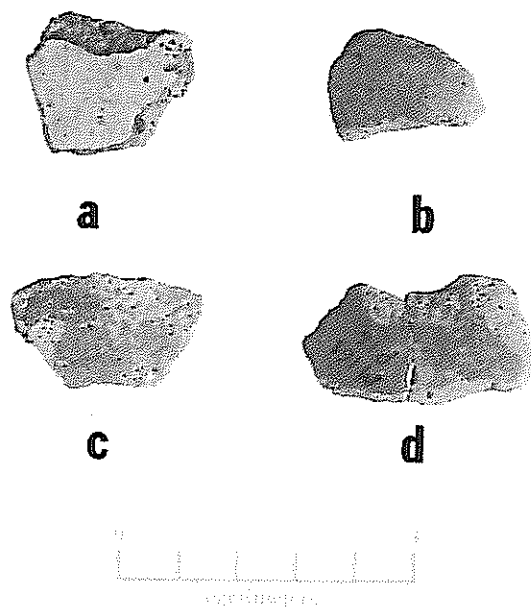


Figure 13. Mississippi Plain, *var. Warrior* (a. white filmed; b-d. red filmed).

Moundville Engraved

Six different varieties of Moundville Engraved were identified at Mound M, totaling 83 sherds. This type occurs on a ware consistent with Bell Plain, *var. Hale*. The decoration consists of either post-fired engraving or fine, dry-paste incision with widths usually between 1 and 1.5 mm (Steponaitis 1983:314). Fifty-four sherds were identified as Moundville Engraved, *var. unspecified*. The majority of these sherds represent too small an area for the design to be clearly identified.

Moundville Engraved, *var. Elliots Creek* (Figures 14 and 15)

This variety is characterized by engraved designs embellished with areas of excision. Nineteen sherds of Moundville Engraved, *var. Elliots Creek* were identified from Mound M with various design representations. The most common design of this variety exhibits excisions in corners where two perpendicular lines intersect. Also common in this collection are sherds with excisions in the crook of two lines forming a "V." One sherd shows excisions in combination with a series of curvilinear lines. Three of the Moundville Engraved, *var. Elliots Creek* sherds are hemagraved with red paint inside the engraved lines and excised areas. Also recovered were several sherds from the base of a pedestaled bottle, all red-filmed. Steponaitis (1983:315) dates this variety to the Moundville I phase; however, he suspected that further evidence may extend it into early Moundville II.



Figure 14. Moundville Engraved, *var. Elliotts Creek*.

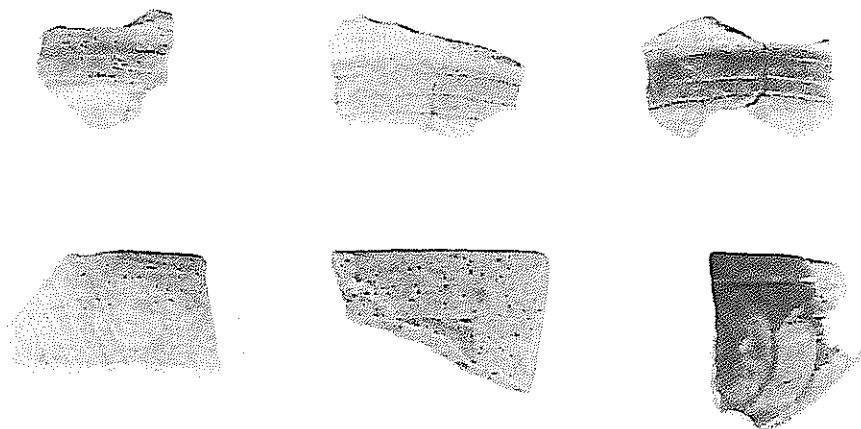


Figure 15

Figure 15. Moundville Engraved, *var. Elliotts Creek*.

Moundville Engraved, *var. Havana*

This variety was sparsely represented at Mound M, consisting of only two sherds. The design is composed of a series of horizontal lines engraved parallel to and just below the lip (Steponaitis 1983:316). This variety occurs during Moundville I through early Moundville III (Steponaitis 1983:317).

Moundville Engraved, *var. Hemphill* (Figure 16a-c)

Only three sherds of Moundville Engraved, *var. Hemphill* were recovered from Mound M. The design consists of free-standing or representational motifs (Steponaitis 1983:317). None of the sherds represented in this collection were large enough to identify a particular motif. This variety dates to the Moundville II and Moundville III phases (Steponaitis 1983:317).

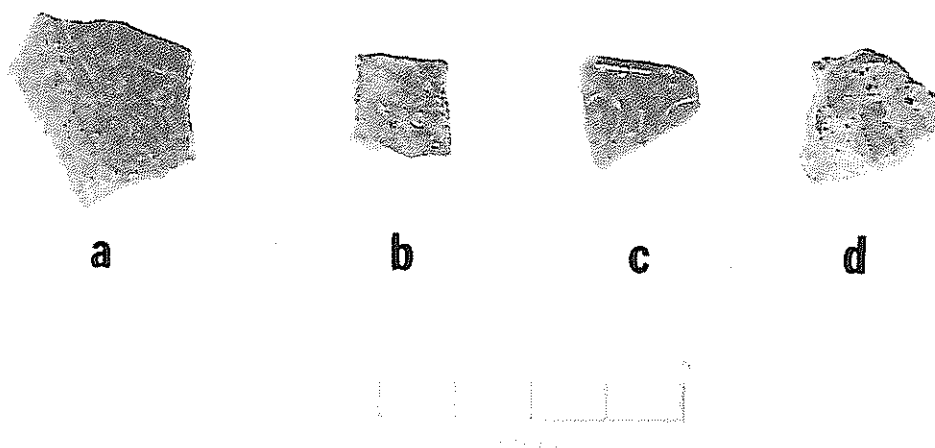


Figure 16. Moundville Engraved (a-c. *var. Hemphill*, d. *var. Middleton*).

Moundville Engraved, *var. Middleton* (Figure 16d)

Moundville Engraved, *var. Middleton* is a new variety of Moundville Engraved not previously described in Steponaitis' (1983) classification. The sorting criteria are very similar to D'Olive Engraved, a type associated with Pensacola Mississippian culture in South Alabama. D'Olive Engraved is characterized by fine-line engraving or very narrow dry-paste incisions occurring on the interior rim of shallow bowls and plates (Fuller 1994:7). Previously, sherds of this type were treated as trade items from the Pensacola area and classified as D'Olive Engraved. However, after comparisons between collections (Knight, personal communication, 1996), it was determined that the Moundville sherds represent a local equivalent of D'Olive Engraved. At Moundville, this type occurs on a paste equivalent to Bell Plain, *var. Hale*, exclusively on plates. The design consists of a series of line-filled semi-circles engraved along the interior rim of the vessel. Only one sherd of Moundville Engraved, *var. Middleton* was identified from Mound M although several have been recovered from other contexts at Moundville. D'Olive Engraved dates to the early to middle Mississippi period (Fuller 1994:7). Moundville Engraved, *var. Middleton* is believed to date primarily to the Moundville II phase (Knight, personal communication, 1996).

Moundville Engraved, *var. Stewart* (Figure 17a)

Only one sherd of Moundville Engraved, *var. Stewart* was identified. This variety consists of a series of oblique parallel lines forming either chevrons or line-filled triangles (Steponaitis 1983:320). The one specimen from Mound M consists of

chevrons engraved on the inside rim of a flaring rim bowl. Steponaitis (1983:320) dates this variety to Moundville I.

Moundville Engraved, *var. Tuscaloosa* (Figure 17b-d)

Three sherds were identified as Moundville Engraved, *var. Tuscaloosa*. The sorting criteria for this variety include designs described by Steponaitis (1983:316, 319) as *vars. Englewood* and *Northport*. Each of these varieties are defined by curvilinear scrolls running either horizontally around or vertically down the vessel. Steponaitis' classification of the three varieties is based on distinctions in the pattern of scrolls found on complete vessels. However, these distinctions are not readily identifiable on sherds. Therefore, this analysis combines all three of these varieties into

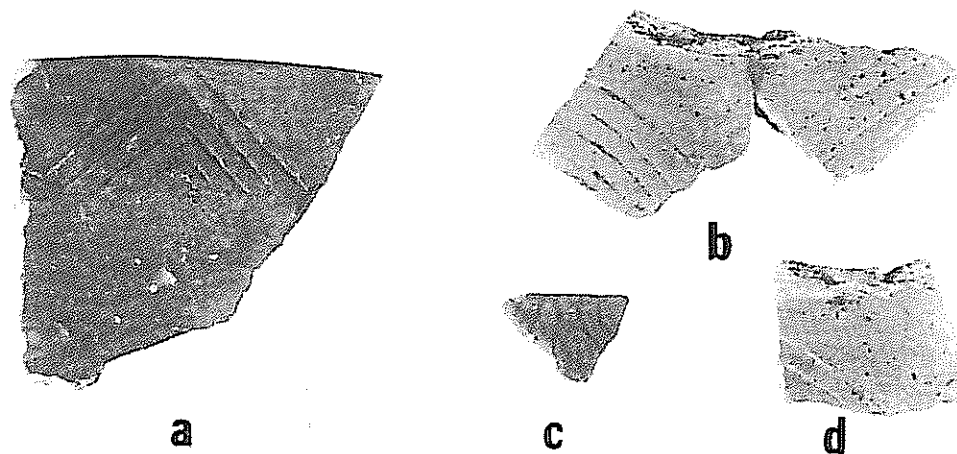


Figure 17. Moundville Engraved (a. *var. Stewart*; b-d. *var. Tuscaloosa*).

the classification of Moundville Engraved, *var. Tuscaloosa*. Two of the Mound M sherds show horizontal scrolls encircling the vessel while one shows vertical scrolls. Sherds of this variety date from late Moundville I through the Moundville III phase (Steponaitis 1983:316, 319, 322).

Moundville Incised

One hundred and sixty-nine sherds were identified as varieties of Moundville Incised. These sherds are decorated on a paste consistent with Mississippi Plain, *var. Warrior*. The designs are extended in this analysis from those defined by Steponaitis (1983:323) to include all coarse shell-tempered vessels with wet-paste incisions located around a vessel's upper portion (Steponaitis 1983:323). Four local varieties of Moundville Incised are defined based on the incised design. Fifty-seven sherds were identified as Moundville Incised, *var. unspecified*. Most of these sherds represent unidentifiable fragments presumably belonging to one of the four defined varieties of Moundville Incised. Three sherds have designs that do not fit into one of the defined varieties (Figure 21d-f). The design on these sherds consists of incised rays extending below rather than above a series of arches.

Moundville Incised, *var. Carrollton* (Figure 18)

Eight sherds of this type were recovered. This variety is defined by a series of arches circling the upper portion of a vessel without additional punctations or incisions (Steponaitis 1983:324). The arches from this collection were made up of either two or

three parallel lines. Steponaitis (1983:324) dates this variety to the Moundville I and early Moundville II phases with a possibility of continuance into late Moundville II.

Moundville Incised, *var. Moundville* (Figure 19)

Ninety-three Moundville Incised, *var. Moundville* sherds were recovered at Mound M. This variety is defined by a series of short incisions radiating upward from a single arch. Steponaitis (1983:325) identifies a temporal aspect to the implementation of this design. Early representations tend to show the short incised lines, or rays, as narrow, closely spaced, and relatively long. Later designs depict rays which are broad, more widely spaced, and relatively short. The collection from Mound M includes sherds with both of these design distinctions. Also evident in this collection are several cases in which the vessel wall beneath the incised arch is pushed out to create a slight protrusion. The chronological position of this variety is Moundville I to early Moundville II (Steponaitis 1983:325).

Moundville Incised, *var. Oliver* (Figure 20)

Moundville Incised, *var. Oliver* is a new variety of Moundville Incised not included in Steponaitis' (1983) classification. Sherds that are classified as *var. Oliver* in this study have been previously classified as varieties of Barton Incised (Scarry 1995; Welch 1994; Steponaitis 1983). Phillips (1970) describes Barton Incised for the Lower Mississippi Valley as exhibiting a variety of rectilinear designs incised on the upper portion of jars. For the Moundville area, Steponaitis (1983) notes that Barton

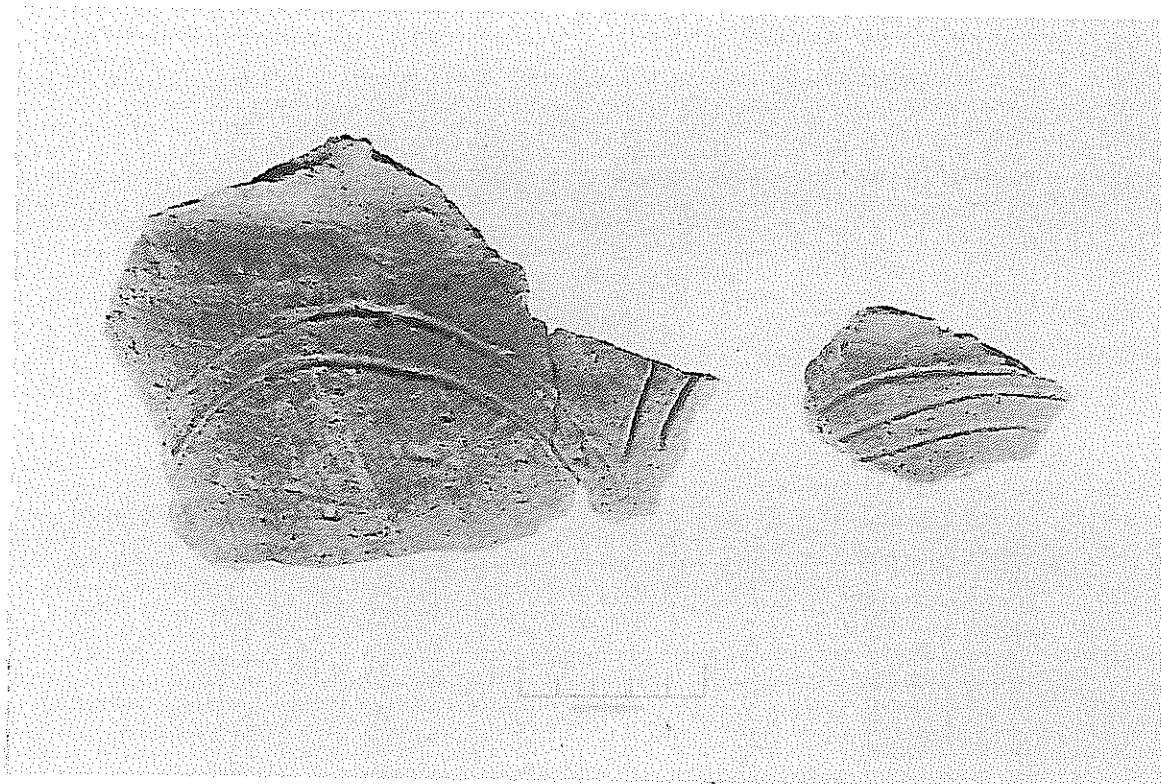


Figure 18. Moundville Incised, *var. Carrollton*.

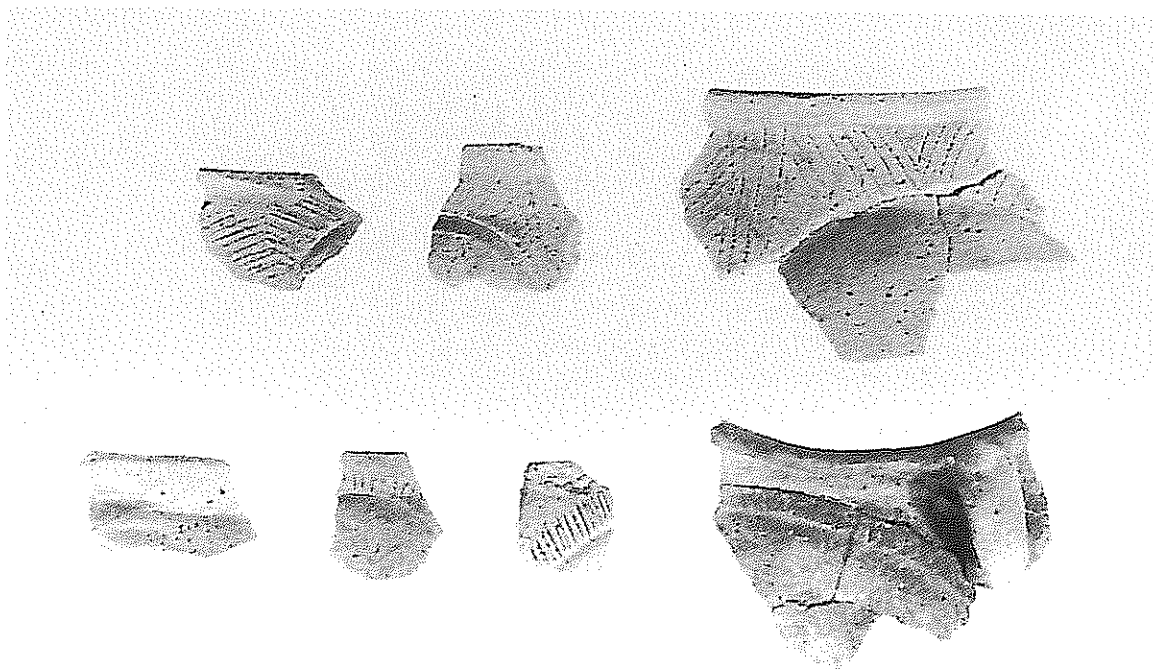


Figure 19. Moundville Incised, *var. Moundville*.

Incised consists of multiple parallel lines forming rectilinear designs incised in a wet paste on unburnished, shell-tempered vessels. Like Barton Incised, the design of Moundville Incised, *var. Oliver* consists of multiple parallel lines forming simple rectilinear patterns on the upper portion of unburnished vessels. The design on the majority of Moundville Incised, *var. Oliver* sherds from Mound M consists of either line-filled triangles or lines forming a diamond shape.

The basis for establishing a new variety of Moundville Incised, distinguished from Barton Incised is largely chronological. Most varieties of Barton Incised date relatively late in the Moundville chronology. However, sherds previously classified as varieties of Barton Incised have been found in Moundville I phase contexts (Welch 1994; Scarry 1995). It is likely that Moundville Incised, *var. Oliver* is different from and not a product of stylistic influence from Barton Incised as found in the Lower Mississippi Valley and as originally defined there. Moundville Incised, *var. Oliver* is believed to date to the Moundville I phase (Knight, personal communication, 1996).

Moundville Incised, *var. Snows Bend* (Figure 21a-c)

Only three sherds of Moundville Incised, *var. Snows Bend* were recovered. The design is composed of either one or more incised lines embellished with punctations (Steponaitis 1983:325). Two of the Mound M sherds exhibit small round punctations over the incised arch. The other sherd shows punctations which are more akin to short, broad incisions. These sherds date to the Moundville I and early Moundville II phases (Steponaitis 1983:325).

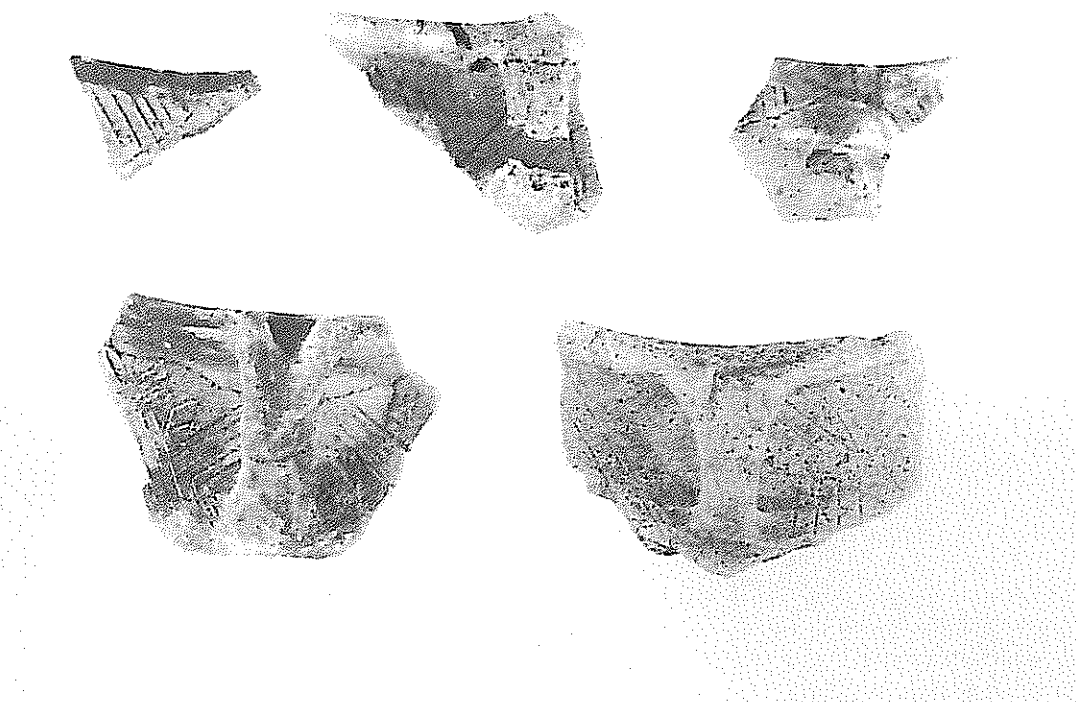


Figure 20. Moundville Incised, *var. Oliver*.

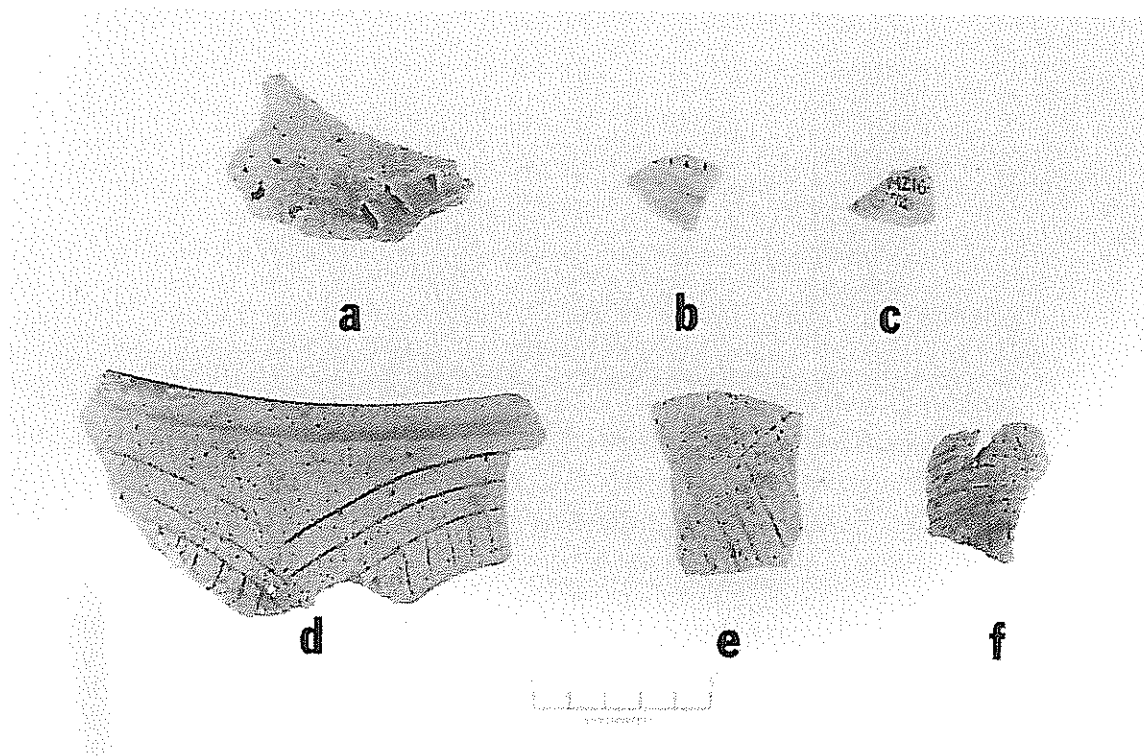


Figure 21. Moundville Incised (a-c. *var. Snows Bend*; d-f. *var. unspecified*).

Mulberry Creek Cord-Marked, *var. Aliceville* (Figure 6b)

One sherd of this type was recovered. Following Jenkins (1981:99-100), this variety is grog-tempered with less than 5 percent sand inclusions. Steponaitis (1983:326) dates this type to the West Jefferson phase.

Non-local Ceramic Types

Barton Incised, *var. Barton* (Figure 22a)

One sherd of Barton Incised, *var. Barton* was identified. The temper is coarse shell and the design consists of cross-hatched lines incised in a wet paste. Phillips (1970:44-45) defines Barton Incised for the Lower Mississippi Valley, dating this variety simply to the Mississippi period.

Carter Engraved, *var. unspecified* (Figure 22b-d)

Three sherds of this type were identified. Following Phillips (1970:103) and Williams and Brain (1983:136) for the Lower Mississippi Valley, these sherds are grog-tempered and engraved with curvilinear and rectilinear patterns. Phillips (1970:103) dates this type to the Mayersville phase, A.D. 1200-1400.

Coles Creek Incised, *var. unspecified* (Figure 23a)

One sherd of Coles Creek Incised, *var. unspecified* was recovered. The design consists of a row of punctations just below an incised line parallel to the lip. Due to the sherd's small size and the lack of a rim, a precise classification is not possible.

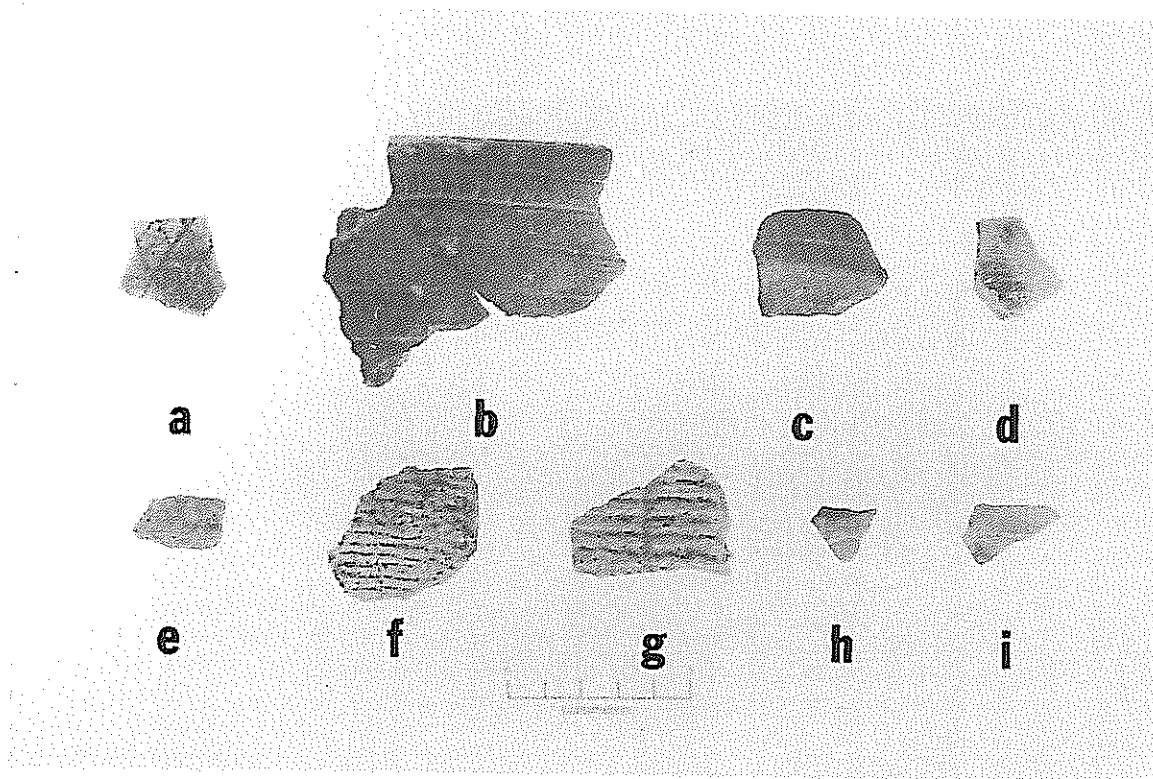


Figure 22. Nonlocal Ceramics from Mound M (a. Barton Incised, *var. Barton*; b-d. Carter Engraved, *var. unspecified*; e. French Fork Incised, *var. unspecified*; f-g. Langston Fabric Impressed, *var. unspecified*; h-i. L'Eau Noire Incised, *var. unspecified*).

However, the sherd most likely represents a specimen of Coles Creek Incised, *var. Hardy* dating to the Crippen Point phase, A.D. 1000-1200 (Phillips 1970:73-74; Williams and Brain 1983:151).

French Fork Incised, *var. unspecified* (Figure 22e)

Only one sherd of French Fork Incised was recovered. Following Phillips (1970:83), the sherd is grog-tempered and exhibits several closely-spaced punctations

among curvilinear incisions. This type dates to the Baytown and Coles Creek periods in the Lower Mississippi Valley, respectively dating from A.D. 300-700 and A.D. 700-1000 (Phillips 1970:83-87).

Langston Fabric Impressed, *var. unspecified* (Figure 22f,g)

Two sherds of this type were identified at Mound M. The surface of these salt pan wares are impressed with twined fabric and date to the early Mississippi period (Fuller 1994:9; Hemilich 1952:26; Wimberly 1960:185-187). This type is listed under the non-local wares since it is commonly found in south Alabama and in the Tennessee Valley and is rare at Moundville although this type could also be locally made.

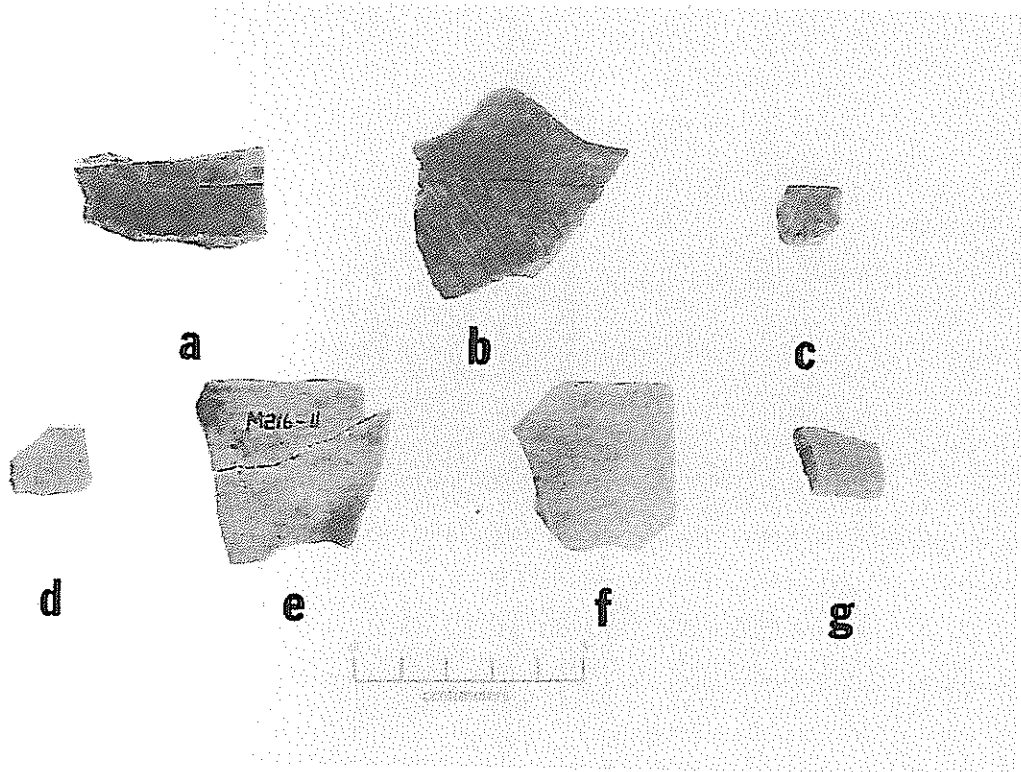


Figure 23. Non-local and Residual Ceramics (a. Coles Creek Incised, *var. unspecified*; b-c. Mazique Incised, *var. unspecified*; d. Residual Fine Grog Tempered Engraved; e-f. Residual Fine Grog Tempered Burnished; g. Residual Fine Grog Tempered Red Filmed).

L'Eau Noire Incised, *var. unspecified* (Figure 22h,i)

Two sherds were identified as L'Eau Noire Incised, *var. unspecified*. Both sherds are tempered with fine grog and shell and are incised with fine lines. The design on both sherds shows parallel lines arranged in step figures with excisions at the corners. Phillips (1970:100-104) dates varieties of L'eau Noire Incised to the Mississippi period for the Lower Mississippi Valley. Williams and Brain (1983:170-171) define only L'Eau Noire, *var. L'Eau Noire* for the Lower Yazoo Basin in Mississippi.

Mazique Incised, *var. unspecified* (Figure 23b,c)

Two grog tempered sherds were classified as Mazique Incised, *var. unspecified*. One is a very small rim sherd exhibiting closely-spaced incised lines projecting downward from the rim. The second sherd is a bit larger with line-filled triangles incised below a scalloped rim. On both sherds, the incisions were made on a wet paste. Most varieties of Mazique Incised date to the Early and Late Coles Creek periods, A.D. 700-1000, and to the Mississippi period (Phillips 1970:129-130; Williams and Brain 1983:184-186).

Residual Ceramic Types

Quite a few residual types were identified in the collections from Mound M, representing a total of 197 sherds. These types characterize sherds with paste characteristics that do not fit into the categories of Mississippi Plain, *var. Warrior* or

Bell Plain, *var. Hale*; nor are they recognizable non-local types. Table 5 lists the residual types and the number of sherds identified in each category. Most of the sherds placed in residual types show either no decoration or not enough of a design to warrant individual description (Figure 23e-g). The majority of the designs are composed of either a series of parallel lines or cross-hatches. A few sherds with fine grog and shell temper are a little more unusual and are described below.

Residual Fine Grog and Shell Tempered Engraved (Figure 24)

Thirteen sherds were classified in this category; however, only four merit individual descriptions. The first one is a rim sherd with four parallel lines just below the lip. Underneath the last parallel line, several more lines begin forming an unidentified rectilinear design. The remaining three sherds are similar in that they all show some type of curvilinear design. Unfortunately, too little of the designs are present on all of these sherds for more precise characterization.

Interpretation of Chronology

The interpretation of Mound M's construction chronology is based on ceramic evidence as well as documentation concerning primary refuse and secondary fill from the mound. As discussed in Chapter 2, only one primary refuse deposit, termed the "gray zone," was identified at Mound M. I believe this deposit lies on the outer flank of the earliest construction stage. Ceramic artifacts provide dates for this first mound

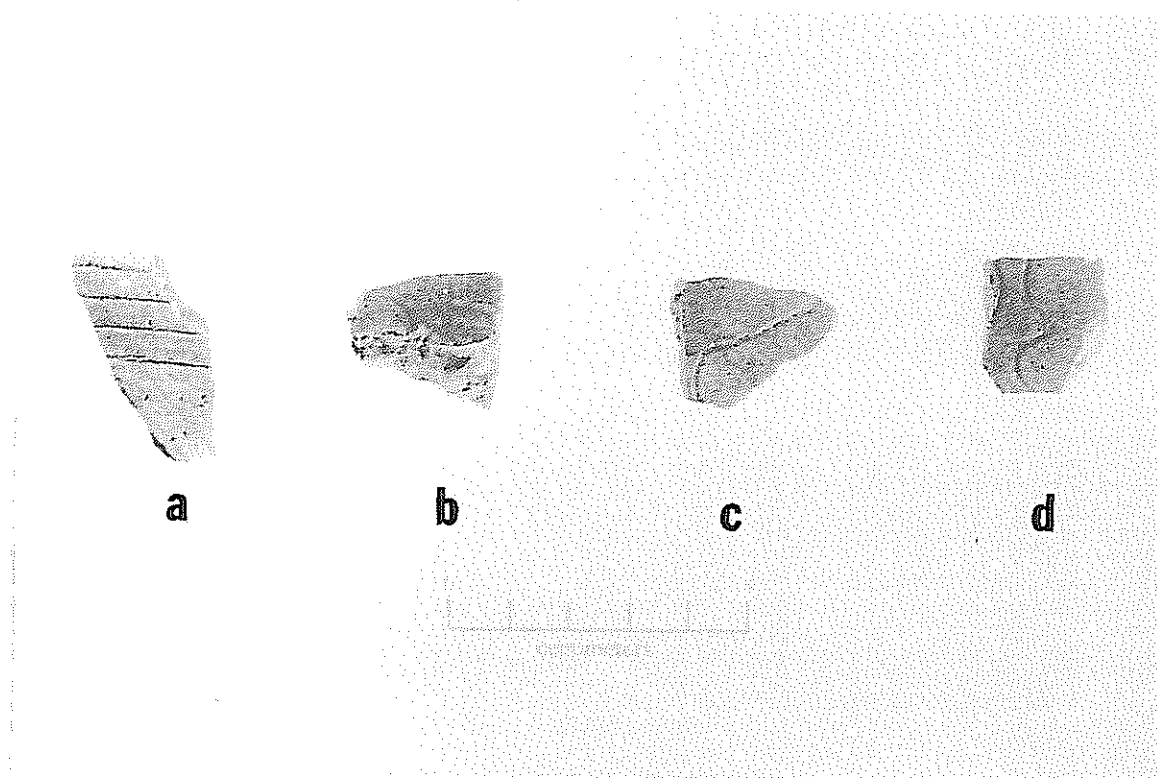


Figure 24. Residual Fine Grog and Shell Tempered Engraved.

stage as well as the date of a second construction stage overlying the gray zone. The majority of datable sherds and modes recovered from Mound M date to the Moundville I or early Moundville II phases. Ceramic types occurring exclusively in Moundville I context include Moundville Engraved, *vars. Elliots Creek* and *Stewart*, Moundville Incised, *var. Oliver*, and Carthage Incised, *var. Summerville*. Types dating to Moundville I and early Moundville II include Moundville Incised, *vars. Carrollton* and *Moundville*. Moundville Incised, *var. Snows Bend* occurs in Moundville I and Moundville II contexts, although it is much more prominent in Moundville II (Steponaitis 1983:325). Two varieties, Carthage Incised, *var. Akron*

and Moundville Engraved, *var. Havana*, are found from Moundville I through early Moundville III. The preceding type-varieties make-up 94 percent of the total number of local, datable sherds. The remaining 6 percent of local sherds are comprised of types dating to the Moundville II and Moundville III phases. Moundville Engraved, *vars. Hemphill, Middleton, and Tuscaloosa* are all found in Moundville II and Moundville III. Carthage Incised, *var. Fosters* is found in the Moundville III and Alabama River phases.

Diagnostic evidence for Mound M's construction chronology is also found in examining ceramic modes. The majority of datable modes occur in the Moundville I phase. These modes include folded rims, folded-flattened rims, hemagraving, and scalloped rims (Steponaitis 1983:100-102). The only datable mode not occurring in the Moundville I phase is the beaded rim which is found in late Moundville II and Moundville III phase contexts (Steponaitis 1983:111, 118). Modes which occur on Mound M pottery, but which cannot be dated to a specific Moundville phase are red and white filming and horizontal lugs.

To interpret the construction chronology of Mound M, it is essential to discuss the location of the diagnostic sherds within the mound. Most of the diagnostic sherds date to the Moundville I or early Moundville II phases and these occur throughout all of the provenience units. More importantly, the primary deposit or "gray zone" overlying the first construction stage contains diagnostic ceramics that date exclusively to the Moundville I and/or early Moundville II phases. The types represented are Moundville Engraved, *var. Elliotts Creek* and Moundville Incised, *vars. Moundville*

and *Oliver*. The diagnostic modes found in this deposit are folded-flattened rims, scalloped rims, and hemagraving, all occurring in the Moundville I phase. No other datable types or modes are present in this deposit. Therefore, this deposit, as well as the first construction stage beneath it, dates no later than the early part of the Moundville II phase.

But what of the few sherds that occur in the late Moundville II and Moundville III phases? The one type believed to date exclusively to the Moundville II phase is Moundville Engraved, *var. Middleton*. Types occurring in the Moundville II and Moundville III phases are Moundville Engraved, *vars. Hemphill* and *Tuscaloosa*. The three Moundville Engraved, *var. Hemphill* and one Moundville Engraved, *var. Middleton* sherds were all found in disturbed context and, thus, do not necessarily represent occupational debris from the mound. Of the three Moundville Engraved, *var. Tuscaloosa* sherds, one was found at the base of the mound in what is now identified as erosional fill; however, two were recovered from midway up the mound slope. More precisely, these two sherds were found in mound fill above the primary deposit termed the "gray zone." Also, three beaded rims, occurring in the Moundville II and Moundville III phases, were recovered from Mound M. Although two of these rims were found in mixed contexts, one was found in level three of a unit midway up the mound's slope. This evidence suggests that Mound M was primarily built during the Moundville I and early Moundville II phases with a second addition during the Moundville II phase.

A final consideration is the location and implication of the few sherds dating exclusively to the Moundville III phase, represented by two Carthage Incised, *var. Fosters* sherds. One of these sherds was located in the area of the historic drainage ditch. The other Moundville Engraved, *var. Fosters* sherd was located in the erosional fill near the mound's base. Therefore, the presence of the two Moundville Engraved, *var. Fosters* sherds does not necessarily indicate that Mound M was occupied or used during the Moundville III phase. According to this evidence, Mound M appears to have been built in two construction stages. The first stage was quite large and was constructed either during Moundville I or conceivably as late as the early Moundville II phase. The second stage was much smaller and was added during the Moundville II phase. This mound is believed to have been abandoned prior to the Moundville III phase, as the few sherds indicative of this phase come from superficial contexts not necessarily related to mound construction or use.

Non-local ceramics, totaling twelve sherds, are only sparsely represented at Mound M. Seven different sherd types are identified, most associated with the Lower Mississippi Valley. The French Fork Incised and Mazique Incised sherds suggest contact during the Woodland phase. The Coles Creek Incised, Carter Engraved, Langston Fabric Impressed, and L'Eau Noire Incised sherds suggest contact during the early Moundville I phase. It is interesting to note that aside from the Langston Fabric Impressed sherd, all the non-local wares reflect contact with the Lower Mississippi Valley. The Langston Fabric Impressed sherd suggests contact with either north or south Alabama.

Lithic Artifacts

Lithic artifacts recovered from Mound M represent a much smaller assemblage than the ceramic artifacts. The assemblage consists of 6,034 grams of unmodified stone, 24 specimens of modified stone, and 80 specimens of chipped debitage and stone tools. The lithic artifacts were separated into categories of unmodified stone, modified stone, and flaked stone (Appendix A). All unmodified stone was weighed and several items were counted as well. Both the flaked stone and ground stone specimens were counted, but not weighed.

Lithic material from Mound M includes both local and non-local materials. The non-local materials and their implications are discussed following descriptions of the lithic assemblage. Functional considerations of the Mound M lithic assemblage, through comparisons with materials from Mound Q, are discussed in Chapter 4.

Local Unmodified Stone

Local unmodified stone pertains to raw materials available within a 30 mile radius of Moundville.

Brown Sandstone. Brown sandstone pertains to blocky pieces of sedimentary rock found in the Pottsville and Hartselle formations. The closest source of this material to Moundville is Tuscaloosa. A total of 2,471 grams of unmodified brown sandstone was recovered from Mound M.

Tabular Hematitic/Limonitic Sandstone. Tabular sandstone refers to thin, elongate pieces of local sandstone containing nodules of hematite and limonite. At Mound M, 1,822 grams of tabular sandstone were recovered.

Hematitic/Limonitic Concretions. Hematitic/limonitic concretions are small, irregular concentrations of minerals, mostly iron, forming rounded balls. The Mound M excavations produced 532 grams of concretions.

Hematitic Sandstone Conglomerate. Like sandstone concretions, sandstone conglomerates are irregular concentrations of minerals, mostly iron, with the inclusion of small rounded pebbles. Only 7 grams of conglomerate material were recovered from Mound M.

Pebbles. Materials identified as pebbles include all small, stream rounded, unmodified rocks of quartz, chert, and limestone. Mound M produced 511 grams of pebbles.

Limestone. Limestone, the general term used for bedded sedimentary rocks formed from calcium carbonate, can be found locally in Cretaceous outcrops. Only one piece of limestone (2 grams) was recovered from Mound M.

Limonite. Limonite, often used for pigments, is a soft, yellow material composed of a mixture of various hydrated iron oxides. One piece of limonite (2 grams) was recovered from Mound M.

Hematite. Hematite, which was also used for pigments, is a soft, dark red material containing iron oxide. Hematite is one of the most widely distributed minerals, found in beds of sedimentary and metamorphic rocks. Seventeen pieces of

hematite (137 grams) were recovered from Mound M. Considerably more red pigment was used than yellow pigment at Mound M, a pattern also noted by Scarry (1995:80) in excavations near the bank of the Black Warrior River at Moundville.

Coal. Coal is formed from metamorphic processes that turn plant material into rock. A local source for coal is found north of the fall-line at Tuscaloosa. The Mound M excavations produced two pieces (7 grams) of coal.

Claystone. Claystones are sedimentary rocks consisting of extremely minute mineral particles. One piece (7 grams) of claystone was recovered from Mound M.

Non-local Unmodified Stone

Greenstone. Greenstone is a fine-grained metamorphic schist found in east-central Alabama (Jones 1939). At Moundville, artifacts most commonly made from greenstone are celts and discoidals. The three pieces (13 grams) of unmodified greenstone recovered from Mound M are classified as greenstone shatter (Figure 25e-g). These pieces are most likely fragments from greenstone tools.

Muscovite. Muscovite, more commonly known as mica, is a silicate mineral found in igneous and metamorphic rocks. Mica tends to be fragile since it is often found in thin, paper-like, sheets. The South Appalachian Mountains of northeast Alabama are the closest source of mica to Moundville (Jones 1926:202-203). Only one piece (0.6 grams) of mica was recovered from Mound M; however, it is likely that additional small mica fragments were simply not recovered by the excavators.

Slate. Slate is a very fine-grained metamorphic rock derived from shale. The Mound M excavations produced one piece of slate (53 grams).

Modified Stone

Ground Stone (Figure 26). Materials classified as ground stone are specimens with deliberately smoothed surfaces. Table 6 lists the ground stone artifacts recovered from Mound M. The raw material for the majority of these specimens is sandstone. Three of the ground specimens may represent sandstone fragments in the early stages of paint palette production (Figure 26a-c). The three ground specimens that are not made from sandstone are made from greenstone, quartzite, and hematite.

Celt Fragment (Figure 25a-c). The term celt is used to describe wedge-shaped, ground stone tools with biconvex bits. Three celt fragments were recovered from Mound M. Each of these specimens is from the bit end of the tool and is made from greenstone.

Table 6. Ground Stone Artifacts from Mound M Excavations.

Artifact Type	Count
Celt Fragment	3
Discoidal	2
Grinding/Nutting Stone	1
Ground Greenstone	1
Ground Hematite	3
Ground Quartzite	1
Ground Sandstone	9
Hammerstone	1
Polished Greenstone Chip	4
Total	25

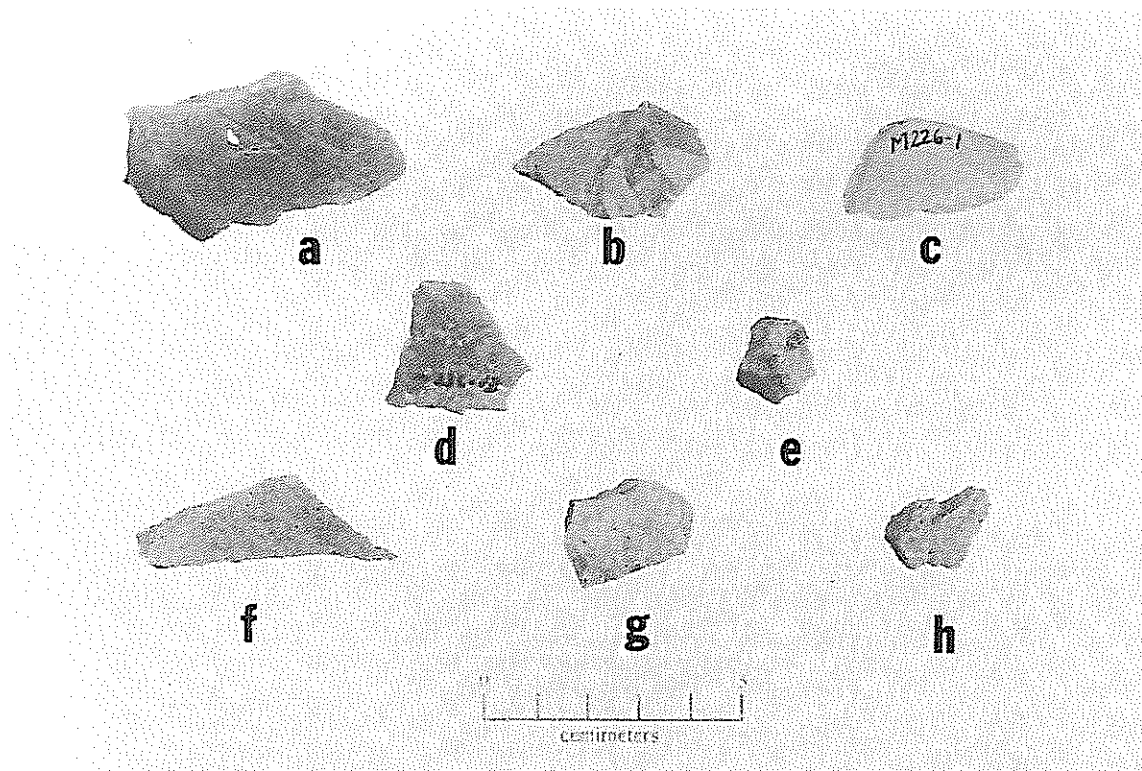


Figure 25. Greenstone Artifacts from Mound M Excavations (a-c. celt fragments; d-e. polished greenstone chips; f-h. greenstone shatter).

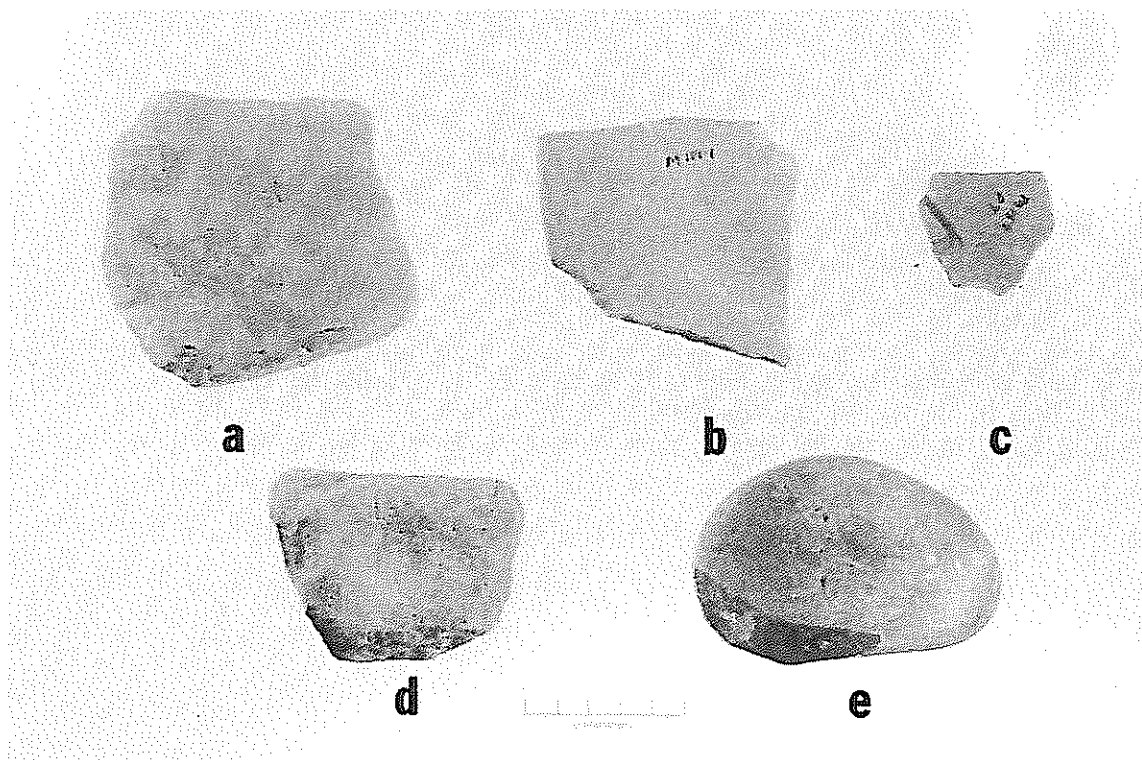


Figure 26. Ground Stone from Mound M Excavations (a-c. possible paint palette fragments; d. grinding/nutting stone; e. hammerstone).

Grinding/Nutting Stone (Figure 26d). The one grinding/nutting stone recovered from Mound M is a piece of brown sandstone with a ground, circular concavity.

Hammerstone (Figure 26e). Hammerstones are fist-sized pebbles with evidence of battering on one or more edges. The Mound M excavations produced one hammerstone made from a quartzite pebble.

Polished Greenstone Chips (Figure 25d-e). Polished greenstone chips are small pieces of greenstone that exhibit smoothed surfaces with a glossy luster. The four pieces recovered from Mound M probably came from celts.

Stone Discoidal (Figure 27). Stone discoidals are small, flat, circular pieces of ground stone, often described as gaming pieces. Two stone discoidals were recovered from Mound M, one made from tabular sandstone. Unfortunately, one specimen is known only from a drawing and description of the discoidal in a field student's notebook. Although the description does not include the type of stone used to make the discoidal, the drawing indicates that the artifact is 5.5 cm in diameter with a grooved hole in the center.

Flaked Stone

Excavations on Mound M produced a variety of flaked debitage and tools from local and non-local sources. Relative to the ceramic assemblage, very modest quantities of flaked materials were present, totaling eighty specimens. A wide range of



Figure 27. Stone Discoidal from Mound M Excavations.

flaking debris was present including cores, preforms, various flakes, and shatter. Only a few retouched flakes and finished tools were found. The flaked stone from Mound M is listed in Table 7.

Local Material Used for Flaked Stone

Ferruginous Sandstone. Ferruginous sandstone is a coarse-grained, cemented sedimentary rock consisting of grains of iron oxide. Sandstone is not usually employed for flaking purposes and only one specimen, a flake, was found.

Tuscaloosa Gravel Chert. Tuscaloosa gravel chert is coarse-grained and yellowish-brown in color. This chert is found locally in beds of Tuscaloosa gravel

along the Black Warrior River. Often, Tuscaloosa gravel chert was heat-treated to improve its flaking qualities, resulting in a change in color to red or dark red (Scarry 1995:66). The Mound M assemblage contains thirty-seven specimens from Tuscaloosa gravel chert, comprising 46 percent of the flaked stone.

Table 7. Flaked Stone Artifacts from Mound M Excavations.

Artifact Type	Count		
	Local	Non-local	Unidentified
Tested Pebble	5	0	0
Core	0	1	0
Shatter	3	4	0
Decortication Flake	13	4	1
Core Reduction Flake	0	3	0
Retouched Flake	1	1	0
Blake-like Flake	0	7	0
Other Flake	7	12	1
Preform I	1	0	0
Preform II	4	0	0
Mill Creek Biface	0	1	0
Perforator/Microdrill	1	2	0
Unifacial Endscraper	0	1	0
Elora Point	0	1	0
Madison Point	3	1	0
Mud Creek Point	1	0	0
Unidentified Point	0	1	0
Total	39	39	2

Quartz. Quartz is a widely distributed silicate mineral found in sedimentary, metamorphic, and igneous rocks. Only one quartz specimen, a flake, was recovered.

Non-local Material Used for Flaked Stone

Bangor Chert. Bangor chert is a dark blue to dark gray chert found in outcrops in northern Alabama. Two specimens of Bangor chert were identified, one from fossiliferous Bangor and one from blue-green Bangor. Fossiliferous Bangor is multi-colored and coarse-grained with a speckled appearance. Blue-green Bangor is fine-grained with a smooth texture appearance.

Fort Payne Chert. Fort Payne chert is a blue-gray, fine-grained chert found in the Tennessee Valley of northern Alabama. The Mound M excavations produced 32 pieces of blue-gray Fort Payne chert, accounting for 40 percent of the flaked assemblage.

Coastal Plain Agate. Coastal Plain agate is a delicately banded chalcedony occurring in beds on the Alabama Coastal Plain. Only one specimen of Coastal Plain agate was recovered from Mound M.

Mill Creek Chert. Mill Creek chert is a buff to tan colored chert found in the Shawnee Hills in southwestern Illinois. Trade for Mill Creek chert is evident in the Moundville chiefdom, primarily in the form of hoe fragments. Two specimens from Mill Creek chert, a blade-like flake and a biface fragment, were recovered from Mound M.

Tallahatta Quartzite. Tallahatta quartzite, coarse-grained and whitish-tan in color, is found in south Alabama. Two specimens were recovered from Mound M, a core reduction flake and an Elora Point which normally dates to the Middle and Late Archaic (Cambron and Hulse 1975:47).

Flaked Stone Artifacts

Tested Pebbles (Figure 28). Tested pebbles are river cobbles with flakes removed, presumably to determine if the specimen was a suitable core. Five tested pebbles were recovered from Mound M, all of Tuscaloosa gravel chert.

Cores. Cores are amorphous chunks of rock with flake scars from the removal of flakes for tool production. One core was recovered from Mound M, of blue-gray Fort Payne chert.

Shatter. Shatter fragments are amorphous, angular pieces of stone that lack striking platforms and other flake characteristics. Eight pieces of shatter were recovered from Mound M from local and non-local materials.

Decortication Flakes. (Figure 29f-g) Decortication flakes are flakes with cortex on their dorsal surface, removed in the initial stage of the flaking process. The Mound M excavations produced eighteen decortication flakes from local and non-local materials.

Core Reduction Flakes (Figure 29c-e). Core reduction flakes are large flakes removed from cores to provide access to or form new striking platforms. Three core reduction flakes were recovered from Mound M, all from non-local stone.

Retouched Flakes (Figure 30a-b). Retouched flakes are flakes with marginal retouch or irregularly chipped edges which have been utilized in some unknown manner. Two retouched flakes were recovered from Mound M, one from Tuscaloosa gravel chert and one from Fort Payne chert.

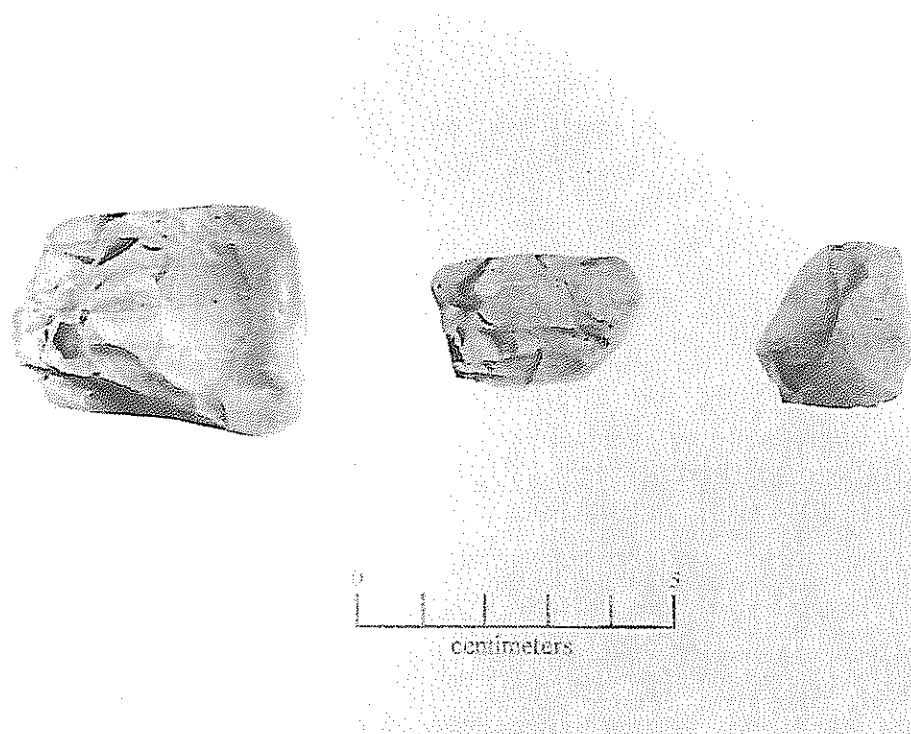


Figure 28. Tested Pebbles from Mound M Excavations.

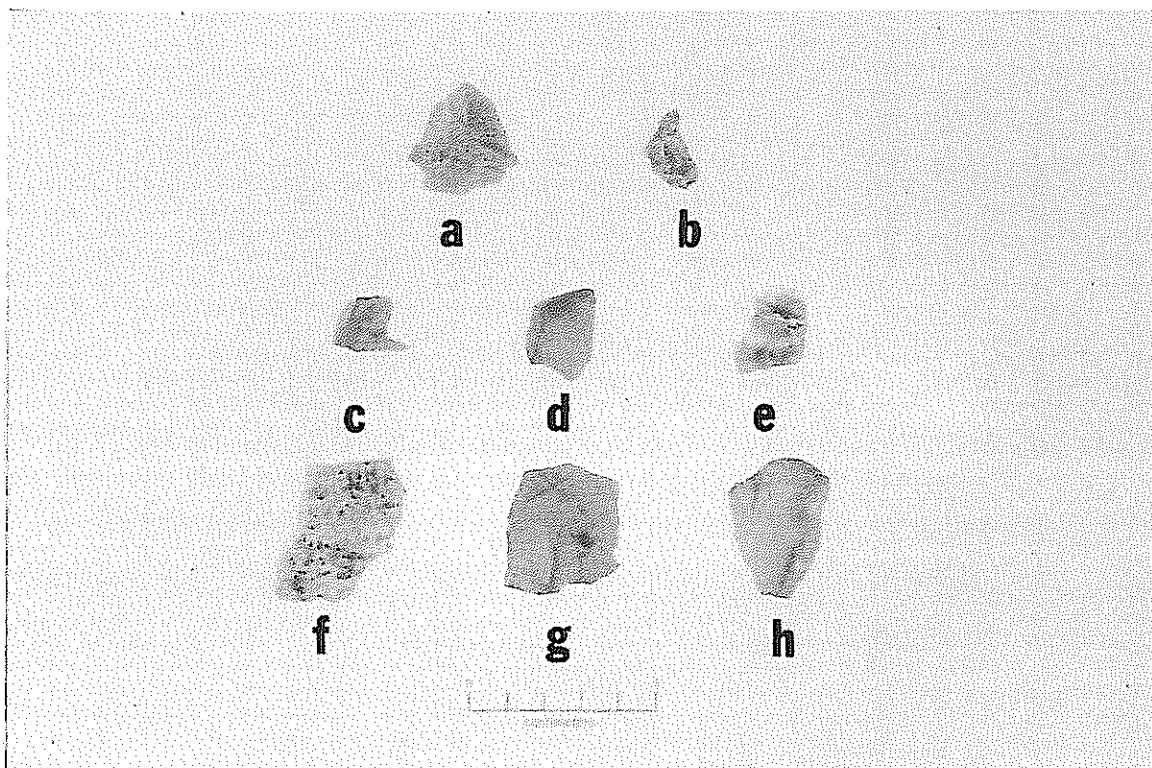


Figure 29. Core Reduction, Decortication, and Other Flakes from Mound M Excavations (a-b. other flakes; c-e. core reduction flakes; f-h. decortication flakes).

Blade-like Flakes (Figure 30c-e). Blade-like flakes have lengths which are at least twice their maximum widths. Seven blade-like flakes were recovered from Mound M, all from non-local material. All but one of these specimens are from Fort Payne chert.

Other Flakes (Figure 29a,b). Debitage classified as other flakes include broken flakes and flakes which do not fit into any of the above flake types. Twenty flakes recovered from Mound M were classified as other flakes. Over half of these specimens were from Fort Payne chert and one was from an unidentified raw material.

Preform I (Figure 31a). This category includes bifacially chipped specimens with evidence of primary thinning only. These specimens exhibit cortex on one or both sides. The Mound M excavations produced one Preform I, of Tuscaloosa gravel chert.

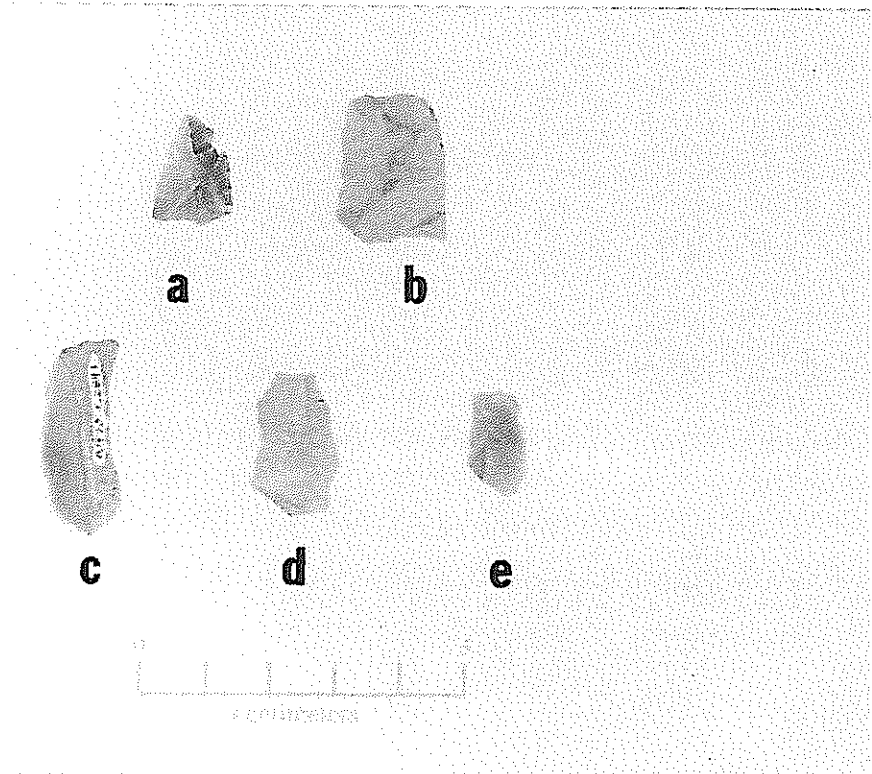


Figure 30. Retouched (a-b) and Blade-like Flakes (c-e) from Mound M Excavations.

Preform II (Figure 31b-d). This category includes bifacially chipped specimens with evidence of secondary thinning, although no pressure flaking is evident. Four specimens from Mound M were classified as Preform IIs, all of Tuscaloosa gravel chert.

Mill Creek Biface Fragment (Figure 32d). A thinned, lanceolate biface made from Mill Creek chert from southern Illinois was recovered from Mound M. Although no other large Mill Creek biface fragments have been found at Moundville, Steponaitis (1992) reports two specimens from 1Tu50. Located about 800 meters northeast of the Moundville Site, 1Tu50 is a single-mound site most likely dating to the early Moundville I phase, A.D. 1050-1150. Steponaitis (1992:7) suggests the bifaces represent fragments of ceremonial weapons. Cobb (1989) reports items from southern Illinois made from Mill Creek chert including hoes, Ramey knives, aborted bifaces, and exotic forms such as maces, spatulate celts, and "swords." Ramey Knives are found throughout the Mississippian cultural sequence in the American Bottom of Illinois (Bareis and Porter 1984; Pauketat 1994).

Microdrill/Perforator (Figure 32a-c). Microdrill/perforators are long bifaces which are narrow and thick in cross-section with blunt distal ends (Faulkner and McCollough 1973:86). Six microdrill/perforators were recovered from Mound M, four of local material and two of non-local material.

Unifacial Endscraper (Figure 32e). This specimen is a fragment of a flake with continuous retouch along a distal working edge. Excavations on Mound M produced only one endscraper made from blue-green Bangor chert.

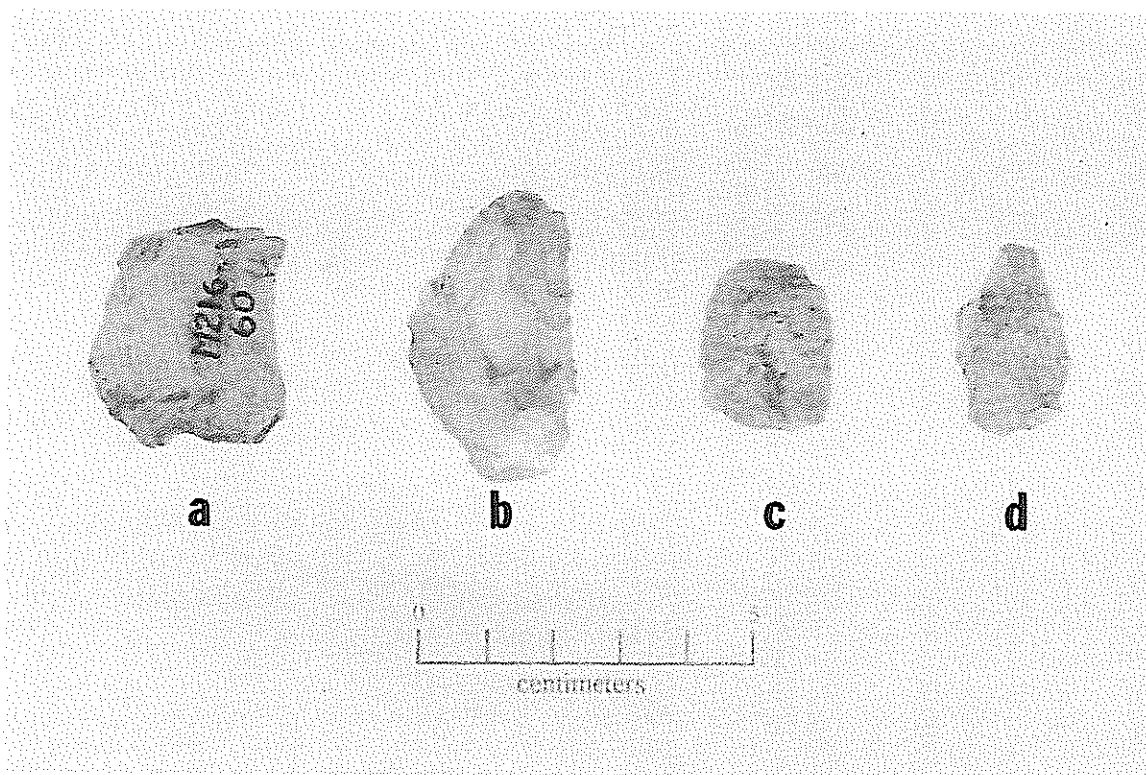


Figure 31. Preform I (a) and Preform II's (b-d) from Mound M Excavations.

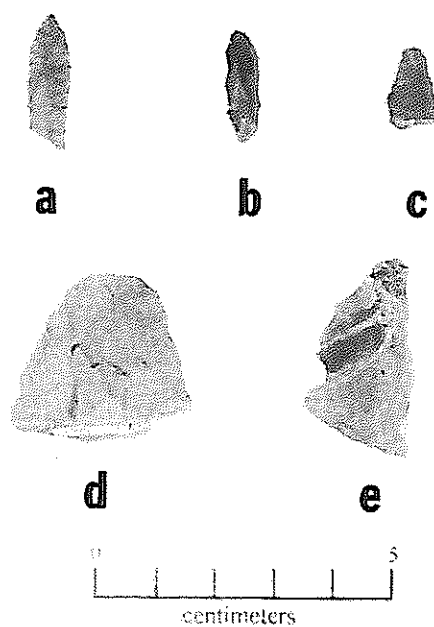


Figure 32. Flaked Tools from Mound M Excavations (a-c. microdrills/perforators; d. Mill Creek chert biface fragment; e. unifacial endscraper).

Projectile Points (Figure 33). Four different types of projectile points were identified from Mound M. These points are classified as Elora, Madison, Mud Creek, and “unidentified.”

One Elora point, made from Tallahatta quartzite, was recovered from Mound M. Elora points are medium to large stemmed points with biconvex cross-sections and straight blades. The base of the Mound M specimen is unfinished, a typical characteristic of Elora points. Elora points date to the Middle to Late Archaic with possible associations in the very early Woodland period (Cambron and Hulse 1975:47).

Madison points are small, thin, triangular points dating from the Woodland through Protohistoric periods. Three of the Madison points from Mound M were made from Tuscaloosa gravel chert, while one was made from Fort Payne chert.

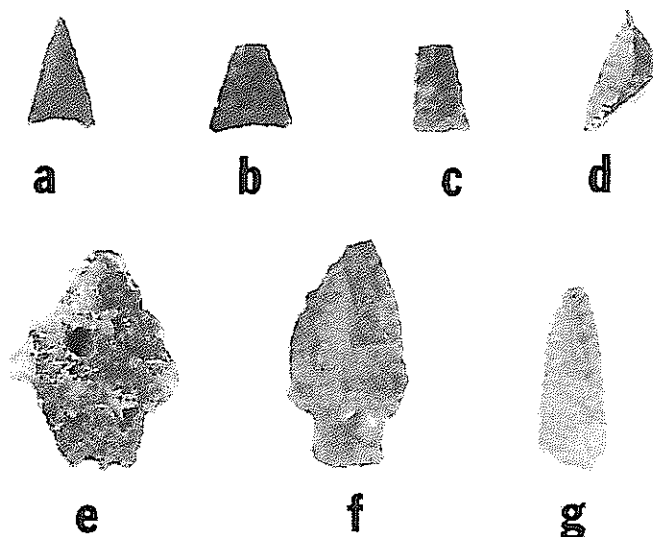


Figure 33. Projectile Points from Mound M Excavations (a-d. Madison Points; e. Elora Point; f. Mud Creek Point; g. unidentified point).

Mud Creek points are medium sized stemmed points with biconvex cross-sections and excurve blades. This point type dates to the Late Archaic, possibly extending into the Woodland period (Cambron and Hulse 1975:94). One Mud Creek point, made from Tuscaloosa gravel chert, was recovered from Mound M.

One unidentified stemmed point was recovered from Mound M. The point is made from blue-gray Fort Payne chert, is biconvex in cross-section, and has a serrated, slightly excurve blade.

Discussion of Non-local Stone

Non-local stone accounts for 49 percent of the Mound M flaked stone and 32 percent of the modified stone. Only four unmodified specimens of non-local stone were identified, three of greenstone and one of mica. All of the modified non-local stone is greenstone, three representing celt fragments and four that are polished greenstone chips. Jones (1939:16) suggests that the source of greenstone was the Hillabee Schist Formation in east-central Alabama. Outcrops of mica are found to the east and northeast of Moundville in the South Appalachian Mountains (Jones 1926:202-3). It is not surprising to find specimens of greenstone and mica from Mound M since these materials are found throughout the Moundville site. Large quantities of greenstone were especially noted in deposits north of Mound R which may have been a locus for manufacture (Welch 1991:165). Also, large quantities of mica were found south of the Conference Building on the bank of the Black Warrior River (Scarry 1995:88).

The non-local flaked stone represents the majority of non-local materials, accounting for 76 percent of all non-local specimen. Eighty-two percent of the non-local flaked specimens are blue-gray Fort Payne chert from northern Alabama. Also from outcrops in northern Alabama are two specimens of Bangor chert. Another source of non-local flaked materials is south Alabama, represented by Tallahatta quartzite and Coastal Plain agate. The only other identified specimens of non-local flaked stone are of Mill Creek chert found in southwestern Illinois. Thus, the overwhelming majority of the non-local flaked assemblage from Mound M is from sources in northern Alabama. These data accord well with data from excavations to the north of Mound R and south of the Conference Building, in which specimens from northern Alabama sources outnumber those from southern Alabama (Welch 1991:162). It is interesting to note, in contrast, that the majority of non-local pottery is associated with the Lower Mississippi Valley rather than northern Alabama. Apparently, the acquisition of non-local stone was not linked to the flow of non-local pottery types.

CHAPTER 5: THE FUNCTION OF MOUND M

One goal of current research at Moundville is to examine mound functions and the nature of activities associated with summit architecture (Knight 1992). This chapter addresses the potential classification of Mound M as a mortuary temple mound. Evidence for this classification is found in a comparison of certain artifacts recovered from Mounds M and Q (Table 8).

Comparison of Stone Artifacts

Markin (1994) recently addressed the issue of mound function for Mound Q, a hypothesized mortuary temple mound at Moundville. Lithic materials were used to examine the relationship between elite stoneworking and mound architecture. Markin's methods in constructing comparative analyses of lithic artifacts from Mound Q and Mound G, a hypothesized elite residential mound, are discussed in Chapter 1 of this thesis. In summary, a comparative index was established to measure the frequencies of certain stone artifacts and craft goods for the Moundville II and Moundville III phases for each mound. The results of the analyses show that Mound Q contained as much as three times the amounts of certain stone materials as found in the same phases of Mound G. These items include chert bladelets, sandstone saws and abraders, greenstone celts, polished greenstone chips, sandstone discoidals, non-local

stone, and pigments. Even though the two mounds generally contained the same types of lithic artifacts, the significant difference in frequencies led Markin (1994:14) to conclude that the two mounds served different functions.

Table 8. Activity Profile of Artifacts from Mounds M and Q.

Component	Mound Q	Mound M
Non-local chert-using activity	X	X
Greenstone celts and chips	X	X
Paint palettes	X	X*
Gaming stones	X	X
Sandstone saws/abraders	X	
Ceremonial weapons	X	X
Manufacture involving drilling	X	X
Long-distance exchange of prestige items	X	X
Use of pigments	X	X
High proportion of nonlocal stone	X	X
High proportion of service to utility ware	X	
Ceramic figurines	X	
Evidence of ceremonial ceramic pots	X	X
Pottery trowels	X	
Human burials	X	
Scattered human remains	X	X

* Three artifacts recovered from Mound M are identified as possible paint palettes.

As a result of recent research (Knight 1992b, Markin 1994), an activity profile of lithic materials can be constructed for Mound Q. With the establishment of the

activity profile, frequencies of stone materials recovered from other mounds at Moundville can be examined to indicate similarities or differences in mound function. Markin (1994) divides the stone artifacts from Mound Q into three classes of materials: primary tool classes, exotic stone, and pigments. Primary tool classes are further divided into chert tools and debitage, sandstone artifacts, greenstone materials, discoidals, and paint palette fragments.

The chert tools and debitage from Mound Q are manufactured from both local and non-local materials; however, the local stone is represented in small numbers. The local stone appears to represent the occasional manufacture of projectile points, one of only a few categories of finished products recovered. The majority of the non-local stone is blue-gray Fort Payne chert found in northern Alabama. Other non-local materials include Bangor chert, Mill Creek chert, and Knox chert. Most of the non-local chert relates to some type of specialized chert-using activity, noted by the presence of cores and blades. Only a few of the blades are retouched into finished tools such as microdrills. Apparently, these non-local blades were used in the manufacture of some type of craft, or nonsubsistence, item.

Other primary tool classes recovered from Mound Q include sandstone saws and abraders, greenstone artifacts, discoidals, and paint palette fragments. The sandstone saws and abraders are believed to have been used in the manufacture of sandstone paint palettes. The greenstone artifacts include celts, adze blades, and polished chips, presumably broken off of celts during use. Discoidals recovered from Mound Q, probably used as gaming pieces, were made from both greenstone and

sandstone. Lastly, several sandstone paint palette fragments were recovered. Webb and DeJarnette (1942:291) note that in the southeastern United States, the most elaborate and largest quantities of such paint palettes have been found in the vicinity of Moundville. Welch (1991:56) points out that information from burials indicates that both paint palettes and stone discoidals were restricted to the upper stratum of Moundville society. The presence of these prestige goods suggests that elite stoneworking, not related to subsistence purposes, was conducted on Mound Q.

In addition to greenstone and non-local cherts, other non-local stone materials used in the manufacture of craft items include exotic stone such as mica, copper, and galena. Each of these materials was recovered from Mound Q. These materials were prestige goods, obtained through long-distance trade. It appears that elite crafting of prestige goods occurred on or near Mound Q.

A final category of stone from Mound Q considered here is pigments. Four types of pigments are represented. One type, galena, was obtained from as far away as southeastern Missouri and the upper Mississippi Valley (Welch 1991:173). Evidence concerning galena suggests that the elite at Moundville had almost exclusive access to the white pigment (Welch 1991:176). The other three pigments, represented by glauconite, hematite, and limonite, are found closer to Moundville in the Alabama Coastal Plain. Nonetheless, their presence indicates Mound Q's involvement in craft activities.

The above discussion of stone artifacts outlines a partial activity profile for Mound Q. Assuming that the classification of Mound Q as a mortuary temple mound

is a correct one, this profile can serve as a measure for the kinds of lithic artifacts associated with other hypothesized mortuary temple mounds at Moundville. To help ascertain the function of Mound M, the stone materials excavated from the mound are compared to those found on Mound Q to see if they fit with the Mound Q profile. Unfortunately, the sample size from Mound M is too small to perform a quantitative analysis involving frequencies of artifacts as seen in Markin's (1994) research. Instead, a general comparison of stone artifacts can be made between the two mounds to see if the same types of materials are represented.

For this comparison, stone materials are compared between Moundville II and Moundville III phase deposits on Mound Q and the entire lithic assemblage from Mound M. There are problems with this comparison. First of all, the comparison involves artifacts from different time periods. The Mound M artifacts are primarily from Moundville I phase deposits with a minor amount of Moundville II phase material. The Mound Q artifacts are from deposits dating primarily to the Moundville II and III phases. Secondly, all the stone artifacts used in the comparison from Mound Q are from primary midden deposits while the Mound M artifacts are from primary midden contexts as well as mound fill and mixed deposits. Although these biases are important to note, the comparison between mounds is still useful in determining the kinds of stone artifacts represented on each mound.

The activity profile for Mound M, like Mound Q, can be discussed in terms of primary tool classes, exotic stone, and pigments. The primary tool classes found on Mound M include materials made from local and non-local stone. Fifty-one percent of

the assemblage is from local stone and forty-nine percent is from non-local stone. Tools and debitage made from local stone include finished projectile points and microdrills as well as preforms, decortication flakes, other flakes, shatter, tested pebbles, and a retouched flake. The non-local stone found on Mound M, like Mound Q, is indicative of specialized chert-using activities involved in craft manufacture. The majority of the non-local stone (82%) is blue-gray Fort Payne chert. Other non-local cherts include Bangor chert and Mill Creek chert. Finished chert tools include projectile points, a Mill Creek biface fragment, and a unifacial endscraper fragment. Debitage includes decortication flakes, core reduction flakes, blade-like flakes, other flakes, shatter, a core, and a retouched flake. The blade-like flakes were most likely utilized in association with elite stoneworking activity. The Mill Creek biface fragment suggests that the occupants of Mound M had a connection to Cahokia trade.

Other tool classes besides those manufactured from chert are also represented on Mound M. Greenstone celt fragments were recovered as well as polished greenstone chips. Two stone discoids were recovered from Mound M, providing evidence of gaming activities. No finished paint palettes were recovered from Mound M; however, three specimens of ground sandstone may represent unfinished palettes. Tool classes missing from the Mound M assemblage are sandstone saws and abraders.

Prestige items form another category of stone artifacts to be compared between Mounds M and Q. Items recovered from Mound Q include mica, copper, and galena, all obtained through long-distance trade. The only one of these materials recovered from Mound M is mica.

The final category of lithic materials to be considered is pigments. Four pigments were recovered from Mound Q: galena, glauconite, hematite, and limonite. Only hematite and limonite were found on Mound M. However, the presence of glauconite may have been overlooked by the excavators since it is preserved as powdery green earth or clay.

The preceding general comparison between lithic materials from Mounds Q and M show both similarities and differences in the two assemblages. Similarities include the presence of items which are made from non-local materials obtained through long-distance trade. Differences in the two mounds result from items which are present in Mound Q, but absent from Mound M. Part of this discrepancy may result from the small sample size for the Mound M assemblage. Also worthy of consideration is the fact that the Mound Q materials are from Moundville II and III phase contexts. Markin's (1994) research showed that the overall frequency of non-local stone from Mound Q increased between the Moundville II and Moundville III phases. It is possible that the earlier Moundville I phase deposits contained even lower frequencies of non-local stone artifacts than the Moundville II phase deposits. Also, consideration of all deposits from Mound M may have lowered the correlation with Mound Q. Perhaps if a dense and productive primary deposit from Mound M could have been considered alone, the number and kinds of artifacts would reflect more similarities. A final consideration in the differences between the two mounds involves the concept of status space. Peebles (1971:83, 87) noted that individuals of differing status were buried in separate areas of the site. Based on the location of prestigious

burials, the northern half of the site is currently regarded as reflecting higher status than the southern half. Since Mound Q is located in the northern half of the site and Mound M is located in the southern half, differences in the mounds' artifacts may be partially attributed to differences in status. Therefore, the differences between the lithic assemblages from Mounds M and Q can be attributed to either real differences in use, to biases due to sampling error, and/or to temporal and spatial factors.

It should be kept in mind that exotic stone, in general, is found in high frequencies all over the Moundville site, including domestic areas. Mound M certainly conforms to the overall, site-wide pattern of occurrences of exotic items and prestige goods. However, not enough of these materials were recovered from Mound M to really distinguish it from even the domestic areas of the site. An example is found in the comparison of frequencies of local to non-local cherts on Mound M with domestic deposits south and east of the Conference Building at the riverbank and north of Mound R (Scarry 1995:244). The Mound M ratio of local to non-local chert is 51:49, showing slightly higher amounts of local stone. These figures are comparable to the 52:48 ratio from deposits south of the Conference Building. Domestic deposits east of the Conference Building contain even higher frequencies of non-local chert with a ratio of 33:67. The highest frequencies of non-local to local stone are found in the elite deposits north of Mound R with a ratio of 24:76.

In light of the above discussion concerning the Mound M lithic assemblage, no clear evidence marks Mound M as involving the same range of uses as Mound Q.

However, there are enough similarities of artifacts between the two mounds to allow the possibility of a common function.

Comparison of Ceramic Artifacts

Ceramics also provide evidence for the inference of functional classes of mounds at Moundville. One aspect of pottery examined here involves the ratio of service to utilitarian wares between Mounds M and Q and deposits along the riverbank and north of Mound R. Service ware was primarily used for serving and display purposes and was made with a paste consistent with Bell Plain, *var. Hale*. Utilitarian ware was mainly used for cooking and was made from Mississippi Plain, *var. Warrior* paste (Scarry 1995:243).

In comparing the ceramic assemblage from Mound M, proportions are figured for the primary deposit alone and also for the primary deposit in combination with all other contexts. Unfortunately, the sample sizes for both of these comparisons are small. The primary deposit produced only 210 sherds on Mississippi Plain, *var. Warrior* and Bell Plain, *var. Hale* pastes. All of the Mound M contexts together produced only 5,496 sherds on these pastes. While larger numbers of sherds would be desired, the comparisons can still be made.

The primary deposit on Mound M produced 165 sherds classified as utility ware and 45 sherds classified as service ware. The resulting ratio of service to utility wares is 21:79. All of the Mound M contexts together produced 4,682 sherds of

utility ware and 814 sherds of service ware. The resulting ratio for these contexts is 15:85.

The earliest deposits available for comparison from Mound Q primarily date to the early Moundville II phase. These deposits represent flank middens on the northern side of the mound. This component produced 3,215 sherds on pastes consistent with Mississippi Plain, *var. Warrior* and Bell Plain, *var. Hale*. Of these, 2,232 sherds are utility ware and 983 sherds are service ware. The resulting ratio of service to utility wares is 31:69. This ratio is considerably higher than the ratios found in either of the contexts from Mound M. This data suggest that occupants of Mound Q may have participated in more activities involving the presentation of food rather than the preparation of food.

Ratios of service to utilitarian wares were calculated by Scarry (1995:246) for domestic deposits along the riverbank at Moundville south and east of the Conference Building and north of Mound R. The deposits discussed here all date to the late Moundville I phase. Deposits south of the Conference Building produced a ratio of service to utility wares of 19:81. Deposits east of the Conference Building produced a similar ratio of 22:78. The deposits north of Mound R produced a greater proportion of service ware with a ratio of 38:62. Based on the large proportion of serving ware and the high ratio of non-local to local resources, it is believed that the locale north of Mound R represents an elite residential area (Scarry 1995:245). The data suggest that individuals who lived north of Mound R were higher in status than those living along the northwest riverbank (Scarry 1995:245).

From the above comparisons, Mound M appears most similar to the domestic deposits south and east of the Conference Building along the northwest riverbank. However, biases in the comparisons due to the small sample size from Mound M must be considered. Also, as noted in the discussion of lithic materials, differences between Mound M and the other deposits may partially result from differences in status space. Each of the contexts considered, except Mound M, is located on the northern half of the site. Therefore, one might expect the individuals living on Mound M to have less need for large amounts of service ware. Even considering the possible biases and differences in status space, the results of the analysis do not distinguish Mounds M and Q as similar as opposed to off-mound contexts.

A final point to consider is the applicability of the comparison of service and utility wares as a measure of eliteness. Perhaps this method is not overly helpful in distinguishing elite, non-domestic deposits at Moundville from common or elite domestic deposits. Also, the partitioning of status space involving differences between the northern and southern ends of the site as well as proximity to the plaza confuses any expected measures of eliteness for any given area. That is not to say that this type of comparison is without merit, but results should be closely examined in light of the above considerations.

Another aspect of ceramic artifacts examined here concerns evidence for ritual and craft activities. On Mound Q, objects in this category include crude human figurines, fragments of terraced rectangular bowls, and pottery trowels. Of these

categories, only fragments of terraced rectangular bowls were recovered from Mound M.

Other Considerations

Up to this point, the discussion of mound function has ignored the consideration of human remains. This aspect of the mortuary temple mound is an essential element. After all, Peebles' (1971:82) original assessment of the planned arrangement of mounds at Moundville emphasized the alternation of mounds containing burials with mounds lacking burials. Investigations on Mound Q (Knight 1992b) produced evidence of human remains as burials and also randomly scattered throughout various deposits. Ultimately, the classification of Mound M as a mortuary temple mound depends on similar evidence of human remains. This evidence exists in the form of one adult human mandible. The mandible was the only evidence of human remains on the mound, but I believe it is sufficient to include Mound M in the same category of other mounds at Moundville containing burials. It is likely that more human remains in the form of burials and/or scattered skeletal parts were at one time present on the mound. Erosion may have disturbed this evidence, leaving merely a trace for excavators. Also, the excavation units in 1970 and 1971 may have been located in an area of the mound with few burials. Therefore, the human mandible recovered from the mound validates its classification as a mortuary temple mound.

Current researchers recognize problems with the classification of certain mounds at Moundville as mortuary temple mounds and depend on future research to

help clarify what functions the mounds served and the activities associated with them. One way to examine this classification is to compare probable activities associated with the hypothesized temple mounds at Moundville with the activities associated with temples in the ethnographic record. Chapter 2 of this thesis presents a discussion of anthropological interpretations concerning historic and prehistoric temples in the Southeast. In looking at these interpretations, one can see important similarities and differences between historic southeastern temples and mortuary temple mounds at Moundville.

The most important similarity between historic temples and temple mounds at Moundville is the presence of human remains. Waring's (1977) consideration of historic and prehistoric temples emphasizes temple roles as ancestor shrines. Previous chiefs and other honored individuals in society were displayed in the temples and often buried there with elaborate grave goods and items displaying ceremonial motifs. The elaborate motifs depict ritual representations which define the Southern Cult, ceremonialism surrounding the honored dead. Burials containing pottery, stone, copper, and shell artifacts with motifs of the Cult have been uncovered at Moundville as well as other major sites in the Southeast such as Etowah and Spiro (Waring 1977:59; Brown 1975:2). This evidence suggests that one function of prehistoric temples involved their use as repositories for special individuals after death and as loci for ceremonial activities honoring those individuals.

A second similarity between historic temples and mortuary temple contexts at Moundville involves the use of temples as treasuries for non-local prestige items.

Brown's (1975, 1985) interpretation of temples as cult houses incorporates this notion of treasuries and places temples in the economic sphere of society. Individuals holding high rank in society and exerting influences over the acquisition of non-local, prestige items appear to have been associated with temples. At Spiro, burials suggest that the elite controlled internal and long-distance exchange of prestige items (Brown 1975:23). If a ruler is able to sustain and/or expand non-local trade, his power is reinforced. Furthermore, by associating strength in trading with religious power and the temples, the ruler further reinforced his ability to rule. Brown (1985:97) notes that historic and prehistoric temples were often used to store valuable items as well as religious paraphernalia. Since valuable, non-local items and ceremonial materials have been found in hypothesized temple contexts at Moundville, perhaps the temple mounds were associated with elite control of exchange networks and the reinforcement of political and religious ideologies.

A main difference seen between historic temples and the temples at Moundville is that the latter contain evidence of elite craft activities while the former do not. Evidence for crafting occurring in or near temples at Moundville includes a non-local chert industry and activities surrounding paint palettes and pigments. The discrepancy between prehistoric and historic temples may be the result of historic observers not noticing crafting or not being around temples while crafting was going on. Another possibility for the difference may suggest that the temple mounds at Moundville were used for a broader range of activities than historic temples. Perhaps

evidence from other hypothesized mortuary temple mounds at Moundville can help clarify this distinction.

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Appendix A: Ceramic and Lithic Analysis Forms

MOUNDVILLE MOUND PROJECT Pottery Types

Use Paradox table SHRDTYPE
MDV- Accession No. A

Season
Provenience Code

Mississippi Plain		Carthage Inc/Unspecified	
Mdville Inc/Carrollton		Mdville Eng/Cypress	
Mdville Inc/Mdville		Mdville Eng/Elliots Creek	
Mdville Inc/Snows Bend		Mdville Eng/Havana	
Mdville Inc/Oliver		Mdville Eng/Hemphill	
Mdville Inc/Unspecified		Mdville Eng/Maxwells Crossing	
Bell Plain		Mdville Eng/Middleton	
Carthage Inc/Akron		Mdville Eng/Prince Plantation	
Carthage Inc/Carthage		Mdville Eng/Stewart	
Carthage Inc/Fosters		Mdville Eng/Taylorville	
Carthage Inc/Lupton		Mdville Eng/Tuscaloosa	
Carthage Inc/Moon Lake		Mdville Eng/Wiggins	
Carthage Inc/Poole		Mdville Eng/Unspecified	
Carthage Inc/Summerville		Other types, Tot. (enter below)	

Pottery Types Listed Under Other, Above
List each specimen separately following master list format

(a)

(b)

(c)

(d)

(e)

Analysed by:

Copy the provenience information
into the box below.

Date of analysis:

MOUNDVILLE MOUND PROJECT
Selected Modes Observed on Sherds

Use Paradox table SHRDMODE

Season

MDV- Accession No. A

Provenience Code

Appliqué Neck Fillet		Handle	
Band of Nodes		Indentation	
Beaded Rim		Lowered Lip	
Beaded Shoulder		Notched Everted Lip	
Cutout Rim		Notched Lip	
Folded Rim		Downturned Lug	
Folded-Flattened Rim		Horizontal Lug	
Scalloped Rim		Vertical Lug	
Gadrooned		Spout	
Grouped Nodes		Rim Adorno	

Painting

Red Filmed, Fineware	
White Filmed, Fineware	
Red on White, Fineware	
White on Red, Fineware	
Red on Buff, Fineware	
Polychrome/Negative Painted	
Red Filmed, Coarseware	
White Filmed, Coarseware	
Hemagraved	

Adorno Type:- List each specimen separately, following master format

(a)

(b)

(c)

Analyzed by:

Copy the provenience information into the box below

Date of analysis:

MOUNDVILLE MOUND PROJECT
Diagnostic Vessel Fragments

Use Paradox table VESSMODE

Season

MDV- Accession No. A

Provenience Code

Collar, Jar	
Handle, Jar	
Flaring Rim, Bowl	
Rim, Short-Neck Bowl	
Rim, Other Bowl	
Corner Point, Bottle	
Pedestal Base, Bottle	
Slab Base, Bottle	
Neck, Bottle	
Other	

Form type listed as Other,
above (standard format):

Use Paradox table VESSMODE

Season

MDV- Accession No. A

Provenience Code

Collar, Jar	
Handle, Jar	
Flaring Rim, Bowl	
Rim, Short-Neck Bowl	
Rim, Other Bowl	
Corner Point, Bottle	
Pedestal Base, Bottle	
Slab Base, Bottle	
Neck, Bottle	
Other	

Form type listed as Other,
above (standard format):

Analyzed by _____ Date _____

MOUNDVILLE MOUND PROJECT
Stone, Fired Clay, and Nonaboriginal Artifacts

Use Paradox table NONCERAM

Season

MDV-

Accession No. A

Provenience Code

FLAKED STONE (count)	Tuscaloosa gravel	Blue-Gray ft Payne	other	UNMODIFIED STONE	Count	Wt (g)
Decorification flake				Sandstone, brown or hematitic		
Core reduction flake				Sandstone, fine gray micaceous		
Biface reduction flake				Sandstone, tabular hematitic/limonitic		
Blade-like flake				Sandstone, hematitic conglomerate		
Other flake				Hematitic/limonitic concretion		
Shatter				Hematite (pigment quality)		
Core/fragment				Pebble (quartz/chert/limestone)		
Tested pebble				Cobble fragments (quartz/chert)		
Microdrill/perforator				Petrified Wood		
Madison point				Coal		
Preform I				Huscovite		
Preform II				Galena		
Other 1.				Greenstone shatter		
Other 2.				Other		

FIRED CLAY ARTIFACTS (specify type)	Count	GROUND STONE	Count
1.		Ground sandstone	
2.		Sandstone pellet fragment	
		Sandstone abrader	
		Hematitic sandstone saw	
		Polished greenstone chip	
		Celt fragment	
		Other	

NONABORIGINAL ARTIFACTS (specify type)

Count
1.
2.

Copy the provenience
 information into the
 box at right

Analyzed by:

Date of analysis: