

**Beneath an Earthen Countenance: the Architecture and Artifacts of the Moundville
Earth Lodge Complex**

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ABSTRACT

Matthew Jared Mirarchi: *Beneath an Earthen Countenance: the Architecture and Artifacts of the Moundville Earth Lodge Complex*
(Under the direction of Dr. Vincas P. Steponaitis)

Archaeological excavations conducted by Vernon J. Knight, Jr. of Mound V's earth lodge complex at the Moundville site, Alabama yielded pottery and stone artifacts that heretofore have been unanalyzed and unreported. For this study, pottery, stone, and architectural analyses were the principal mechanisms used to (1) support the fifteenth-century radiocarbon dates attributed to the Moundville earth lodge complex and (2) describe the architectural components with and features from which the pottery and stone artifacts were associated and recovered. Descriptions and analyses of the complex's artifacts and architecture thus bracketed my consideration of the complex's chronology and function, and its potential significance at a time when Moundville had transitioned from a regional political center to a depopulated necropolis.

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Although so many helped in the production of this thesis, the final product and any errors therein solely are my responsibility.

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Chapter 1 Introduction

In and of themselves, buildings are statements. What exactly they “state” or of what they “speak” depends on for whom, by whom, and for what purposes they were built (e.g., Rapoport 1982:15-19). The meanings actors’ inscribed into buildings during construction, reconstruction, and destruction are difficult to extract archaeologically. That said, archaeological investigation can, at the very least, frame a speculative window through which these meanings, masked by time or subterfuge, potentially may be gleaned.

Previous studies (e.g., Morgan [1881]1965:104-106,125-128; Rudolph 1984:40; Larson 1994:106) have defined Southeastern earth lodges based on architectural attributes. Of these definitions, Rudolph’s is the most applicable: “an above-ground building that had either an earth covered roof or an earth embankment buttressing the exterior walls” (1984:33). Deriving my own definition for this study from these previous studies, I define an earth lodge as a square or round, earth-embanked structure blanketed with an exterior earthen sheath.

The Moundville earth lodge is Alabama’s only identified earth lodge; as such, it can reasonably be touted as the westernmost example of earth lodge architecture known in the Mississippian Southeast—the geographic area east of the Mississippi river valley and south of the Kentucky-Tennessee line (Steponaitis 1986:363); the Mississippian period dates to ca. AD 1000-1650 (e.g., Fundaburk and Foreman 2001:9). Although recent reports describe the discovery and excavation of the Moundville earth lodge (Knight, in press), wooden

components (Tickner, in press), and daub remains (Sherard, in press), no systematic studies have described or analyzed its associated pottery and stone artifacts. Filling this analytical void, I conducted pottery and stone analyses (1) to support the fifteenth-century radiocarbon dates applied by Knight (in press) to the earth lodge complex and (2) to describe the architectural components with and features from which the pottery and stone artifacts were associated and recovered. Analyses of the complex's architecture and artifacts also allowed me to make preliminary suppositions about the complex's functions at a time when Moundville had transitioned from a regional political center to a depopulated necropolis.

Chapter 1 includes a brief literature review of Southeastern earth lodge research as well as background on the Moundville site and Mound V. Chapter 2 provides information about Mound V's structures, stratigraphy, and features. Chapter 3 introduces Moundville pottery and the Moundville pottery classification system and chronology. Chapter 4 introduces Moundville stone, copper, and shell artifacts, and mineral pigments. Chapter 5 presents the data of the artifact analyses. Chapter 6 is a brief comparison of the Moundville earth lodge complex to other Southeastern earth lodges. Chapter 7 is a synopsis of the previous chapters and includes my conclusions and avenues for further research.

Earth Lodges in the Southeast

Only a few archaeological and architectural studies have addressed Southeastern earth lodges, their spatiotemporal distributions, and their possible functions (e.g., Fairbanks 1946; Rudolph 1984). Undoubtedly, one of the most comprehensive Southeastern earth lodge studies was completed by Crouch (1974), whose Master's thesis continues to be an oft-cited resource for those conducting earth lodge architectural analyses. To date, though, earth lodge

research primarily has been focused on Great Plains earth lodges (e.g. Linton 1924; Nabokov and Easton 1989:126-143; Roper and Pauls 2005), leaving earth lodges further east to the Southeast's acidic soils. Relatively recently, studies conducted at North Carolina's Town Creek Indian Mound site and Alabama's Moundville site have added more pieces to the Southeastern earth lodge puzzle. Boudreaux (2005, 2007) describes Town Creek's earth-embanked structures and their relation to the site's single platform mound. At the Moundville site, Knight (in press) directed excavations of the Mound V earth lodge complex. In addition to these studies, notable conference papers (e.g., Williams 1990) and iconographic studies (Lankford 2007a, 2007b, 2007c) have also considered earth lodge use and meaning.

The Moundville Site and Mound V

The Moundville site, which is located atop a terrace of the Black Warrior River in west-central Alabama, is a major Mississippian mound center that was once home to approximately 1000 inhabitants (Steponaitis 1998:43) (Figure 1.1). Arranged across 75 hectares, 29 identifiable mounds are the most obvious vestiges of this once thriving chiefdom (Figure 1.2).

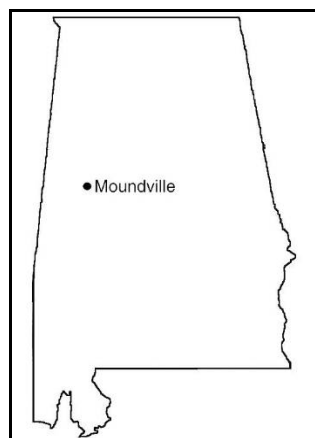


Figure 1.1. Location of the Moundville site in Alabama.

Construction and modification of these mounds peaked in late Moundville I to early Moundville II times, approximately AD 1200-1300 (Knight and Steponaitis 1998:8) (Figure 1.3). By late Moundville II (ca. AD 1350-1400) the majority of Moundville's inhabitants had abandoned the site and emigrated to farmsteads in proximity to the river valley's contemporaneous single-mound sites (Knight and Steponaitis 1998:18; see also Welch 1998:163; Maxham 2000). Multiple—and varied—but not necessarily related causal factors are attributed to this site-wide abandonment and include elites' exertions of power, resource depletion, diminished regional warfare, and fission of once interdependent sociopolitical groups (Steponaitis 1983:8; Knight and Steponaitis 1998:17; cf. Blitz 1999).

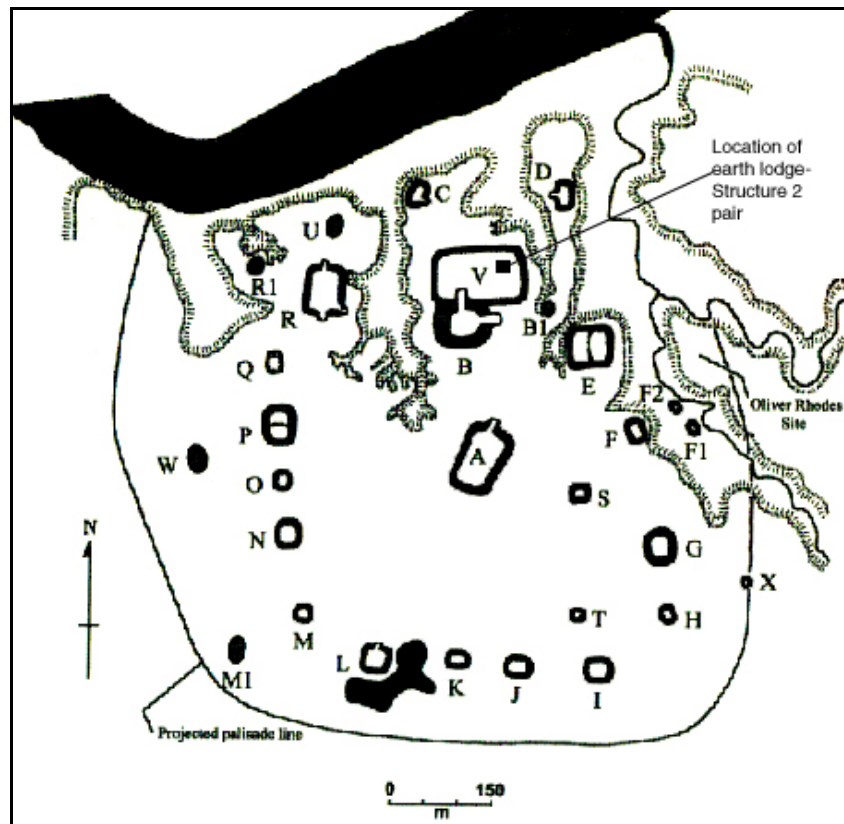


Figure 1.2. The Moundville site, Moundville, Alabama (adapted from Knight and Steponaitis 1998:fig. 1.1). Abutting Mound B to the north, Mound V occupies a distinctive position within the Moundville site; the location of the earth lodge complex is marked.

Intermittent occupation of the site’s northern mounds, and activities related to off-mound cemeteries, continued into late Moundville III and Moundville IV—a time span approximated as AD 1400-1650. By this time, most of the resident population had abandoned the site and Moundville functioned as a necropolis (Knight and Steponaitis 1998:14-19).

Calibrated Date	Pottery Phase	Occupation Phase	E.L. Complex Construction Stages
AD 1650	Moundville IV	“Collapse” and Reorganization	
AD 1520			
AD 1400	(late) Moundville III (early)		EL-2b destroyed
			EL-2b constructed
			EL-2a destroyed
AD 1260	(late) Moundville II (early)	The Paramountcy Entrenched	EL-2a constructed
AD 1120	(late) Moundville I (early)	Regional Consolidation	
		Initial Centralization	
AD 1020	(late) West Jefferson (early)	Intensification of Local Production	

Figure 1.3. The Moundville site’s pottery chronology and developmental phases juxtaposed with the earth lodge complex’s construction stages. Current evidence suggests Mound V’s construction preceded that of the earth lodge complex. Adapted from Knight and Steponaitis (1998:fig. 1.2).

Radiocarbon dates indicate that the earth lodge complex (Figures 1.4 and 1.5) was constructed, deconstructed, and reconstructed in the early fifteenth century (Table 1.1)—i.e. in the early Moundville III phase, a time when Moundville was largely depopulated.

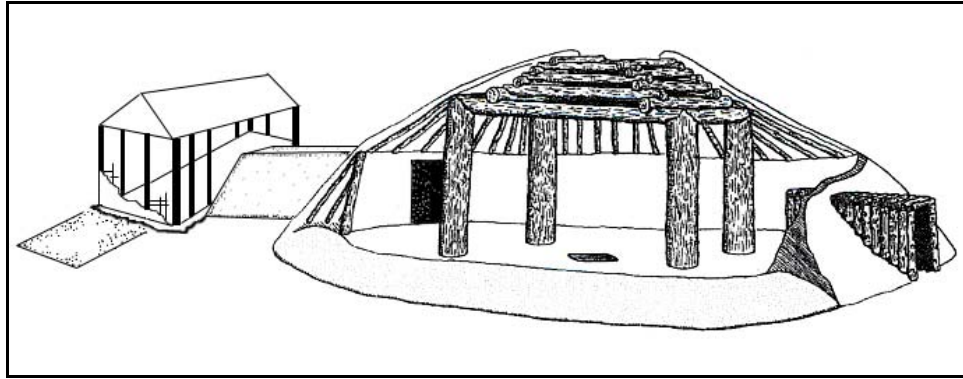


Figure 1.4. Hypothetical composite of the Moundville earth lodge complex, with the possible clay patio north of Structure 2 (adapted from Knight, in press). Structure 2's walls are left open to illustrate its architecture.

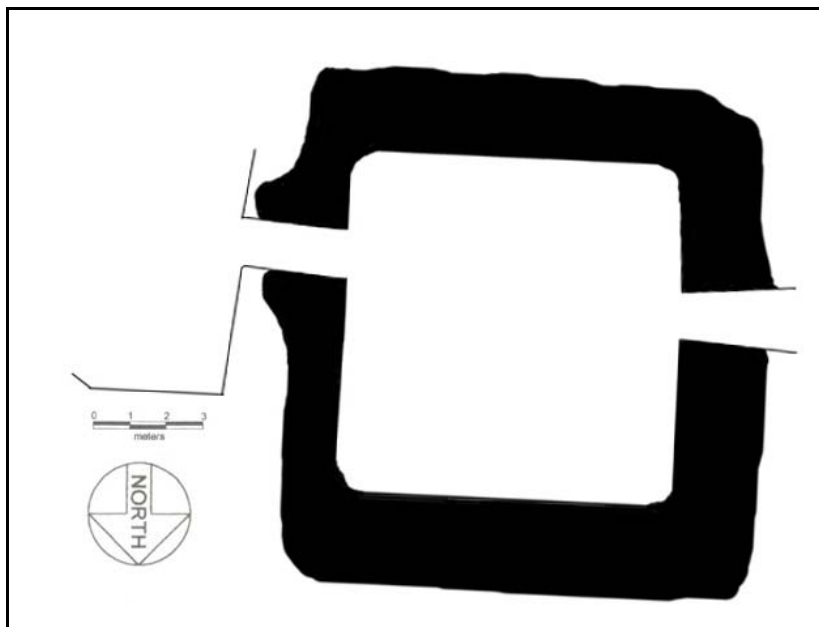


Figure 1.5. Schematic plan view of Mound V's earth lodge complex as presently delineated. Structure 2's architectural footprint is incomplete. The dark area surrounding the earth lodge is the sandy-clay berm.

Table 1.1. Radiocarbon dates attributed to earth lodge complex components. Adapted from Knight (in press:table 1).

Sample Description	Radiocarbon Age	Conventional Radiocarbon Age	2 Sigma Calibration
Feature 8, Charcoal from Structure 1's east berm fill	620 +/- 60 BP	590 +/- 60 BP	AD 1290-1430
Feature 14, Structure 2 corner post	570 +/- 60 BP	570 +/- 60 BP	AD 1290-1440
Structure 1b roof beam	250 +/- 60 BP	240 +/- 60 BP	AD 1500-1690
Feature 33, Structure 1b post	550 +/- 50 BP	540 +/- 50 BP	AD 1300-1440

Numerous studies have addressed the socioeconomic, political, and ideological organizational frames within which Moundville's inhabitants operated (e.g. Peebles 1971, 1983; Knight 1986, 1998; Welch 1991, 1996; Steponaitis 1991; Scarry 1980, 1993; Muller 1997:346-351; Knight and Steponaitis 1998; Steponaitis 1998; Knight 1998; Scarry 1998; Powell 1998; Schoeninger and Schurr 1998; Welch 1998; Michals 1998; Wesson 1998; Wilson 2001, 2008; Blitz 2008)—frames that had mostly dissolved prior to the complex's construction. The fact that the temporal frame within which Moundville's last inhabitants built the earth lodge complex likely co-occurred with the displacement or reorientation of their social, economic, and political powers makes their construction and use of the complex unique with regard to the site's history.

Chapter 2

Mound V Structures, Stratigraphy, and Features

Mound V's structures and their associated stratigraphic deposits are detailed below (Figure 2.1), as are two stratigraphic deposits and extraneous features peripherally related to these structures. The earth lodge complex's "directly affiliated" deposits are defined as those deposits that were components of the complex and not later, overlying additions to the complex area.

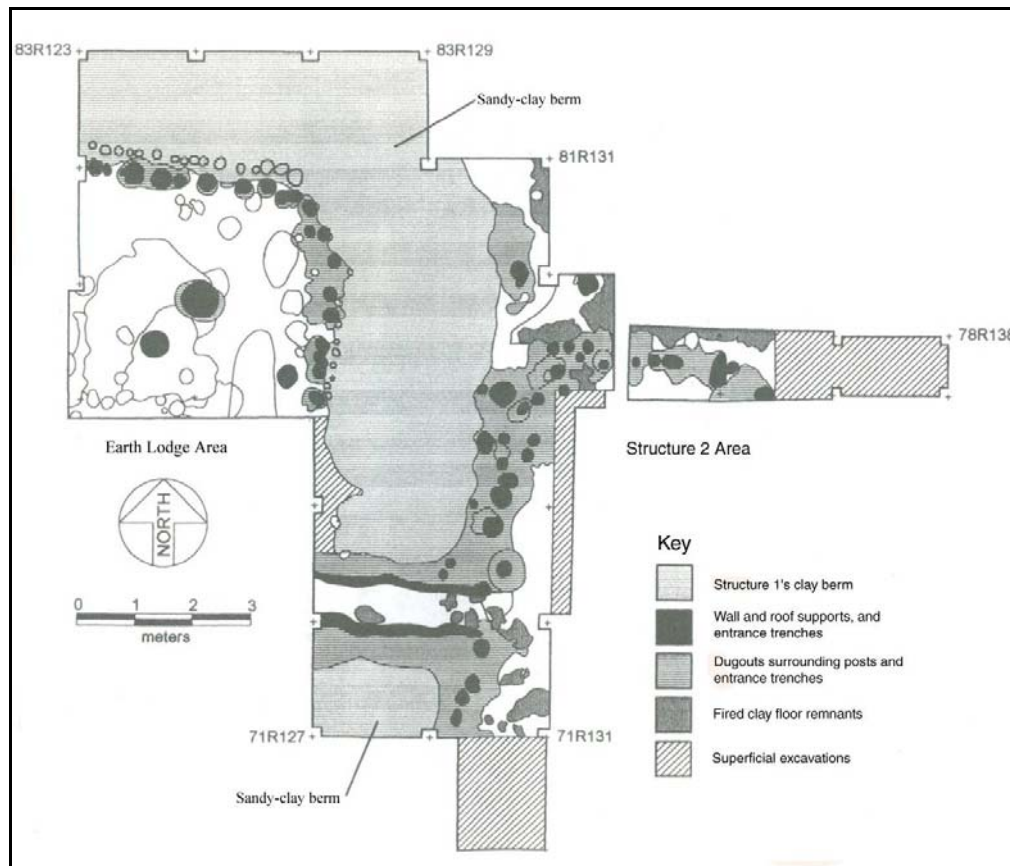


Figure 2.1. Plan view of Moundville earth lodge complex. Adapted from Knight (in press:fig. 8).

Because the stratigraphic deposits' fills were not developed *in situ*, they were classified as secondary contexts. It is likely that these fills were extracted from the immediate areas surrounding Mound V—herein referred to as Mound V's peripheries—and might be indicative of activities related to Mound V and its structures. Pit feature fills are considered primary contexts. Unlike pit-feature artifacts, contents of postholes are not reliable indicators of how the earth lodge complex was used, but they do potentially provide evidence of the types of artifacts that were circulated within the general area of Mound V and the earth lodge complex (herein referred to as “the complex,” unless further distinction is required). Unless otherwise noted, specific architectural or feature measurements were derived from Knight's unpublished field notes. A general overview of Mound V's structures and stratigraphy precedes the descriptions of the stratigraphic deposits and integrates the architectural and stratigraphic information.

Overview

The Moundville earth lodge is represented by sequential structural stages, designated Structures 1a and 1b. Both stages are characterized by a palimpsest of superimposed postholes and pit features. Most notably, however, the earth lodge was sheathed by earth. In addition to its earthen sheath, each earth lodge stage was embanked by the same sandy-clay berm.

The earth lodge's stratigraphy indicates that the lodge's pine infrastructure was surrounded by a high, approximately 2.7 m wide embanked berm made of compacted tan-orange sandy clay. At present, the berm's actual height is unknown, as a CCC truncation of

Mound V's surface removed the majority of the berm, which had remained relatively intact and upright following Structure 1b's fiery decommissioning (Knight, in press:7).

The earth lodge was a monumental construction that featured smoothed, daubed walls underlain by a framework of whole-cane lathing; its east wall was painted red and white (Sherard in press). Structure 1a was 11.1 meters in diameter and had approximately 123 square meters of useable interior space (Knight, in press:11). Structure 1b was slightly smaller and had less useable interior space than Structure 1a. Despite the slight size disparity, the two earth lodge stages were nearly identical in form, and, as such, it was difficult to definitively assign the earth lodge's wall post lines (i.e., exterior wall and leaner posts) to a particular stage.

Two rows of single-set posts were the earth lodge's main structural supports. A line of small hickory leaner posts at the berm's base likely served as a supportive retention wall for both the berm and the earth lodge's earthen sheath. An interior line of larger pine posts, located approximately 20 cm interior to the leaner post line, and approximately 75 cm below the floor's surface, likely functioned as one of the earth lodge's main wall lines (Knight, in press:8); these postholes were spaced approximately 50 cm apart and averaged 28 cm in diameter and 74 cm deep (Knight, in press:8).

Four large pine posts were set into the center of both stages' floors and acted as each stage's interior support system; a central hearth was situated within the area delineated by these four central support posts (Knight, in press:10). One posthole for one of these four central support posts was identified in the excavations of each structural stage. These two postholes likely accommodated their respective stage's primary, interior, northeast support

post. Two deep insertion-extraction ramps, or “slide trenches,” were paired with these two central support postholes (cf. Schnell, Knight, and Schnell 1981:34).

Structure 1a and 1b’s earth-covered, cribbed, pine and hickory superstructures each were supported by the four central posts and the exterior walls’ pine posts (Knight, in press:8); the latter posts were angled slightly inward, such that the superstructure’s weight was dispersed and accommodated. Once the wooden infrastructures of the earth lodge stages were erected, dark brown, midden-like fill, combined with sod, was packed within the crevices between the sandy-clay berm and the exterior leaner posts, and atop the earth lodge stage’s superstructure, thereby providing the earth lodge’s earthen sheath; cedar and hickory poles possibly were placed atop this sheath as anti-erosion devices (see Tickner, in press:7).

The primary entryway into the complex was identified in the earth lodge’s west berm through gradiometry. A connective passageway between the earth lodge and Structure 2 was excavated. Wood evidence indicates that the connective passageway was almost entirely constructed of red cedar, a symbolic wood for multiple Southeastern Indian tribes (see Tickner, in press:11-12; cf. Rapoport 1969:108-109). Additionally, the earth lodge likely featured interior furniture, not unlike that identified in historic Creek and Cherokee council-houses and townhouses; Structure 1b contained architectural evidence of two possible benches.

Eventually, Structure 1a was dismantled and the area was capped with clean fill. Following this capping event, Structure 1b was built atop the clean fill and its features intruded down through this clean fill layer and into Structure 1a’s floor. At the end of its use-life, and after two possible burials intrusive to its floor were exhumed, Structure 1b was burned, thereby preserving the architectural elements that had, at the time of collapse, been in

the process of partial or complete combustion. Posts, rafters, and other charred architectural elements littered the lodge floor and were preserved not only by the fire, but also by the collapsed earth that had covered the sandy-clay berm, and the superstructure and exterior leaner posts.

Structure 2 likely was an enclosed structure framed with single-set posts and unsmoothed daubed walls. Like the earth lodge's interior superstructure, but unlike its walls, Structure 2's interior and exterior walls were underlain by split-cane lathing (Sherard, in press). Although segments of Structure 2b's north and west walls were uncovered, Structure 2a's features were relatively obscured by Structure 2b's architectural footprint. Due to the limited visibility of Structure 2's architectural footprint an approximate size for Structure 2 is not presently calculable. As evidenced by Structure 2a's baked clay floor, and Structure 2b's intrusive wall posts, Structure 2 was rebuilt at least once, possibly in tandem with both earth lodge stages. Additionally, both Structure 2 stages likely were burned; daub evidence and Structure 2a's baked clay floor substantiate this supposition.

A large baked clay floor paralleled Structure 2's north wall posts and was relatively devoid of postholes; albeit classified with Structure 2's chronologically earliest stage, this clay floor likely was present for both Structure 2 stages. The exact purpose of this baked clay, "patio-like surface" is unknown (Knight, in press:6-7), but I believe it possibly served as a supplementary living floor to the primary floors of both Structure 2 stages. Interestingly, such patio-like surfaces have been identified in proximity to such structures at other Southeastern earth lodge sites (see Crouch 1974).

Stratigraphy of the Earth Lodge (Structure 1)

Six contiguous stratigraphic layers constituted the earth lodge's stratigraphy (Figure 2.2): *Structure 1a floor*, *Sandy-clay Berm*, *Clean fill*, *Structure 1b floor*, *Berm cover*, and *Roof/wall fall*. Each of these six deposits encompassed multiple features, some of which intruded earlier deposits (Appendix A: Table A.1). An additional deposit, *Structure 1a/1b fea.*, includes features that could not be assigned to one particular earth lodge stage. In the following sections, detailed descriptions of each of these deposits and their affiliated features are synthesized with explanations of each stage's architecture and use-life.

Structure 1a. As the earth lodge's oldest stratigraphic deposit, *Structure 1a floor* encompassed a number of distinct interior features affiliated solely with the earth lodge's first stage, Structure 1a (Figure 2.3). Structure 1a's exterior wall and leaner posts likely were intruded by those of the earth lodge's second stage, Structure 1b, thus making Structure 1a's exterior wall and leaner posts nearly undistinguishable from those of the later stage. Despite their archaeological obscurity, Structure 1a's posts were embanked by *Sandy-clay Berm*, a construction utilized by both earth lodge stages. To support the weight of a sizeable superstructure, four large posts were emplaced in the center of Structure 1a's floor area; a hearth was centered within the space delineated by these central support posts. Once the four central posts were in place, a cribbed, wooden superstructure was built atop the central posts. An entryway and connective passageway interrupted the west and east portions of Structure 1a's sandy-clay berm and exterior walls respectively; only the connective passageway was excavated. Both the entryway and connective passageway were constructed with two closely-spaced wall trenches, each of which accommodated multiple small poles.

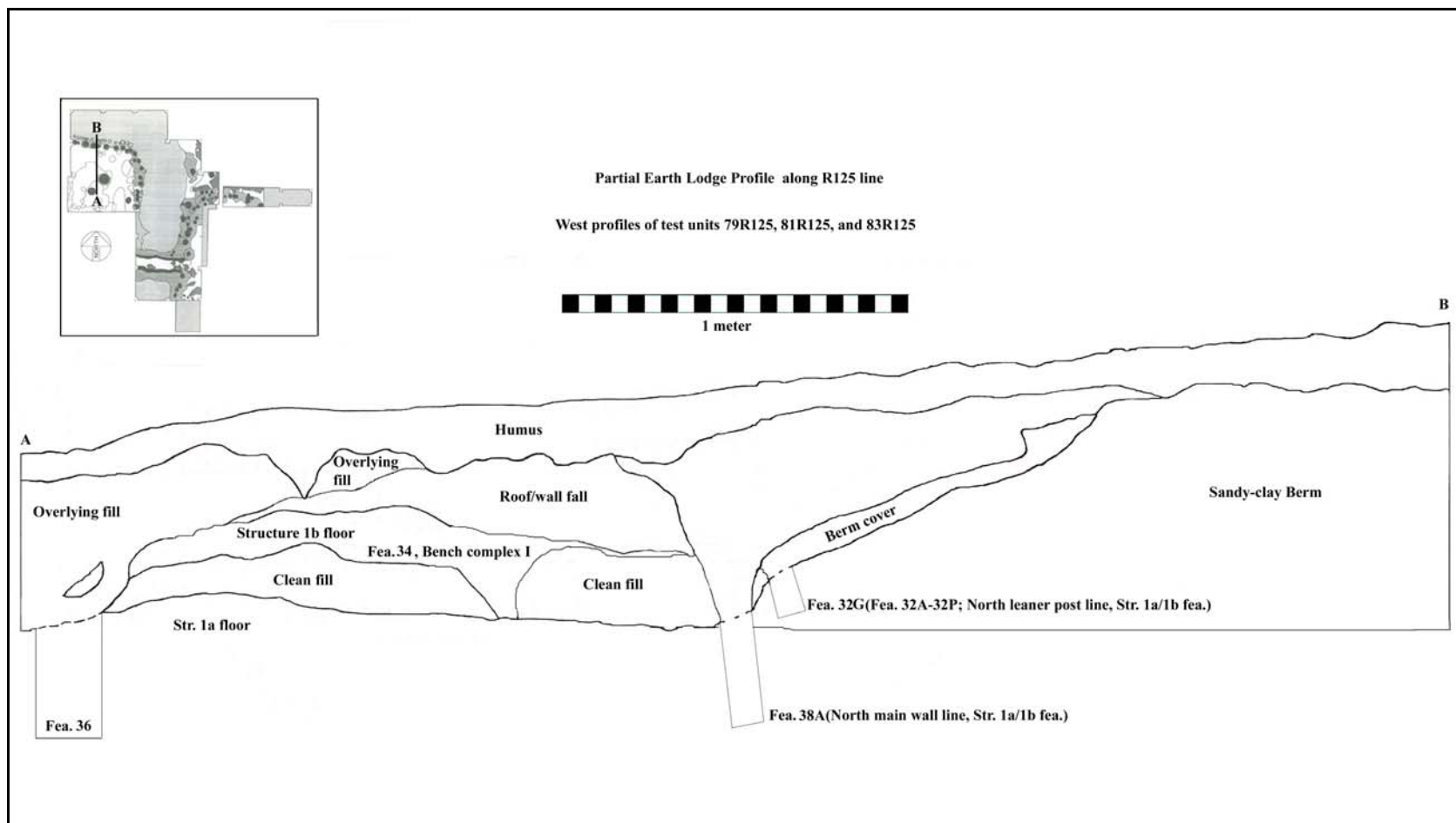


Figure 2.2. Partial earth lodge profile with stratigraphic deposits and certain features labeled.

Eventually, Structure 1a was deconstructed and its floor was capped with an approximately 15-20 cm thick layer of clean, sandy fill (*Clean fill*); this layer acted as a divisive barrier between Structure 1a and 1b's respective floors (Knight, in press:7). Due to the fact that *Sandy-clay Berm* exhibited no evidence of being significantly altered between the earth lodge stages, it likely remained standing during the Structure 1a-1b transition.

Structure 1a's two identifiable features were components of a single large feature: Feature 49. Both features had distinct architectural functions, which are referred to explicitly and described below.

Feature 49. Features 49A and 49B were two subsidiary features of Feature 49; each had a distinctive shape and differently-colored fill. Feature 49A was a large, irregularly-shaped insertion pit, or slide trench, used to situate and emplace Feature 49B. Feature 49B was a circular posthole for one of Structure 1a's four central support posts. A post impression at Feature 49B's base indicated that Feature 49B's affiliated post measured approximately 65 cm in diameter and extended approximately one meter deep.

Structure 1b. After *Clean fill* was used to cap *Structure 1a floor*, *Structure 1b floor* was laid down and the second earth lodge, Structure 1b, was built. Albeit slightly smaller than its predecessor, Structure 1b likely was constructed in the same manner, as evidenced by the intrusion of its exterior wall and leaner posts through *Clean fill* and into *Structure 1a floor*. As stated previously, *Sandy-clay Berm* remained standing during Structure 1a's deconstruction and was re-used by Structure 1b.

Following a period of use, Structure 1b was intentionally burned, which caused dark soil that had coated *Sandy-clay Berm* since its construction (*Berm cover*) to fall inwardly. Structure 1b's earthen sheath and the earth banked against its exterior leaner posts (*Roof/wall*

fall) subsequently overlaid *Berm cover*. Structure 1b's *Roof/wall fall* consisted of Structure 1b's superstructure and wall supports, earthen roof covering, and wall and roof daub that collapsed from Structure 1b's conflagration; the *Roof/wall fall* collapsed onto *Berm cover* and Structure 1b's floor.

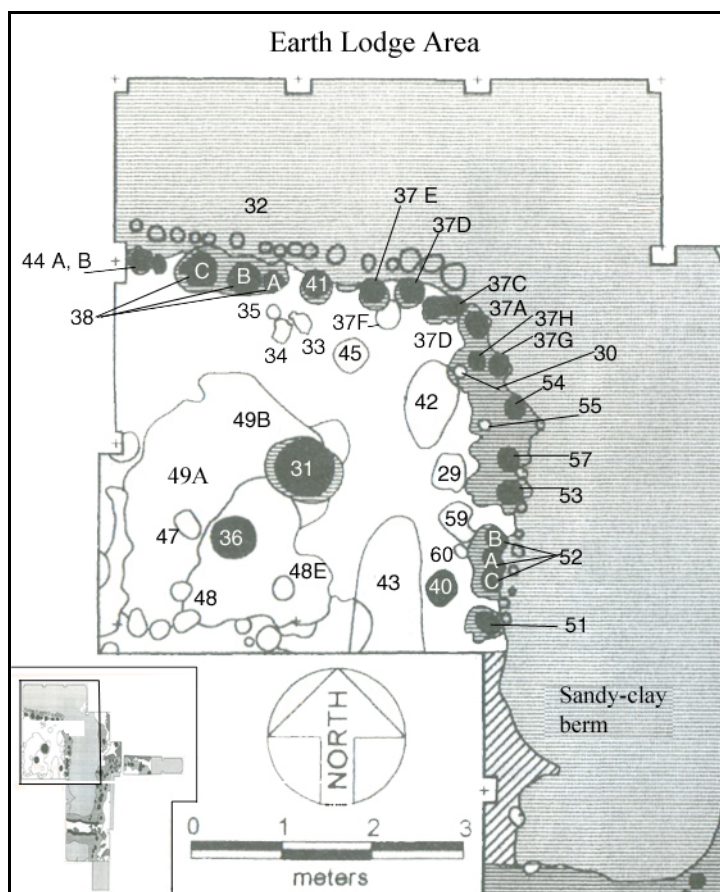


Figure 2.3. Plan view of earth lodge area with features labeled.

Although Structure 1b's architectural footprint closely resembled and intruded that of Structure 1a, several of Structure 1b's features were distinctly different from those of Structure 1a. Interestingly, though, two of Structure 1b's features appear to have functioned in similar capacities as Features 49A and 49B: Features 36 and 48, respectively.

Feature 48. Feature 48 was a large intrusion that encompassed Features 48A-48D and was directly associated with Feature 36. Of Feature 48's smaller, subsidiary features, Features 48A and 48B are the most architecturally important, as they both constituted a single slide trench for Feature 36. Moreover, Feature 48 was analogous in form to, and intruded the Feature 49 complex.

Feature 36. Feature 36 was a posthole for one of Structure 1b's four central support posts, was approximately 51 cm in diameter, and extended approximately two meters deep; Tickner (in press:6) classifies this post as pine. Smaller than its Feature 49B predecessor and inset slightly southwest from Feature 49B's location, Feature 36 undoubtedly served the same purpose.

Several of Structure 1b's other features were located immediately interior to Structure 1b's exterior wall posts. Of these interior features, three clustered postholes were classified together as an interior bench's support framework: Features 33, 34, and 35; thus, these three features are discussed together as the earth lodge's *Bench complex I*. One of these posts, Feature 33, was radiocarbon dated and yielded a 2 sigma calibrated date of AD 1300-1440 (Knight, in press:table 1). A relatively larger posthole than those of *Bench complex I*, Feature 45, located immediately east of *Bench complex I*, possibly was an additional component of *Bench complex I*.

In addition to *Bench complex I* and Feature 45, four postholes aligned north-south and interior to the exterior wall line's east section possibly were components of another interior bench or furnishing: Features 29, 59, 60, and 40; as such, these features are classified together as *Bench complex II*.

Two of Structure 1b's interior features were relatively ovoid in shape and had structural attributes diagnostic of burial pits: Features 42 and 43. Albeit not entirely delineated, Feature 43, located south of Feature 42 and west of Feature 40, exhibited relatively straight walls and a flat bottom. Due largely to these shape characteristics, Knight (in press:11) presumed Feature 43 to be an exhumed burial intrusive to Structure 1b's floor. Interestingly, Feature 43 was aligned north-south—an orientation analogous to that of the adjacent *Bench complex II*; interment of the dead beneath and adjacent to such furnishings was not an uncommon practice in the Mississippian Southeast. It is likely that Feature 43 extended further south; however, its southerly extent was not uncovered. Despite being substantially smaller than Feature 43 and not fully excavated, Feature 42 exhibited similar structural attributes as those of Feature 43 and likely was a burial or storage pit.

Structures 1a and 1b. Due to the fact that Structure 1b roughly followed Structure 1a's architectural footprint, thus intruding some of Structure 1a's features, the exterior wall and leaner post lines and the trenched connective passageway likely were incorporated into Structure 1b's architectural layout. As a result of this intrusion, the exterior wall and leaner post lines were considered architectural components of both Structures 1a and 1b.

In Figure 2.3, two distinct curvilinear feature lines are identifiable, both of which are portions of the earth lodge's exterior walls. The northernmost feature line is constituted of a leaner post line, dubbed Feature 32, and the east wall line's unnamed leaner post indentations, located interior to the sandy-clay berm's east portion. Each of the leaner post indentations accommodated a small, inwardly-slanting leaner post; none of these indentations was more than 15 cm deep and a few of their bases were pointed in profile. The second feature line is constituted of the following features, each of which was a posthole in the

exterior wall line's east section: Features 44 (A and B), 38 (A, B, and C), 41, 37 (A-H), 30, 54, 55, 57, 53, 52 (A, B, and C), and 51. The majority of the exterior wall line's postholes had shallow dugouts around their bases; these dugouts likely facilitated the repositioning of existing posts, the extraction of compromised posts, or the insertion of new posts.

One trenched, tunnel-like, connective passageway was identified southwest of the earth lodge's excavated interior floor area and interrupted the sandy-clay berm's east portion (Figure 2.4); a tunnel-like entryway, located in the sandy-clay berm's west portion, was identified through gradiometry, but was not excavated. Two wall trenches constituted the east connective passageway and were classified together as Feature 26. Feature 26's two linear wall trenches were aligned east-west with the unexcavated, west entryway and framed the connective passageway between the earth lodge and Structure 2. Of the earth lodge's architectural components, the connective passageway exhibited the only true wall trenches—trenches that were intentionally excavated to accommodate linear post groups. The trenches were spaced approximately 57 cm apart and each received a small, linear post group (Knight, in press:7); comparable spacing for trenched entry and connective passages have been documented at other Southeastern sites (e.g., Caldwell and McCann 1941:25). When caned and daubed over, these trenches' post groups acted as the east passageway's primary support framework. This trench framework characterized the connective passageways of both earth lodge stages.

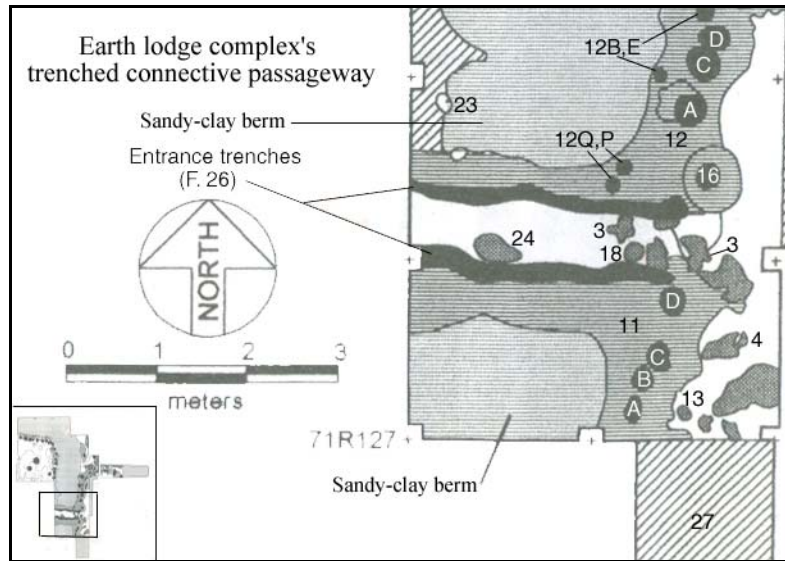


Figure 2.4. Plan view of earth lodge complex's trenched connective passageway area with features labeled.

Both earth lodge stages also were sheathed by earth—hence, were *earth* lodges. The earth lodge's stratigraphic deposits yielded silica froth—a “gray vesicular glass formed by the melting and fusion of silica phytoliths in grass and cane structural elements” (Knight, in press:7). In this case, silica froth's formation undoubtedly resulted from the highly intense temperatures associated with Structure 1b's conflagration (Knight, in press:7). Of course, while most structure fires produced intense heat, an earth lodge's earthen sheath insulated a fire in an oven-like environment more so than an open-air or non-embanked structure, but limited oxygen flow and supply, thereby increasing the conflagration's thermal intensity and generating the requisite heat for silica froth formation—the fusion of the silica phytoliths in the earthen sheath. When coupled with the earth lodge's stratigraphy, specifically the sod-like *Berm cover*, the presence of silica froth provides supportive evidence for the earth lodge's earth-covering.

Intrusive features. Three features intrusive to the earth lodge area were recorded; however, these features dated chronologically later than the earth lodge's directly affiliated stratigraphic deposits, but predated *Overlying fill*. One of these features is particularly intriguing, not only for its position relative to *Structure 1a floor's* Feature 49B, but for its artifact content. Each of these three intrusive features is enumerated below.

Feature 39. Feature 39 was a shallow, clay-lined pit filled with daub rubble from the earth lodge's *Roof/wall fall*. This pit intruded through *Roof/wall fall*, down to the area just above the base of Feature 49B, Structure 1a's only excavated central support posthole. Due to the fact that the pit contained substantial amounts of daub from the conflagration, it is likely that the pit was opened very shortly after Structure 1b's destruction and then closed. In addition to the daub rubble, Feature 39 contained an inverted, intact Alabama River Incised, *var. unspecified* vessel (Figure 2.5); charred bark or cane strips, a single piece of three-braid fiber cordage, and two acorns had been placed inside the vessel. Feature 39 definitively predated Feature 31, postdated Feature 49, and likely was contemporaneous with Feature 47.



Figure 2.5. Feature 31's intact Alabama River Incised, *var. unspecified* vessel.

Feature 31. Feature 31 was an oval, midden-filled pit which intruded the southeastern portion of Feature 39. Longitudinally, Feature 31's axis had a slight northwest-southeast orientation and was located immediately east of Feature 47.

Feature 47. Feature 47 was a circular intrusion that likely was contemporaneous with Feature 39. This feature contained only plugs of clay and possibly was a clay extraction pit.

Although these three features undoubtedly postdated the stratigraphic layers and features they intruded, they were identified and excavated in association with chronologically earlier stratigraphic deposits; thus, in the earth lodge's plan views, they appear to occupy the same stratigraphic level as the earth lodge's directly affiliated features.

Stratigraphy of Structure 2

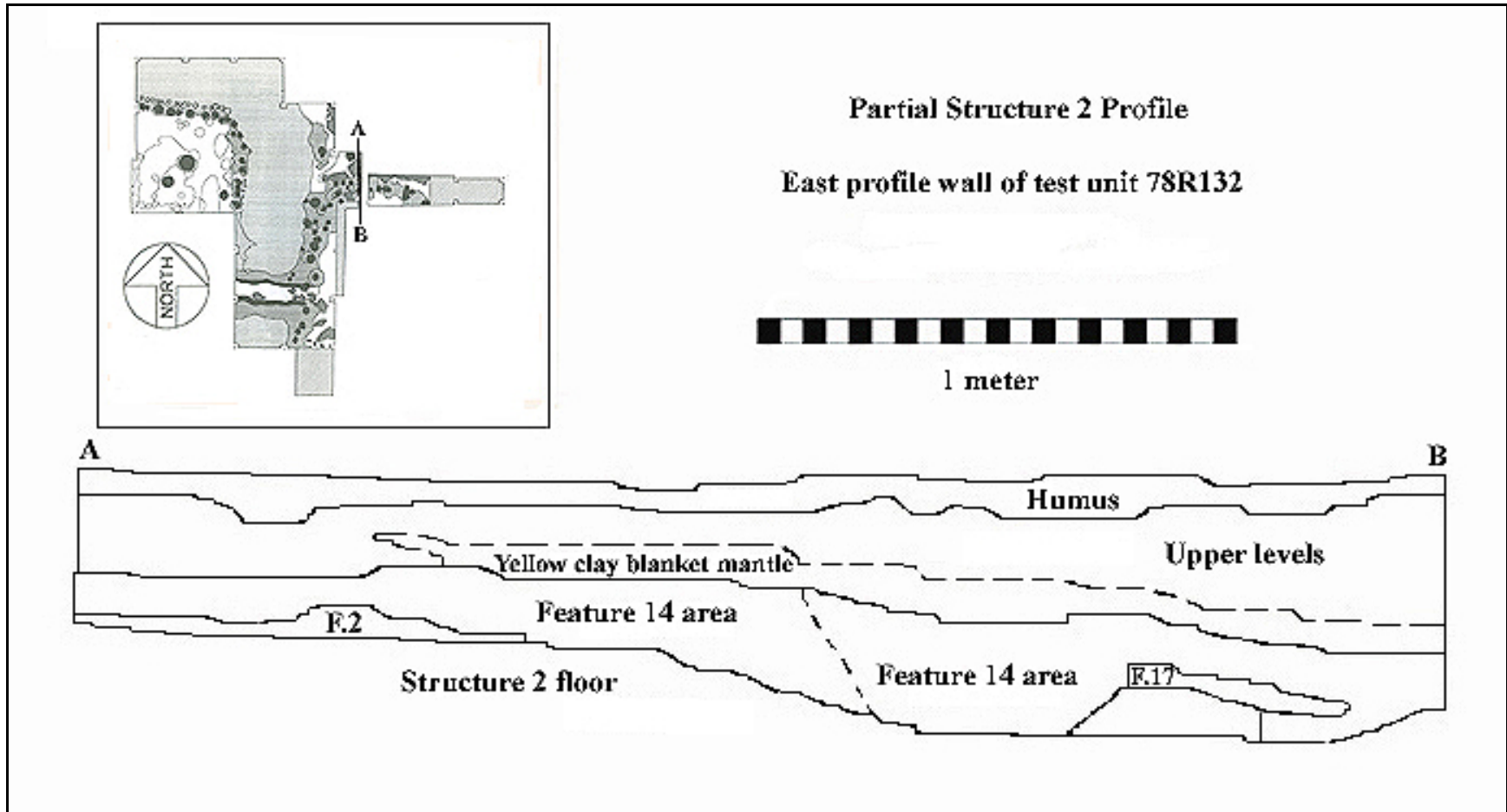
Structure 2's stratigraphy consisted of four contiguous stratigraphic deposits (Appendix A: Table A.2): *Structure 2a floor*, *Structure 2b floor*, *Upper levels*, and *Humus* (Figure 2.6). With the exception of *Humus* and *Upper levels*, each of these stratigraphic deposits was directly related to Structure 2 and its two stages—Structures 2a and 2b. Detailed descriptions of the two former stratigraphic deposits are provided below. One caveat is in order, though: most of the Structure 2 area was not excavated as intensively by Knight as the earth lodge area, and it was not possible to survey the Structure 2 area with the fluxgate gradiometer—the instrument used to delineate the remainder of the unexcavated earth lodge; as such, Structure 2's architectural footprint remains relatively obscured and we can only speculate on its architectural transformation through time relative to that of the earth lodge.

Structure 2's chronologically oldest deposit, *Structure 2a floor*, was contemporaneous with the earth lodge's *Structure 1a floor*. Presumably after Structure 1a's deconstruction,

Structure 2a was burned, which baked its clay floor. Knight suggested that the presence of daub in the earth lodge's Feature 48—Feature 36's insertion-extraction pit—indicated that a nearby structure, Structure 2a, burned between Structure 1a's deconstruction and Structure 1b's construction. Following Structure 2a's destruction, *Structure 2b floor* likely was laid down directly over the baked *Structure 2a floor*, as evidenced by Structure 2b posts' intrusion through *Structure 2a floor*; no stratigraphic layer analogous to the earth lodge's *Clean fill* was identified between Structure 2's two floors. It is unknown if Structure 2b was burned in tandem with Structure 1b, but Structure 2b's charred architectural remains, a beam of which was radiocarbon dated, indicated that Structure 2b did burn.

Following Structure 2b's fiery destruction, the Structure 2 area was capped with a yellow clay blanket mantle (*Upper levels*), which was subsequently intermixed with overlying humic soil (*Humus*). Of Structure 2's two stages, Structure 2b was the most archaeologically-visible, as sections of its west and north walls were more distinguishable than features of its Structure 2a predecessor (Figure 2.7); sections of Structure 2a's baked clay floor are that stage's only distinguishable features.

Interrupted by Feature 26, two feature lines, Features 11 and 12, and their subsidiary postholes, constituted Structure 2b's west wall. In addition to these two feature lines, Feature 16, a relatively large posthole with a large dugout surrounding its base, likely acted as an additional support for Structure 2b's west wall. Feature 16 was the largest posthole of Structure 2b's west wall and was located at the terminus of the connective passageway into Structure 2; albeit a rather unexpected location for such a substantial post, comparably large posts at entrance trenches' termini have been documented at other Southeastern earth lodge sites (e.g., Fairbanks 1946:95).



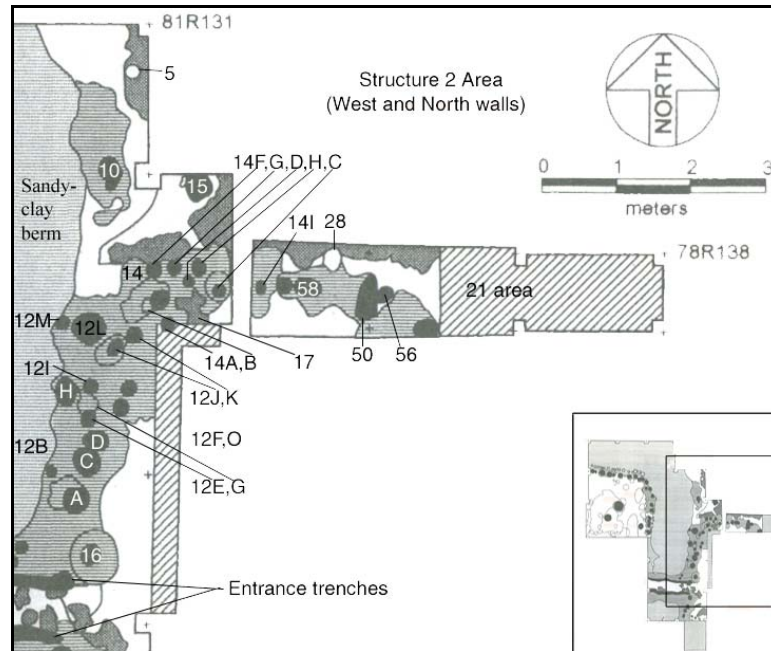


Figure 2.7. Plan view of Structure 2 area with features labeled.

Structure 2b's north wall line was constituted of the northern portion of the Feature 12 line and the Feature 14 line. Three postholes were roughly aligned with the Feature 14 post line and likely were exterior wall posts for Structure 2b's north wall line: Features 28, 56, and 58. One relatively amorphous feature, Feature 50, was located southeast of Feature 56. Feature 50's shape suggests that it was a storage pit.

Mound V Summit Structure

Albeit peripheral to my interpretation of the complex, Mound V's summit structure—a structure that postdated the complex—also requires attention. In his preliminary report on the Mound V excavations, Knight (in press:12) mentions a “final structure indicated by yellow clay-filled postholes on top of the mounded surface [of Mound V].” Corresponding to Mound V's latest summit deposits, and possibly to the yellow clay blanket mantle that definitely overlaid the Structure 2 area (*Upper levels*) and possibly overlaid the earth lodge

area, four yellow clay-filled postholes were identified during the excavations and dubbed Feature 27. Three of these four postholes were aligned with one another to the south of the earth lodge area, while one comparable post was isolated to the north of the three aligned postholes, in an area that overlaid the earth lodge locus. Little else is known about the summit structure's architectural footprint, due in part to Mound V's surface truncation by the CCC—an act intended to stabilize the eroded mound summit. Potentially a large, Structure 2-like building, this mound-summit structure requires further delineation before conclusive results can be reached.

Residual Deposits and Features

Throughout the course of the Mound V excavations, two stratigraphic deposits were investigated minimally: *Central Mound V* and *CCC fill* (Appendix A: Table A.3). Knight's initial excavations of the central Mound V area intersected CCC mound stabilization fill, which was intermixed with heavily disturbed mound deposits. Albeit useful for understanding Mound V's historic superficial alteration, *Central Mound V* and *CCC fill* were abandoned in lieu of deposits affiliated with the complex.

In addition to *Central Mound V* and *CCC fill*, a heterogeneous group of single, isolated features was recorded: *Extraneous features*. *Extraneous features* included multiple features, many of which were postholes not clearly associated with the earth lodge or Structure 2 (Appendix A: Table A.3): Features 5, 10, 13, 15, 18, and 23. These extraneous posts' spatial proximity to the two structures' other features suggests that the extraneous posts functioned as supplementary structural supports for the earth lodge or Structure 2.

Summation

In this chapter I have described Mound V's structures, their stratigraphy, and features, and distinguished each structure's primary and secondary contexts. Subsequent chapters address the pottery recovered from the complex's stratigraphic deposits and features. Before the results of the pottery analysis are enumerated, Moundville's pottery chronology and classification system are discussed in detail, as both structured my pottery analysis. In addition to Moundville's pottery chronology and classification system, other ceramic artifacts of the complex also are discussed.

Chapter 3

Pottery and Other Ceramic Artifacts

Diagnostic pottery recovered from the complex's stratigraphic deposits and features provided the requisite evidence to relatively date the complex's construction stages and stratigraphy. Moundville pottery is classified according to diagnostic types and varieties, vessel shapes, secondary vessel shape features, and effigy features that correspond to Moundville's chronological occupation phases— i.e., Moundville I, Moundville II, Moundville III, and Moundville IV (see Steponaitis 1983; Knight and Steponaitis 1998:fig.1.2). The widely used and resilient pottery chronology and classification system developed by Steponaitis (1983) were the principal references I used to identify and classify the pottery recovered from the Mound V excavations. Other ceramic artifacts also are discussed, as their presence possibly indicates differential use of particular features and stratigraphic deposits.

Moundville pottery exhibits a wide array of diagnostic features amenable to relatively precise dating, including variability in pastes, surface treatments, and decorative accents (Figure 3.1). Nonlocal pottery and their identifiable features also were relatively dated and, alongside their contemporaneous local Moundville counterparts, assigned to an appropriate Moundville occupation phase. Only types and varieties, painted treatments, vessel shapes, secondary vessel shape features, and effigies or effigy features represented in Mound V's pottery assemblage are discussed.

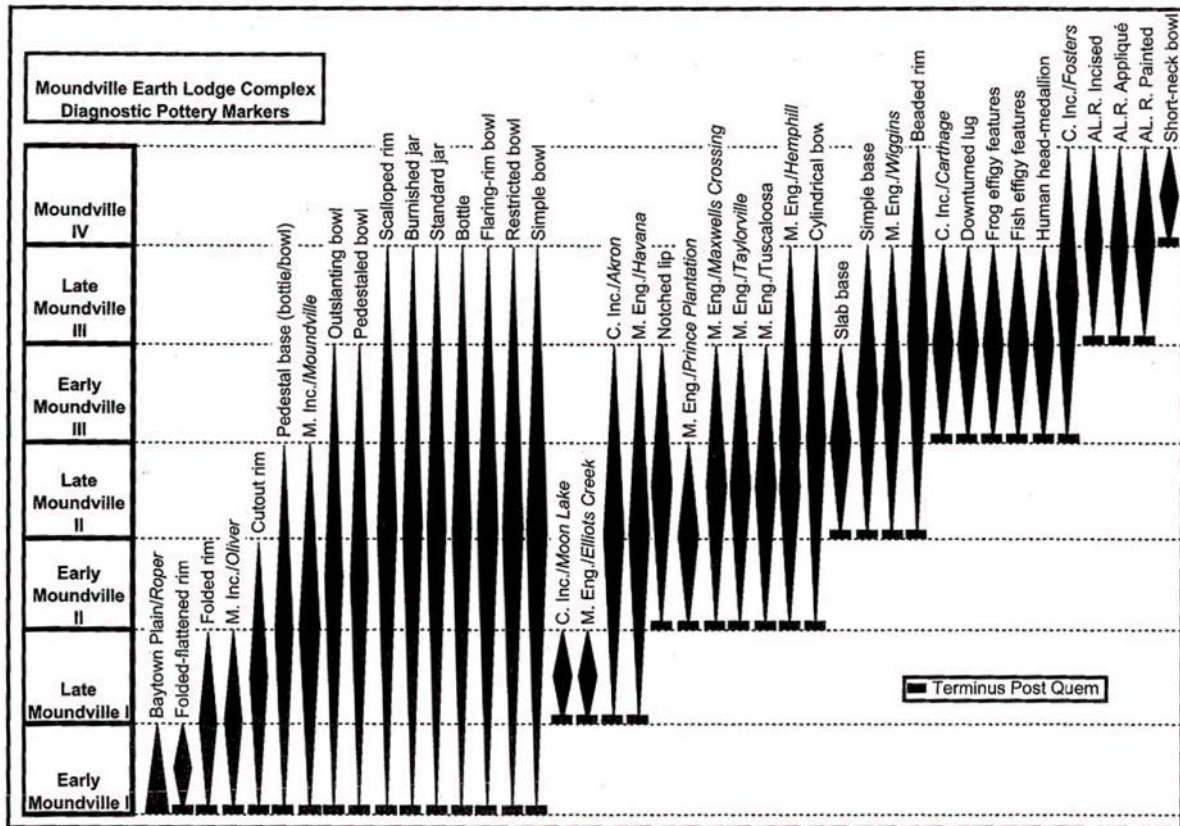


Figure 3.1. Diagnostic pottery markers of the earth lodge complex's assemblage. Adapted from Knight (n.d.:fig. 2.1).

Unless otherwise noted, information related to Moundville's pottery and chronology was derived from Steponaitis (1983).

Types and Varieties

The Moundville site assemblage's two main local pottery types were identified in Mound V's assemblage: Mississippi Plain and Bell Plain. As indicated by their type names, Mississippi Plain and Bell Plain are not decorated and are distinguished by their temper and surface treatment; these latter two differences also affected each type's functional use.

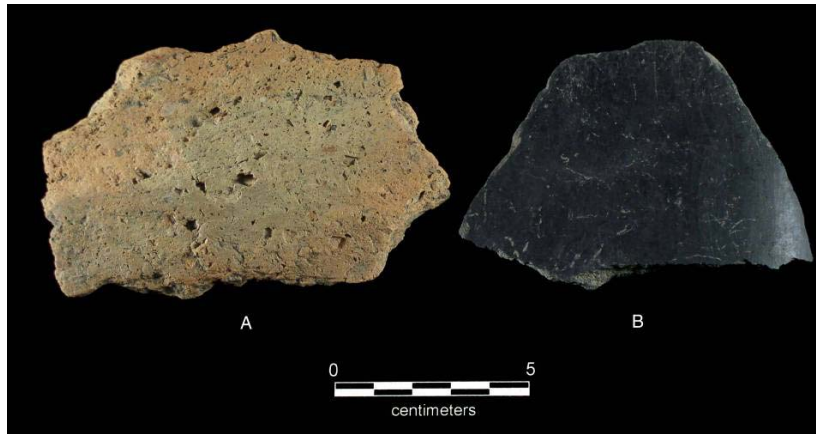


Figure 3.2. Mississippi Plain (A) and Bell Plain (B) pottery.

Mississippi Plain is coarse shell-tempered and likely was used as utility ware for cooking, processing, and storing dry foodstuffs (Figure 3.2A). In contrast, Bell Plain is finely shell-tempered and burnished, and likely was used for non-cooking service needs (Figure 3.2B). Although Mississippi Plain and Bell Plain are Moundville’s baseline pottery types, their temporal ubiquity makes them inappropriate diagnostic markers. Oftentimes, sherds of these plain pottery types were ground into circular playing disks, or discoidals (Figure 3.3). Like their parent pottery type, these playing disks are non-diagnostic.



Figure 3.3. Mississippi Plain playing disks, or discoidals.

Moundville's most common decorated types are more temporally confined than Mississippi Plain and Bell Plain: Moundville Incised, Carthage Incised, and Moundville Engraved (Figures 3.4, 3.5, and 3.6, respectively). As a pottery type, Moundville Incised is distinguished by curvilinear motifs that were incised into a given vessel's moist surface; during incision, small clay beads or burrs often formed along the motif's margins.

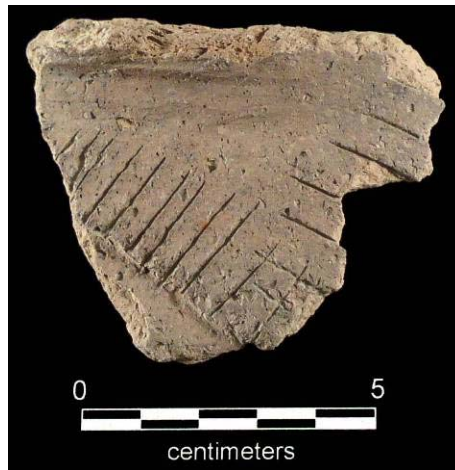


Figure 3.4. Moundville Incised, *var. Moundville* jar fragment. Easily identified by its “eyelash” motif, this Moundville Incised variety is a Moundville I-Moundville II diagnostic.

In contrast, Carthage Incised is a burnished pottery type, the anthropomorphic and zoomorphic motifs of which were incised into a given vessel's leather-hard surface; these motifs' lines usually were broader and shallower than those of Moundville Incised. Unlike the previous two incised pottery types, Moundville Engraved is a burnished pottery type, the fine, closely-spaced, curvilinear, anthropomorphic or zoomorphic motifs of which were engraved into a given vessel's fire-hardened surface.



Figure 3.5. Carthage Incised rims.



Figure 3.6. Moundville Engraved, *var. Wiggins*.

Carthage Incised and Moundville Engraved anthropomorphic and zoomorphic motifs depict feathered serpents, bones, and deaths' heads (Figures 3.7 and 3.8)—all motifs that have been ascribed to the Southeastern Ceremonial Complex (SECC), a group of related art styles believed to have been utilized throughout the Mississippian Southeast (see Waring and Holder 1945a; Steponaitis 1983:58-63; Hudson 1984; Muller 1989; Fundaburk and Foreman 2001; contributions in Reilly and Garber 2007; but also see Brown 1976; Knight 2006). With regard to temporal distribution, the Moundville Incised type and its varieties often were confined to the early Moundville occupation phases—i.e., Moundville I to late Moundville II—while the Carthage Incised and Moundville Engraved types were used throughout Moundville's occupation—i.e., Moundville I to Moundville IV; however, the latter two types' pottery varieties are more temporally confined.



Figure 3.7. Carthage Incised, *var. Fosters* flaring-rim bowl rim fragment. Two partial fingertips are visible in the sherd's lower left-hand corner.



Figure 3.8. Moundville Engraved, *var. Hemphill* sun circle motifs.

In addition to the complex's multiple local diagnostic types and varieties, a few nonlocal sherds also were recovered (Figures 3.9., 3.10., and 3.11). When these types and varieties' broad, Middle-Late Mississippian use-dates are translated into Moundville's occupation sequence, most of these sherds' dates correspond to Moundville III or earlier.



Figure 3.9. Pensacola Incised, *var. Gasque*.



Figure 3.10. Parkin Punctated, *var. Parkin*.

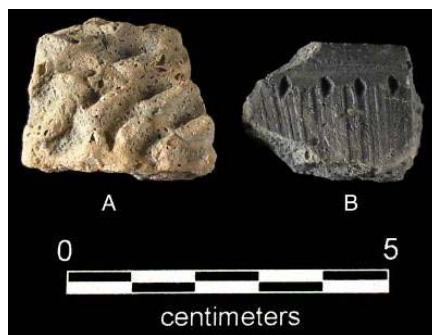


Figure 3.11. (A) Pouncey Ridge Pinched, *var. unspecified* and (B) Plaquemine Brushed, *var. unspecified*.



Figure 3.12. Alabama River Painted, *var. Cork* (red on white painted) flaring-rim bowl fragment. (Photograph courtesy of Dr. Vernon J. Knight, Jr.)

Only one definitive, nonlocal Moundville IV diagnostic was recovered: Alabama River Painted, *var. Cork* (see Curren 1984:219); red and white rectilinear patterns, applied to a flaring-rim bowl's interior rim, characterized this pottery type and variety (Figure 3.12).

Although late Alabama River phase pottery types, like Alabama River Appliqué and Alabama River Incised, initially were classified by Steponaitis (1983) as firm Moundville IV diagnostics, Knight (n.d.:67, 286-288) suggests that at least some of these pottery types were present earlier, during the late Moundville III phase.

Painted Treatments

Moundville's burnished pottery—i.e., Bell Plain, Carthage Incised, and Moundville Engraved types—were black filmed, meaning black pigment or soot was applied to the pottery surfaces. Red and white filmed treatments each were applied in the same manner as black filming. Unlike polychromatic painted treatments, these monochromatic painted treatments are not reliable diagnostic markers, as they were used throughout Moundville's

occupation (Figure 3.13); however, these painted wares often are more frequently recovered from elite contexts within the Moundville site. More temporally confined or rare painted treatments include the following: red on white, black on white, and white on red (Figures 3.14 and 3.15). Hemagraved pottery is peripherally associated with painted treatments and is characterized by motifs with red paint smudged into their engraved lines.



Figure 3.13. White and red painted sherds. **Figure 3.14.** Red on white painted sherds.



Figure 3.15. Red on white painted sherds.

Black on white and hemagraved pottery are Moundville I diagnostics. Red on white painted treatments, of which there are multiple subsidiaries, are Moundville III diagnostics; however, certain of the subsidiary red on white treatments date earlier, to Moundville II (see Knight n.d.:139-140).

Vessel Shapes

As with types, varieties, and painted treatments, vessel shapes varied in time, space, and proportion. For this study, only those sherds large enough to identify the specific vessel shape were enumerated. To be identified accurately, such sherds had to have an inflection point—the confluence of a vessel’s body and neck—and rim. Sherds that exhibited only the rim were classified as “indeterminable” vessel shapes. Although Moundville’s three generic vessel shapes—jar, bowl, and bottle—were well represented in the complex’s stratigraphic deposits, one other, more unusual vessel shape was represented minimally: the plate, herein defined as a vessel shape characterized by a relatively thin profile and no evidence of a rim-body inflection point (Figure 3.16).



Figure 3.16. Plate fragment with notched rim.

Like pottery types, Moundville’s generic vessel shapes have multiple stylistic and functional permutations—i.e., each of the generic jar, bowl, and bottle shapes was further subdivided into multiple, more specific categories. Each of these specific shape categories was more temporally confined than the affiliated generic shape.



Figure 3.17. Jar collars with handles. Although each is slightly different, all date relatively late in Moundville’s occupation sequence: (A) Moundville III jar handle with single node; (B) late Moundville III jar handle; (C) late Moundville III-Moundville IV, appliqué-like jar handle.

Of Moundville’s baseline vessel shapes, the jar was perhaps the most common utility ware (Figure 3.17). Neckless, standard, and burnished jars are the generic jar’s three varieties. As their names imply, two of the three varieties were unburnished and one was burnished (Figure 3.18). The neckless variety is a Moundville I diagnostic. The standard and burnished jar varieties were utilized throughout Moundville’s occupation.



Figure 3.18. Burnished jar fragment.



Figure 3.19. Three bowl shape varieties identified in the Moundville earth lodge complex’s deposits: (A) short-neck bowl; (B) restricted bowl; (C-D) flaring-rim bowls.

Like the jar, the bowl also had multiple varieties: cylindrical, flaring-rim, outslanting, pedestaled, restricted, short-neck, and simple (Figure 3.19). Bowl sherds that did not conform to these seven bowl shapes were lumped into an “other” bowl category (Figure 3.20). Of the bowl varieties, the following have shorter use-lives than their counterparts: the pedestaled bowl was utilized from Moundville I to early Moundville III; the outslanting bowl and shallow flaring-rim bowls likely were utilized from late Moundville I to early Moundville III; the cylindrical bowl was utilized from early Moundville II to late Moundville III; and the short-neck bowl and deep flaring-rim bowl were utilized only during Moundville III. Of the remaining bowl varieties, the restricted bowl and simple bowl were utilized throughout the Moundville sequence.



Figure 3.20. Unusual, coarse shell-tempered “other” bowl fragments. These fragments likely were once a part of a shallow, hand-modeled, expediently-made bowl.



Figure 3.21. Red painted bottle neck fragment.

Bottle necks and bases were Moundville bottles’ primary and secondary markers, respectively. Unlike jar and bowl shapes’ varieties, bottle varieties cannot be as easily identified by their rim, neck (Figure 3.21), or corner point; a bottle’s corner point is analogous to a jar’s or bowl’s inflection point: it is the point at which a bottle’s neck meets the body. Bottle corner points were identified as slightly curved body sherds that exhibited relatively planar, broken surfaces where the bottles’ necks broke away from the bottles’ bodies (Figure 3.22A).

Although bottle corner points and necks were identifiable (Figures 3.22B and 3.22C, respectively), it was not possible to attribute them to a specific bottle variety without the remainder of the vessel, as the main markers for differentiating bottle varieties typically are

confined to the body. That said, I did not enumerate bottle varieties; instead, I lumped identifiable bottle features—i.e., necks and corner points—into a generic “bottle” shape category. Additionally, I classified all bases—slab, pedestal, or simple (Figures 3.23A-B, 3.23C, and 3.23D, respectively)—into a single “bowl/bottle” category; in hindsight, this was not the best route to take, as bowls typically have burnished interiors and bottles have unburnished interiors and thus can be distinguished relatively easily. Only a base that exhibited enough of its respective vessel’s body for a more precise classification was counted into the appropriate vessel shape category.



Figure 3.22. Diagnostic bottle features: (A) the point at which the bottle neck broke away from the bottle body is located in the white area; (B) burnished bottle neck and rim; (C) intact corner point.



Figure 3.23. Moundville’s three chronologically-distinct bowl-bottle base types: (A-B) slab bases; (C) pedestal base; (D) simple base.

The bowl-bottle bases classified in the “bowl/bottle” category occupied the following temporal positions: the pedestal base was utilized from Moundville I to late Moundville II; the slab base was utilized from late Moundville II to late Moundville III; the simple base was utilized throughout Moundville’s occupation.

Secondary Vessel Shape Features and Effigy Features

Of the diagnostic markers for Moundville pottery, secondary vessel shape features are the most useful; these features include the following: appliqué neck fillet, beaded rim, downturned lug, folded rim, folded-flattened rim, indentations, notched everted lip, notched lip, and scalloped rim. Proper execution of these secondary vessel shape features required either the excision or application of clay from or onto a vessel’s surface. Of the secondary vessel shape features mentioned, neck fillets, beaded rims, and downturned lugs were additive features—i.e., they were applied to a vessel (Figures 3.24 and 3.25). Contrastingly, scalloped rims were subtractive features—i.e., they were produced via the excision of clay from the vessel. Occupying a rather liminal position within the secondary vessel shape feature continuum, indentations required neither clay addition nor subtraction—they were impressed into a vessel’s malleable clay surface (Figure 3.26).



Figure 3.24. Simple bowl sherds with beaded rims.



Figure 3.25. Alabama River Appliqué jar rims with appliqué neck fillets.



Figure 3.26. Indentations on Moundville Engraved pottery. Indentations commonly adorned Moundville Engraved pottery, specifically *vars. Tuscaloosa, Northport, and Havana.*

Comparable to additive secondary vessel shape features, Moundville effigies often were applied to bowls' rims; however, burnished jars also exhibited “structural effigies” (Steponaitis 1983:74)—effigies incorporated into a vessel body to make the entire vessel resemble the effigy subject (e.g., Figures 3.27 and 3.28). Typically, effigies were zoomorphic or anthropomorphic in form, with fish, frog, and human head-medallion being the most common (Figures 3.29 and 3.30).



Figure 3.27. Burnished jar with partial frog effigy limb on shoulder.

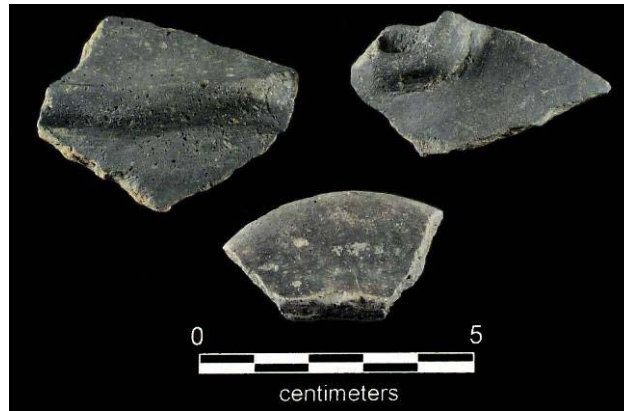


Figure 3.28. Effigy features. Two sherds with partial effigy limbs (top) and a partial effigy tail (bottom).



Figure 3.29. Suckerfish effigy.



Figure 3.30. Human-head medallion effigy.

Chronologically-early effigies often were inward-facing, attenuated avian figures applied to vessel rims; however, through time, effigies increased in thickness and faced outward. As such, an effigy's thickness, the direction to which it faces, and its subject—be it mammalian, avian, amphibian, or reptilian—make possible a rough attribution of the effigy to a Moundville occupation phase. Over time, Moundville I-Moundville II avian effigies were eclipsed in popularity by the later fish, frog, and human head-medallion effigies.

Other Ceramic Artifacts

In addition to Moundville's diagnostic pottery, non-diagnostic ceramic artifacts also were recovered from the complex's features and stratigraphic deposits. Although these artifacts cannot be used to date such features or deposits, their presence alone can indicate differential use of the features or deposits with which they were associated.



Figure 3.31. Clay owl figurine.



Figure 3.32. White-painted clay bead.



Figure 3.33. Incised clay pipe fragment.



Figure 3.34: Painted raptor effigy pipe fragment.

Four artifacts in this category were recovered, but each was distinctive: An owl figurine, a white painted bead, and a pipe fragment were made of untempered clay (Figures 3.31, 3.32, and 3.33, respectively). Additionally, a red on white painted, clay effigy pipe fragment also was recovered; this possibly was fine shell-tempered (Figure 3.34). Knight suspected that

both pipe fragments are from exotic forms. More specifically, the painted effigy possibly is a “canoe-pipe” fragment.

Summation

In sum, the pottery recovered from the complex’s features and deposits were classified by their type and variety, painted treatment, vessel shape, secondary vessel shape features, and effigies or effigy features—categories entrenched in the Moundville site’s pottery chronology and classification system. Once classified, each sherd was assigned to a chronological phase or time-span within the Moundville site’s occupation sequence. The results of the pottery analysis are detailed in Chapter 5.

Chapter 4

Stone, Mineral Pigments, Copper, and Shell

Multiple studies of Moundville's economy and craft production specifically reference lithic artifacts and ground-stone artifacts and the roles they, as well as natural mineral pigments, copper, and shell played in the lives of Moundville's inhabitants (e.g. Peebles 1971; Welch 1991; Blitz 1993b:153-178; Scarry 1998; Wilson 2001). Not only were these artifacts used as status markers, but, like pottery, their regulation and control by Moundville's elites possibly undergirded and reified elite power at the site. Unlike diagnostic pottery, these artifacts are less amenable to chronological dating; as such, this chapter contains descriptions of these artifacts, followed by tentative conclusions regarding their utility for understanding the functions of the complex and Mound V.

No stone was recovered from the final summit structure's deposits, thus no mention of the structure is made in this chapter. Additionally, *Extraneous features*, *CCC fill*, and *Central Mound V* yielded relatively little material and were not considered in the final analysis; however, their associated artifacts were recorded (Appendix F: Table F.3 and Appendix G: Table G.3). This chapter was divided into two sections, the first of which includes descriptions of unmodified stone and mineral pigments. The second section includes descriptions of the modified stone, copper, and shell artifacts. Both sections also include the materials' likely source areas and their intra-site significance.

Unmodified Stone and Mineral Pigments

Sandstone was one of the most abundant local, raw materials available to Moundville’s population. For descriptive reasons, sandstone varieties are distinguished by the amount of hematite, limonite, or muscovite mica they contain. In total, four sandstone varieties are distinguished at the Moundville site: brown or hematitic, fine gray micaceous, tabular hematitic or limonitic, and hematitic conglomerate. Of these varieties, fine gray micaceous sandstone, extracted from a Pottsville formation 30 kilometers north of Moundville, was the primary raw material used to produce Moundville’s sandstone “paint palettes” (Welch 1991:166; Scarry 1998:75).

Locally-derived pigment-quality hematite and limonite also were enumerated, as large quantities of such mineral pigments often are indicative of craft manufacture; hematite is a red pigmented mineral and limonite is a yellow pigmented mineral. Naturally-occurring glauconite—a blue-green clay formed within sedimentary rock deposits (Figure 4.1)—was counted, as pellets of this clay could have been extracted and used similarly as hematite and limonite (Figure 4.2). Trace evidence of ground pigment has been identified on Moundville’s sandstone paint palettes and it is likely that the three aforementioned pigments were ground on these palettes; as such, these pigments likely were used as paint (Welch 1991:166; see also Futato 1983:159).



Figure 4.1. Glauconite.



Figure 4.2. Pigment quality hematite.

With the exception of fine gray micaceous sandstone and the specified mineral pigments, the locally-available, unmodified sandstone is relatively insignificant. In contrast, moderate quantities of uncommon, nonlocal stone are quite important, as their presence possibly indicates that Mound V's peripheries, and possibly even the complex itself, were sites of craft manufacture. Of the nonlocal stone recovered, muscovite mica, galena, and greenstone shatter are of particular interest, as they are widely thought to have been high-status materials in-site and, like the fine gray micaceous sandstone, possibly evidence craft manufacture.

The muscovite mica in the complex's stone assemblage possibly was shatter or scrap from ornament manufacture; such scrap mica also could have been ground and used for bodily adornment as "glitterlike pigment" (Scarry 1998:75). Geographically, the closest muscovite mica source is the Appalachian Mountains in northeast Alabama (Scarry 1998:75). Fairly large pieces of galena have been recovered from Moundville burials (Welch 1991:173); however, the galena fragments recovered from the complex's deposits were relatively small. Source sites for Moundville's galena have been identified in southeastern Missouri and the Upper Mississippi Valley, specifically in Illinois, Wisconsin, and Iowa (Welch 1991:173). Unlike other stone, galena likely was valued "as is" in its raw, unmodified state and used as pigment. The Hillabee formation in east-central Alabama likely was the source site for Moundville's greenstone, which was used primarily for celt manufacture (Gall and Steponaitis 2001). According to Welch (1991:185), greenstone celts were produced in-site, north of Mound R; however, Wilson (2001) concludes that the celts were not produced in-site, but rather at sites near the Hillabee formation, and then were

imported to Moundville, circulated, and subsequently recycled and refurbished into other greenstone implements.

Modified Stone

Flaked debitage and lithic artifacts were classified by their raw material and their stage of manufacture at the time of deposition—e.g., preform, complete point, shatter, primary, secondary, or tertiary flake. Flakes without identifiable, stage-specific markers—e.g., percussion bulb or cortex—were classified as “other” flakes.

Local Tuscaloosa-gravel and nonlocal cherts, many of which are Ft. Payne varieties from northern Alabama source areas, constitute the majority of the complex’s flaked stone debitage. Of the Ft. Payne varieties identified, the blue-gray variety that outcrops in the Tennessee Valley is the most common; a fossiliferous variety that outcrops in Northeast Mississippi also is present (see Futato 1983:156). The stone assemblage also contains crystalline quartz, crystal quartz, and nonlocal Tallahatta quartzite debitage; Tallahatta quartzite outcrops in Southwest Alabama and Southeast Mississippi (Futato 1983:161). Shatter and other flakes constitute the majority of the stone assemblage’s flaked debitage; biface reduction, blade-like, and decortication flakes constitute the remainder of the flaked debitage.



Figure 4.3. Microdrills/perforators.

Lithic artifacts were tabulated and classified by tool type: core or core fragment, microdrill/perforator, preform I or preform II, and Madison point. Cores and core fragments were characterized by overt, longitudinal, parallel flaking scars—evidence of repeated flake removal from the core body. Oftentimes cores are not considered tools in their own right; however, cores were classified as tools to distinguish them from lithic debitage. Microdrills/perforators were classified as relatively small, asymmetrical tools that exhibited a flaked projection from the body proper (Figure 4.3). Preforms were distinguished from complete points by their flaking scars, amount of cortex, and overall completeness: a preform I exhibited more cortex and less flaking or edge-retouching than a preform II (cf. Futato 1983:167).

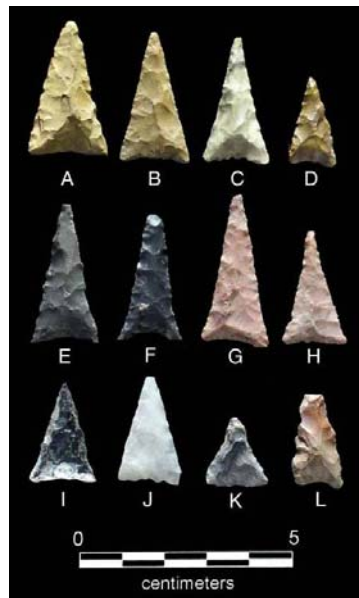


Figure 4.4. Mound V's projectile points: (A-D) Tuscaloosa-gravel chert; (E-F) Fort Payne chert; (G-H) heated fossiliferous and fossiliferous Ft. Payne chert, respectively; (I) crystal quartz; (J) crystalline quartz; (K) Fort Payne chert; and (L) Tuscaloosa-gravel preform I.

Madison projectile points were identified by their small size and shape (Figure 4.4); Dragoo (1990:22) notes that Madison points' shapes are comparable to isosceles or equilateral

triangles. Moderate quantities of tested pebbles and retouched flakes also were recovered. Retouched flakes were identified by their slightly worked surfaces and edges, which were serrated, flaked, or otherwise slightly modified; as expedient tools, retouched flakes likely served multiple purposes (Figure 4.5).

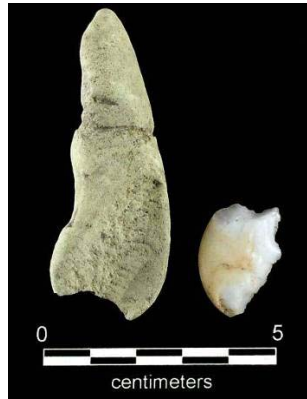


Figure 4.5. Retouched flakes.

Ground-stone tools were classified by raw material and tool type: ground sandstone, sandstone palette fragment, sandstone abrader, pendant fragment, hematitic sandstone saw, polished greenstone chip, and celt fragment. Moderate quantities of fragmented, ground sandstone were recovered, but they exhibit no identifiable markers that suggest their potential uses. Sandstone palette fragments also were identified (Figure 4.6). It is notable that the palette fragments were made of the same fine gray micaceous sandstone recovered in unmodified form from the complex's stratigraphic deposits. Of the identified ground-stone artifacts, tabular hematitic sandstone saws constitute the majority. Sandstone saws were distinguished by their tabular bodies and serrated edges (Figure 4.7). Shale pendant fragments also were identified; as a sedimentary rock, shale occurs in limestone and sandstone formations. Of the two pendant fragments recovered from the Mound V excavations, both are ovoid in shape, suggesting a similar shape for the intact pendant

(Figure 4.8). Pendant fragments lacked perforations through which cordage could be passed, lacked incised motifs typical of palette fragments, and were not thick enough to be celt fragments. Pendants and palettes often were products of craft manufacture and used as burial accoutrements and ceremonial paraphernalia. Conversely, hematitic sandstone saws were used to produce such crafts.

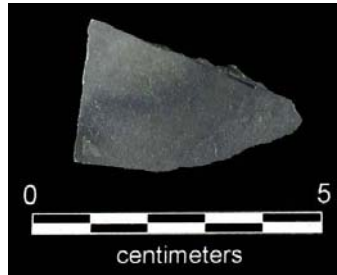


Figure 4.6. Gray micaceous sandstone palette fragment.



Figure 4.7. Hematitic sandstone saw fragments.



Figure 4.8. Shale pendant fragment.

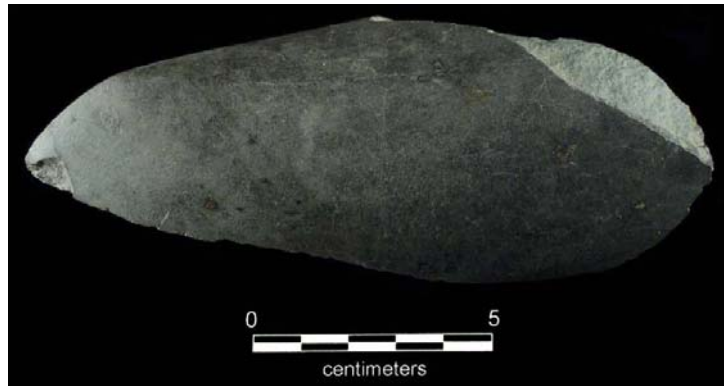


Figure 4.9. Greenstone celt fragment.

Polished greenstone chips also were identified; these chips likely are ground and polished debitage from celt edge-retouching. Greenstone celts likely were the primary tools produced from the Hillabee Greenstone imported to the site; these celts were used both as utilitarian tools and burial accoutrements (Figure 4.9).

Copper and Shell

Bead-like copper pellets and amorphous copper pieces were identified (Figure 4.10) and often are recovered from Moundville's elite contexts; copper source areas lie to the northeast of Moundville (Welch 1991:184). Although the patina makes it difficult to determine if these copper pieces were manipulated, given copper's importance within the site, it is unlikely that these pieces were not manipulated or intentionally included within particular deposits and features.

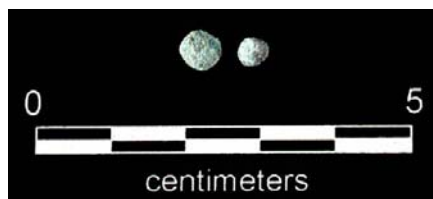


Figure 4.10. Copper pellets.



Figure 4.11. Eroded marine shell bead.

Only one shell artifact was identified: an eroded marine shell bead, crafted from columella material (Figure 4.11). Shell beads like this one have been recovered from elite contexts at Moundville, specifically elite burials, and are thought to have been a form of decoration and wealth (Knight and Steponaitis 1998:11-18).

Summation

The complex's assemblage contained a wide array of nonlocal and local unmodified stone, mineral pigments, debitage, lithic artifacts, and ground-stone artifacts. Several of these raw materials and artifacts are frequently recovered from crafting loci within the Moundville site and are considered to have been high-status goods. All stratigraphic data concerning these materials are presented and juxtaposed in Chapter 5. Tentative conclusions outline the potential utility of these materials for understanding the activities related to Mound V and its peripheries, both during the complex's mound-summit occupation and after its destruction.

Chapter 5

Artifact Analyses

Pottery data are used here to support the radiocarbon dates Knight (in press) assigned to the complex. Moreover, the data are used to date the complex's building stages and stratigraphic deposits. The pottery data are limited in how they can be used to deduce the complex's functions, as its stratigraphic deposits are secondary contexts. Only the complex's features were considered to contain primary-context material. Posthole artifacts are not the most reliable indicators of the complex's function. Regardless of this, artifacts from certain postholes and pit features, specifically Features 42 and 43, potentially can speak to those features' architectural importance.

For a more thorough interpretation of the pottery data, I discuss the complex's service-utility ware ratios after the primary pottery data are presented; such ratios are used to make tentative conclusions about Mound V activities, and, by extension, activities potentially related to the complex. That said, the pottery data are not used to "prove" the complex's functions; rather, their primary use is to date the complex's stratigraphic deposits.

Pottery recovered from *Extraneous features*, *Central Mound V*, and *CCC fill* were tabulated, but contained relatively little diagnostic pottery; thus, their data are not enumerated below (but see Appendix B: Table B.3; Appendix C: Table C.3; Appendix D: Table D.3). To be consistent with Chapter 3's format, I present the pottery data by pottery category—i.e., local and nonlocal types and varieties are discussed first, followed by painted treatments, vessel shapes, secondary vessel shape features, and effigies. Data that pertains to specific jar

and bowl categories are interjected into this latter lineup, after vessel shapes and before secondary vessel shape features. Other ceramic artifacts are discussed after the pottery data are presented.

Both buildings' pottery data are synthesized and presented below, with specific mention of the deposits' latest diagnostic pottery, which provides the deposits with a *terminus post quem*—the latest relative date to and after which the complex's deposits date. By dating the deposits in this way, it was possible to conclude that the complex's pottery assemblage is formally and stylistically compatible with a fifteenth-century occupation. Tentative suggestions also are made about activities related to Mound V and the complex.

Types and Varieties

A fraction of the 9,305 potsherds recovered from the complex's directly affiliated deposits were diagnostic (Table 5.1): 27% (63 of 230) of the earth lodge's decorated pottery were diagnostic and 28% (42 of 150) of Structure 2's decorated pottery were diagnostic. Table 5.1 shows that the complex's directly affiliated deposits contain Moundville II-Moundville III diagnostics, such as Moundville Engraved, *vars. Tuscaloosa, Hemphill, and Wiggins*, and Carthage Incised, *vars. Carthage and Fosters*. Nonlocal types and varieties that date to Moundville II-Moundville III also were recovered: Plaquemine Brushed, *var. unspecified*, Pensacola Incised, *var. Gasque*, D'Olive Incised, *var. unspecified*, and Parkin Punctated, *var. Parkin*. Minimal numbers of Alabama River Appliqué sherds also were recovered from the complex's latest deposits; these diagnostics likely date to late Moundville III. That said, the local diagnostics and nonlocal types and varieties from the complex's directly affiliated deposits are compatible with a fifteenth-century occupation.

Table 5.1. Local diagnostic type and variety counts by structure and stratigraphic deposit

Structure	Types and Varieties													Totals				
	Baytown Plain/Roper	M. Inc./Oliver	M. Inc./Moundville	C. Inc./Moon Lake	M. Eng./Elliot's Creek	C. Inc./Akron	M. Eng./Havana	M. Eng./Prince Plantation	M. Eng./Maxwells Crossing	M. Eng./Taylorville	M. Eng./Tuscatooosa	M. Eng./Hemphill	M. Eng./Wiggins		C. Inc./Carthage	C. Inc./Fosters	Alabama River Incised	Alabama River Appliqué
<i>Earth Lodge</i>																		
Humus	2					1					1		2					6
Overlying fill						1	1	1		1	1		3			3	1	12
Intrusive fea.																1		1
Roof/wall fall						1			1				1	3		1		7
Berm cover	1		2	1		3	1	1		6	16	1	2	1		1		36
Str. 1a/1b fea.	1							2				1	2					6
Str. 1b floor		1								1								2
Clean fill										1	1		1	1				4
Str. 1a floor			1		1	1	1					2						6
<i>Structure 2</i>																		
Humus	1										2							3
Upper levels	1		2			3	1	4		1	6	2	1			2		23
Str. 2b floor	1		1				5	2		2	4	6	1	1				23

The deposits overlying the complex contained a mixture of Moundville II and early Moundville III diagnostics, like Carthage Incised, *var. Carthage*, and nonlocal Pouncey Ridge Pinched, *var. unspecified*, but also contained late Moundville III diagnostics. Feature 39's intact Alabama River Incised, *var. unspecified* vessel and a partial Alabama River Painted, *var. Cork* flaring-rim bowl from *Overlying fill*, as well as Alabama River Appliqué sherds, date these overlying deposits to late Moundville III.

Painted Pottery

Red and white filmed sherds were represented in each of the complex's stratigraphic deposits; these sherds were the most common but least diagnostic of the painted pottery (Table 5.2). Two diagnostic painted treatments were identified, however: red on white and

white on red. Red on white sherds constitute the majority of the complex's diagnostic painted pottery. Although it is used by Steponaitis (1983:64) as a late Moundville III diagnostic, the red on white painted treatment is parsed by Knight (n.d:131-136, 286-288) into multiple, more temporally confined variations, only a few of which he considers Moundville III diagnostics. With this slightly altered classification, I consider the red on white painted treatment, as it pertains to the complex's painted pottery, to be an early Moundville III diagnostic rather than a late Moundville III diagnostic.

The complex's deposits contained a mixture of early painted treatments, like hemagraved and black on white, but the red on white treatment was present in all but the complex's earliest deposits—*Structure 1a floor* and the artifact-devoid *Structure 2a floor*. Deposits overlying the complex contained slightly higher numbers of red on white painted pottery than most of the complex's directly affiliated deposits; the only exception to this trend is *Berm cover*.

Table 5.2. Painted ware counts by structure and stratigraphic deposit.

<i>Structure</i> Deposit	Painted Treatment						
	<i>Red Filmed</i>	<i>White Filmed</i>	<i>Red on White</i>	<i>White on Red</i>	<i>Black on White</i>	<i>Negative Painted</i>	<i>Hemagraved</i>
<i>Earth Lodge</i>							
Humus	12	9					
Overlying fill	31	25	11	2			
Intrusive fea.							
Roof/wall fall	6	13	6				
Berm cover	62	50	12	2		1	
Str. 1a/1b fea.	9	5	2				1
Str. 1b floor	13	5	2				
Clean fill	1	9	1				
Str. 1a floor	7	2					1
<i>Structure 2</i>							
Humus	25	23	4				
Upper levels	41	36	1				1
Str. 2b floor	27	23	3	1	2	2	

Vessel Shapes

The complex's stratigraphic deposits had higher frequencies of jar and bowl sherds than bottle sherds; the plate was represented minimally (Table 5.3). Moreover, when one of these vessel shapes was represented in greatly reduced frequencies within a given deposit, the other vessel shape usually dominated with a substantially higher frequency. For instance, Structure 2's deposits contained higher frequencies of bowl sherds than jar sherds.

Table 5.3. Vessel percentages by structure and stratigraphic deposit.

<i>Structure:</i> Deposit	Vessel Shape					
	Jar	Bowl/Bottle	Bowl	Bottle	Plate	Indeterminable
<i>Earth Lodge:</i>						
Humus	23		23	7		47
Overlying fill	28		25	5		42
Roof/wall fall	30		47	7		16
Berm cover	21	2	31	12		34
Str. 1a/1b fea.	13		13	11		63
Str. 1b floor	48	3	17	3	3	26
Clean fill	52		20	8		20
Str. 1a floor	11		17	2		70
<i>Structure 2:</i>						
Humus	34		43	6		17
Upper levels	37	5	41	8		9
Str. 2b floor	26	2	46	12	1	13

This trend is not altogether unexpected and likely reflects only superficial differences in the use of these two common vessel shapes. Deposits overlying the complex contained comparable percentages of these vessel shapes, except for the plate.

Jar Shapes

As illustrated in the previous section, the complex's stratigraphic deposits contained a relatively high percentage of jar sherds. By and large, these sherds were portions of the Moundville site's three jar shapes: neckless, standard, and burnished.

Table 5.4. Jar percentages by structure and stratigraphic deposit.

<i>Structure:</i> Deposit	Jar Form		
	Burnished	Neckless	Standard
<i>Earth Lodge:</i>			
Humus			100
Overlying fill	5	5	90
Roof/wall fall	11		89
Berm cover	7	3	90
Str. 1a/1b fea.			100
Str. 1b floor	7		93
Clean fill		8	92
Str. 1a floor	20		80
<i>Structure 2:</i>			
Humus		17	83
Upper levels	6	12	82
Str. 2b floor	9	3	84

Of these three jar shapes, the standard jar is the most ubiquitous and burnished and neckless jar shapes are represented minimally (Table 5.4). This jar shape trend is similar in the deposits overlying the complex.

Bowl Shapes

Most of the bowl sherds in the complex's stratigraphic deposits were portions of Moundville's multiple bowl shapes: flaring-rim, restricted, short-neck, simple, cylindrical, outslanting, and pedestaled. An "other" bowl category was used as a catch-all for bowl sherds that did not conform to the rim and body characteristics of the former seven bowl shapes. Of these seven bowl shape categories, the flaring-rim bowl and simple bowl constituted the highest percentages per stratigraphic deposit (Table 5.5). Restricted and short-neck bowls constituted relatively moderate percentages, and the remaining bowl shapes were represented minimally.

Table 5.5. Bowl percentages by structure and stratigraphic deposit.

<i>Structure:</i> Deposit	Bowl Shape							
	Flaring-rim	Restricted	Short-neck	Simple	Cylindrical	Outslanting	Pedestaled	Other
<i>Earth Lodge:</i>								
Humus	44	14		14	14			14
Overlying fill	32	5	16	37				10
Roof/wall fall	29			57				14
Berm cover	17	19	7	42	7			8
Str. 1a/1b fea.	38			38	12	12		
Str. 1b floor	40	20		20				20
Clean fill	40	20		40				
Str. 1a floor				100				
<i>Structure 2:</i>								
Humus	26	7	7	46		7	7	
Upper levels	21	8	3	45	5			18
Str. 2b floor	14	7	7	58	4	6		4

This bowl shape trend is similar in the deposits overlying the complex, in that simple and flaring-rim bowls are the most common, followed by restricted and short-neck bowls; the remaining bowl shapes are represented minimally.

Secondary Vessel Shape Features and Effigies

The complex's vessel shapes exhibited several diagnostic secondary vessel shape features. For many of the vessel shapes, it is their secondary vessel shape features and effigies that provide the means to more precisely date each vessel shape. Of the diagnostic secondary vessel shape features and effigies recovered from the complex's stratigraphic deposits, the following had use-lives that extended through Moundville III and into Moundville IV: beaded and scalloped rims, downturned lug, and fish, frog, and human head-medallion effigies. Most of the complex's stratigraphic deposits contained a mixture of these diagnostics. Other secondary vessel shape features were represented minimally: cutout rim, notched lip, appliqué neck fillet, and indentations.

Service-Utility Ware Ratios

As stated previously, the pottery data is limited in its ability to be used to posit the complex's functions, as the pottery was recovered from secondary contexts; however, tentative suggestions about activities at Mound V's peripheries are possible and based on the pottery from the complex's secondary deposits. Due to the fact that each deposit's matrix was relatively uniform, I assumed that the fill for each of the complex's secondary deposits was extracted from one locus and not intermixed with fill from other loci.

Table 5.6. Service-utility (S:U) ware percentages and ratios by structure and stratigraphic deposit.

<i>Structure:</i> Deposit	Percentage		S:U Ratio
	Service	Utility	
<i>Earth Lodge:</i>			
Humus	28	72	0.39
Overlying fill	25	75	0.33
Roof/wall fall	31	69	0.45
Berm cover	30	70	0.43
Str. 1a/1b fea.	39	61	0.64
Str. 1b floor	29	71	0.41
Clean fill	28	72	0.39
Str. 1a floor	34	66	0.52
<i>Structure 2:</i>			
Humus	22	78	0.28
Upper levels	29	71	0.41
Str. 2b floor	33	67	0.49
Str. 2a floor	20	80	0.25

Per each of the complex's directly affiliated deposits, the service-utility ware ratios indicate a significant bias for cooking ware (Table 5.6). Although the porosity of cooking vessels made them highly resistant to thermal shock, they were more susceptible to breakage via mechanical stress. Due to this susceptibility, the service-utility ware ratios could be resultant of a higher frequency of broken cooking vessels than serving vessels; however, such an explanation would be more likely if Table 5.6's vessel percentages were less polarized.

From the ratios, then, it is likely that cooking vessels were used more frequently than serving vessels at Mound V's peripheries.

Table 5.7. Comparison of service-utility ware ratios for Mounds Q, E, G, and V. Service-utility ware ratios for Mounds Q, E, and G were derived from Taft (1996:table 6).

Mound	Serving	Utility	S:U Ratio
Mound Q	0.25	0.75	0.33
Mound E	0.24	0.76	0.32
Mound G	0.21	0.79	0.27
Mound V	0.29	0.71	0.41

To extend the service-utility ware ratio discussion beyond that of Mound V's earth lodge complex and to other Moundville contexts, a composite service-utility ware ratio for Mound V was calculated and compared to the service-utility ware ratios Taft (1996:table 6) enumerated for Mounds Q, E, and G (Table 5.7); service and utility ware from all of Mound V's deposits were included in its composite service-utility ratio. Of these three mounds, Mounds Q and G are the most comparable to Mound V; however Mound G's assemblage, like that of Mound E, conformed more to a restricted activity range typical of residence mounds. Mound Q, a "diverse activity mound" (Taft 1996:67), was believed to have been a site for "large group communal food activities" that required numerous large storage vessels, like jars, and all sizes of utility ware (Taft 1996:68). Moreover, Taft (1996:67 *sensu* Welch and Scarry 1995:412) emphasizes that Mound Q's high frequencies of flaring-rim bowls suggest the public presentation of food.

Even though Mound V's deposits were largely secondary, their composite service-utility ratio is unusually high and possibly indicative of how Mound V's peripheries were used. Despite the fact that Mound V's vessels were not measured, the high proportion of jars and utility ware, the proportion of flaring-rim bowls, and the multiple bowl shapes per

stratigraphic deposit suggest that activities comparable to those posited by Taft for Mound Q potentially took place at and around Mound V. That said, since the complex's soil fills likely were extracted from Mound V's peripheries, it is possible that these same activities were associated with the complex. The high proportion of simple bowls also could indicate that food was being doled out to large groups of people (cf. Blitz 1993a). Albeit tentative, such a supposition is plausible, as earth lodges are thought to have served as public buildings and likely hosted such events (cf. Hally 1994:154).

Other Ceramic Artifacts

As stated in Chapter 3, the complex yielded three unusual, untempered clay artifacts: an owl figurine, a white painted bead, and a pipe fragment. The former two artifacts were recovered from specific features associated with their respective structure floors, and the pipe fragment was recovered from *Berm cover*. In addition to the untempered pipe fragment, *Berm cover* also yielded a negative painted, red on white, engraved raptor effigy pipe fragment that possibly was fine shell-tempered. Although these artifacts are non-diagnostic, they do provide insight into the types of activities that potentially occurred in and around the complex and Mound V.

Of the assemblage's other ceramic artifacts, Feature 12's free-standing owl figurine is the most intriguing. Moore (1905:190) identified a comparable, but "grotesque" figurine of a hump-backed creature north of Mound F and presumed it to have been a toy. It is possible that the owl figurine also was a toy that was mistakenly swept into the Feature 12 post line during construction activities. Conversely, the figurine also could have been a ritually-significant inclusion, like the copper pellets included in the fills of particularly salient

architectural features. A potential rationale for why this figurine was included within Structure 2's west wall line is provided in Chapter 7's conclusions.

Feature 43's white painted bead is relatively large and likely was a decorative accessory. The fact that the bead was recovered from one of the two presumed burials intrusive to *Structure 1b floor* possibly indicates its use as a burial accoutrement.

According to Knight's initial assessment, *Berm cover*'s two pipe fragments are exotic forms, and the painted fragment is characteristic of a "canoe-pipe." The incised, untempered pipe fragment exhibited minor incising along its top edge and the top of a tubular chamber, identifiable in the fragment's lower center, likely allowed the passage of smoke.

Summation of Pottery and Other Ceramic Artifacts

As mentioned previously, the matrices of the complex's stratigraphic deposits were secondary contexts. Only the complex's features were considered to contain primary-context material. Posthole contents are limited in their ability to speak to the activities that occurred in and around the complex and Mound V; however, the earth lodge's two pit features and their contents are a bit more telling of such activities. The pottery data were used primarily to support the complex's fifteenth-century radiocarbon dates, but also were used to posit the activities that occurred at and around the complex and Mound V.

The complex's diagnostic types and varieties and nonlocal sherds provide relatively similar dates for its directly affiliated stratigraphic deposits. Some diagnostics, like Carthage Incised, *var. Fosters*, are now believed to date earlier than Steponaitis (1983) initially suspected (Knight n.d.:77-85). And while several of the complex's diagnostics first appear during Moundville II, such as multiple Moundville Engraved varieties, their use-lives extend

through Moundville III. That said, most of the diagnostic types and varieties recovered from the complex's features and directly affiliated stratigraphic deposits either date to early Moundville III or have use-lives that extend through Moundville III; thus, these diagnostics are compatible with a fifteenth-century occupation.

The presence of red on white painted sherds in most of the complex's stratigraphic deposits is significant for dating purposes. Used here as an early Moundville III diagnostic, the red on white painted treatment provides the complex's stratigraphic deposits with an early Moundville III *terminus post quem*, which is compatible with a fifteenth-century occupation and the relative date provided by the diagnostic types and varieties.

Certain of the complex's diagnostic vessel shapes, like short-neck bowls, firmly date the complex's stratigraphic deposits to Moundville III. Simple bowls with beaded rims were relatively common in the complex's deposits and are relatively reliable Moundville III diagnostics. Additionally, Moundville III effigies, like fish and human head-medallion, and effigy features also were present and substantiate the complex's early Moundville III *terminus post quem*.

All told, the complex's stratigraphic deposits yielded diagnostic pottery markers that provide the complex with an early Moundville III *terminus post quem*. That said, the pottery data are compatible with a fifteenth-century occupation and Knight's radiocarbon dates. Assigning the complex an early Moundville III *terminus post quem* necessitates the assignment of a *terminus ante quem* for the complex. Given that there are slight differences in how Steponaitis (1983) and Knight (n.d.) date particular Moundville III and Moundville IV diagnostics, it was a bit more difficult to assign the complex a *terminus ante quem*—the relative date before which the complex dates. The most logical course was to adjudge a

terminus ante quem by more closely analyzing the final events related to the complex, specifically its decommission, its potential commemoration with the Alabama River Incised vessel, and its capping by *Overlying fill*.

Late Moundville III pottery diagnostics were recovered both from the complex's latest deposits and the deposits overlying the complex, specifically the earth lodge's *Overlying fill*, Structure 2's *Upper levels*, and Feature 39. The presence of late diagnostics in these later deposits, like Alabama River Appliqué, Alabama River Incised, *var. unspecified*, and Alabama River Painted, *var. Cork*, suggest that the final events related to the complex date to late Moundville III, at the cusp of Moundville IV. If the former Alabama River pottery types retained their firm Moundville IV diagnostic designation, then the pottery data would indicate a temporal disconnect between the decommissioning and subsequent commemoration and capping of the complex. Considering the most recent, slight revision of the Moundville pottery chronology by Knight (n.d.), though, these former Moundville IV diagnostics likely are datable to late Moundville III. That said, Feature 39's Alabama River Incised, *var unspecified* vessel, *Overlying fill*'s partial Alabama River Incised, *var. Cork* flaring-rim bowl, and the Alabama River Appliqué sherds, both from *Overlying fill* and *Upper levels*, suggest a late, almost terminal Moundville III-early Moundville IV *terminus ante quem* for the complex.

Of the complex's few primary-context other ceramic artifacts, the owl figurine and white painted bead possibly offer evidence for activities related to the complex. Although the figurine might possibly have been included unintentionally, the clay bead likely was included as a burial accoutrement within one of the two burials that intruded *Structure 1b floor*.

Two pipe fragments and a Mississippi Plain playing disk, or discoidal, were recovered from *Berm cover*. Although these artifacts were included within re-deposited fill, and thus are less indicative of earth lodge activities than primary-context artifacts, their presence in *Berm cover*, a deposit that likely was present during both earth lodge stages, suggests that these types of artifacts were used in or around the complex. The use of pipes possibly coincided with meetings within the complex, as pipes typically were reserved for more esoteric activities. Regardless of its functions, the complex was a relatively short-lived architectural phenomenon, having a use-life from the first few decades of the fifteenth-century, during early Moundville III, to approximately AD 1500, late Moundville III (cf. Knight, in press:12; Knight n.d.:865-866).

Stone, Copper, Shell, and Mineral Pigments

The complex's stone, copper, and shell artifacts, and mineral pigments, are non-diagnostic and thus are not used to support the complex's fifteenth-century radiocarbon dates. Unmodified stone and mineral pigment counts, debitage and tool counts, and flaked tool and ground-stone tool counts are juxtaposed below. Of the unmodified stone, only greenstone, muscovite mica, and galena are mentioned specifically; all other unmodified stone was recorded, but is not addressed below (see Appendix G: Table G.1). Copper and shell artifacts are discussed after the stone and mineral pigment data are presented.

Both structures' unmodified stone and mineral pigment data are synthesized and discussed first, followed by lithic and ground-stone artifact data. Due to the minimal representation of lithic and ground-stone artifacts per deposit, raw counts are provided in lieu of percentages. A synoptic discussion of these materials and what they suggest about the use

of Mound V and its peripheries, both during and after the complex's mound-summit tenure, is included at the chapter's end.

Unmodified Stone and Mineral Pigments

Of the complex's unmodified stone, galena was relatively scarce and muscovite mica was the most abundant (Table 5.8). Greenstone was represented minimally. Hematite was the most frequently recovered mineral pigment and glauconite was relatively scarce. Limonite was more frequent than glauconite, but less so than hematite. Only one of the *Intrusive features*, Feature 47, yielded mineral pigments. Given that Feature 47 possibly was a clay extraction pit, it is interesting that it also contained other raw materials, like mineral pigments.

Table 5.8. Counts of selected unmodified stone and mineral pigments by structure and stratigraphic deposit.

<i>Structure</i> Deposit	Stone			Mineral Pigment		
	Greenstone	Mica	Galena	Hematite	Limonite	Glauconite
<i>Earth Lodge:</i>						
Humus	1	6		5		
Overlying fill	2	10		23	2	
Intrusive fea.				1	3	
Roof/wall fall	1					
Berm cover		6		27	2	6
Str. 1a/1b fea.		5		11	1	
Str. 1b floor		3		9	4	
Clean fill		11				
Str. 1a floor	1	11		4		2
<i>Structure 2:</i>						
Humus	4			11		
Upper levels	1	4	4	39	4	
Str. 2b floor	1	2		26	5	

The deposits overlying the complex contained a similar distribution of unmodified stone and mineral pigments.

Lithic Artifacts

Although the complex yielded a relatively small number of lithic artifacts (Table 5.9), several different tool types were represented, such as unifacial or expedient tools, Madison points, and microdrills/perforators. The most intriguing lithic artifact in the complex's assemblage is a crystal quartz Madison point recovered from Feature 43, one of the two presumed burials intrusive to *Structure 1b floor*.

Table 5.9. Flaked tool-to-debitage counts by structure and stratigraphic deposit.

<i>Structure</i> Deposit	Lithic Class	
	Flaked Tool	Flaked Debitage
<i>Earth Lodge:</i>		
Humus	4	9
Overlying fill	4	19
Intrusive fea.		1
Roof/wall fall	1	1
Berm cover	3	41
Str. 1a/1b fea.	1	8
Str. 1b floor	1	17
Clean fill		5
Str. 1a floor		5
<i>Structure 2:</i>		
Humus	2	21
Upper levels	6	19
Str. 2b floor	4	19

Debitage of various stages and materials constituted the majority of flaked stone within the complex's directly affiliated deposits. The deposits overlying the complex contained a comparable distribution of debitage and lithic artifacts.

Ground-stone Artifacts

The complex's stratigraphic deposits yielded a number of ground-stone artifacts, such as ground sandstone, hematitic sandstone saws, pendant and palette fragments, celt fragments, and polished greenstone chips (Table 5.10). One broken celt was recovered from

Structure 2's *Humus*. Most of these ground-stone artifacts were recovered from the complex's directly affiliated deposits and deposits overlying the complex, but a handful were included in feature fill. More specifically, each of the following four features contained one polished greenstone chip: Features 49B, 43, 54, and 58 of *Structure 1a floor*, *Structure 1b floor*, *Structure 1a/1b*, and *Structure 2b floor* respectively.

Table 5.10. Flaked tool-to-ground tool counts by structure and stratigraphic deposit.

<i>Structure</i> Deposit	Lithic Class	
	Flaked Tool	Ground Tool
<i>Earth Lodge:</i>		
Humus	4	6
Overlying fill	4	7
Roof/wall fall	1	1
Berm cover	3	9
Str. 1a/1b fea.	1	1
Str. 1b floor	1	1
Str. 1a floor		1
<i>Structure 2:</i>		
Humus	2	1
Upper levels	6	2
Str. 2b floor	4	2

Other fragmented artifacts also were included in specific features, such as a sandstone palette fragment in Structure 2's Feature 12.

Copper and Shell Artifacts

The complex yielded relatively few copper and shell artifacts (Table 5.11), but some of these artifacts were included in specific feature fills. For instance, *Structure 1a floor's* Feature 49B and *Structure 1a/1b's* Feature 54A each contained a copper pellet.

Table 5.11. Copper and shell artifact counts by structure and stratigraphic deposit.

<i>Structure</i> Deposit	<i>Artifact Class</i>	
	Copper	Shell
<i>Earth Lodge:</i>		
Berm cover	1	
Str. 1a/1b fea.	1	
Str. 1b floor		1
Str. 1a floor	1	
<i>Structure 2:</i>		
Upper levels	3	

Due to the fact that both copper and shell were relatively high-status materials, and often were used to craft elite controlled-objects, it is plausible that such objects were intentional inclusions in their respective features.

Summation of Stone, Copper, and Shell Artifacts, and Mineral Pigments

Of the complex's unmodified stone, galena was scarce and muscovite mica was abundant. Albeit minimal, the presence of mica and galena is significant, as those materials often are recovered from craft loci and elite residential areas within Moundville (e.g., Mound Q and north of Mound R, respectively). In both structures' deposits, hematite was the most frequently recovered mineral pigment and glauconite was relatively scarce. As stated in Chapter 4, such mineral pigments potentially were used as paint for crafting activities.

In addition to its unmodified stone and mineral pigments, the complex also contained a number of lithic and ground-stone artifacts, and a wide array of debitage. Although the vast majority of the complex's flaked debitage was constituted of nonlocal Ft. Payne chert and local Tuscaloosa-gravel chert, a number of less common, nonlocal cherts also were represented: Knox, Flint Creek, Bangor, and Coastal Plain. The relative dearth of complete lithic artifacts in the complex's stratigraphic deposits suggests that Mound V's peripheries

possibly were sites of lithic flaking and reshaping. Interestingly, deposits overlying the complex, such as *Overlying fill* and *Humus*, yielded as much debitage and more lithic artifacts than most of the complex's directly affiliated deposits. That said, and as evidenced by the lithic artifacts and debitage included within *Humus*, it is possible that small-scale lithic production and recycling took place on and around Mound V after the complex's remains were covered by *Overlying fill*.

The complex's stratigraphic deposits yielded more ground-stone artifacts than lithic artifacts. Moreover, most of the ground-stone artifacts were recovered from *Berm cover*, *Overlying fill*, and *Humus*. Interestingly, though, three polished greenstone chips were recovered from three features associated with both earth lodge stages. Albeit conjecture, it is possible that these greenstone chips were intentional feature inclusions, not unlike the copper pellets, shell bead, and Feature 12's palette fragment; however, polished greenstone chips also were recovered from *Berm cover* and *Humus*, so the features' greenstone chip inclusions possibly were coincidental and not intentional. The broken celt recovered from Structure 2's *Humus* is a relatively important inclusion. As mentioned previously, celts functioned both as utilitarian implements and burial accoutrements. Considering the ground-stone artifacts from the earth lodge's *Humus* deposit, it is possible that this broken celt was one that had been recycled and was being used to produce expedient greenstone implements. The fact that a number of the earth lodge deposits' ground-stone artifacts were recovered from *Overlying fill* and *Humus* suggests that, after the complex's destruction, small-scale ground-stone production and recycling also occurred on and around Mound V.

The majority of the complex's Madison projectile points and other lithic artifacts were knapped from local Tuscaloosa-gravel and nonlocal Ft. Payne cherts; blue-gray Ft.

Payne chert was the dominant nonlocal raw material used for lithic production. Of course, it is expected that, as potential small-scale stone tool production and recycling sites, Mound V's peripheries would have higher frequencies of expedient tools (e.g., retouched flakes or tested pebbles) and broken or unusable ground-stone implements (e.g., broken sandstone saws and palette fragments) discarded and included in refuse fills than complete, useable lithic implements or ground-stone tools. It is not unexpected, then, that most of the complex's deposits contained greater numbers of fragmented or expedient tools than complete tools.

Even though the complex's deposits were constituted of re-deposited fills, the complex's debitage, broken stone artifacts, and complete stone tools presence every stage of stone tool production, which further supports the notion that, while the complex sat atop Mound V, Mound V's peripheries were small-scale stone tool production and recycling sites. The presence of nonlocal raw materials, (e.g., muscovite mica, nonlocal cherts, and greenstone), crafting paraphernalia (e.g., sandstone saws), putative ceremonial objects (e.g., palette fragments, copper, and shell), and utilitarian tools (e.g., projectile points and celt fragments) further supports this notion and suggests that Mound V's peripheries also were small-scale crafting loci. Moreover, the tool and craft production activities at Mound V's peripheries possibly were related to the complex. The complex's overlying strata, specifically the humus deposits, *Overlying fill*, and *Upper levels*, contained a number of intact stone tools, a wide array of debitage, and modest amounts of copper, all of which may indicate that later, after the complex's destruction, Mound V and its peripheries continued to be sites of small-scale stone tool and craft production and recycling.

Chapter 6

The Moundville Earth Lodge Complex and Southeastern Earth Lodges

The Moundville earth lodge is not a unique architectural case in the Southeast. Earth lodges and earth lodge sites have been documented in Georgia, North Carolina, South Carolina, and Tennessee (see Larson 1994). The exact number of Southeastern earth lodges is presently unknown; however, syntheses of confirmed and possible earth lodge sites are available (e.g., Rudolph 1984:33-34; Hally and Rudolph 1986) (Table 6.1). My purpose, though, was not a holistic study of all known Southeastern earth lodges. Even so, it still is necessary to provide an annotated temporal and architectural comparison of a select group of confirmed Southeastern earth lodges, such that the Moundville earth lodge complex can be appropriately contextualized.

Southeastern earth lodges have been dated as early as the late tenth century AD (Table 6.2). Georgia's Macon earth lodge, the first such Southeastern structure to be designated an "earth lodge" (Kelly 1938:11), and the nearby Brown's Mount earth lodge are two of the chronologically earliest documented cases of earth lodge architecture in the Southeast (Fairbanks 1946:107; Wilson 1964; see also Hally and Williams 1994). Most of the confirmed Southeastern earth lodges date within the Mississippian period (ca. AD 1000-1650). Moreover, a few earth lodges (e.g., Garden Creek and Town Creek) have dates comparable to those of the Moundville earth lodge, and none date later than the early seventeenth century. Relative to other Southeastern earth lodges' temporal positions, then, the Moundville earth lodge fits comfortably within this temporal frame.

Table 6.1. Confirmed and possible Southeastern earth lodge sites and sites with architecture comparable to that of earth lodges.

State	Site	References
Alabama	Moundville	Knight, in press
	Fusihatchee	Sheldon 1997
	Tukabatchee	Knight 1985
Georgia	Macon Plateau	Fairbanks 1946; Kelly 1938
	Brown's Mount	Fairbanks 1946
	Beaverdam Creek	Rudolph and Hally 1982
	Long Swamp	Wauchope 1966:301-314
	Horseshoe Bend	Wauchope 1966:323-328
	Plant Hammond and Free Bridge	Hally and Langford 1988:64
	King	Hally and Kelly 1998
	Little Egypt	Hally and Rudolph 1984:70
	Estatoe	Kelly and de Baillou 1960
	Cemochechobee	Schnell, Knight, Schnell 1981
	Wilbanks	Sears 1958
	Bell Field	
	Tugalo	
	Bullard Mounds	
	Stubbs Village	
Singer-Moye	Schnell and Wright 1993	
Dyar		
Irene Mound	Caldwell and McCann 1941	
North Carolina	Town Creek	Boudreaux 2005, 2007
	Garden Creek	Dickens 1976
	Warren Wilson	Dickens 1976
	Peachtree	Setzler and Jennings 1941
South Carolina	Chauga	Dickens 1976:98
	Estatoe	Kelly and de Baillou 1960
Tennessee	Hiwassee Island	Lewis and Kneberg 1946
	Cox, DeArmond, and Fains Island	Webb 1938:163, 167
	Bowman Farm, Irvin Village, Harris Farm, and Lea Farm	Crouch 1974; see also Fairbanks 1956
	Toqua	Polhemus 1987, 1990

The fact that Southeastern earth lodge architecture seemingly coincides with the Mississippian period is curious, as this period is characterized by religious institutions with affiliated cult symbols and imagery, some of which are reflected in earth lodge architecture. Knight (1986:676) suggests that three Mississippian “iconic families,” each of which had a set of sacra, were concretized in material forms, like platform mounds, and reflected by particular cult institutions.

Table 6.2. Southeastern earth lodge temporal and architectural characters.

Earth Lodge Temporal and Architectural Characters						
State	Site	Date (AD)	Above/Below Mound	Shape	Size (sq. m)	Interior features
<i>Alabama</i>	Moundville	early 1400s	Above	Square	123	Possible bench; painted wall
<i>Georgia</i>	Macon Plateau	1015	Below	Circular	c. 39 diameter	Clay banquet; eagle-shaped clay platform
	Brown's Mount	980	Below	Circular	c. 37 diameter	Molded clay seats
	Beaverdam Creek	c. 1100-1200	Below	Square	A1: c. 56 A2: 38	Unknown; interior disturbed
<i>North Carolina</i>	Garden Creek	c. 1250-1450	Below	Square	c. 3, 1, 2, 3	Possible clay bench; clay platform
	Town Creek	1150-1250; 1300-1500	Below/Above	Square	c. 70, c. 49	Possible benches

As one of the three cult institutions, the communal “Mississippian platform mound” was characterized by episodic construction and destruction, and mound-centered purification and mortuary rites; these rites and practices were performed by interconnected groups and underlain by cosmological and mythological narratives (Knight 1986:680; see also Knight 1981). Interestingly, each facet of the Mississippian platform mound institution is exhibited by earth lodge architecture, specifically by that of the Moundville earth lodge complex.

Not only was the Moundville earth lodge complex a public architectural entity, but its two stages and their cappings possibly were facets of cleansing or purification rites directed not just to the complex, but also to Mound V. Moreover, the burials interred within *Structure Ib floor*, the fact that the earth lodge’s primary entrance faced west—a direction affiliated with darkness and death in Southeastern Indian cosmological and mythological narratives (cf. Lankford 1987:113)—and the complex’s association with Moundville as a necropolis, also are aspects that find resonance with the Mississippian platform mound cult institution.

Due to the fact that several Southeastern Indian groups often included in their cosmological narratives references to subterranean spaces from which they originated, it should not be unexpected that earth lodge architecture, which actually was semisubterranean, or created the sense of such, coincides with these socio-religious belief systems. Moreover, it is possible that an earth lodge was equated with the “navel of the earth” (see Knight 1989:281)—the locus from which humans originated and populated “earth island,” the plane of human occupation, which is bracketed by the Above World and Under World (cf. Hudson 1984; Lankford 1987), and subsequently retreated to at death (Knight 1989:280-281). It is possible that, like their Great Plains analogs (see Roper and Pauls 2005), Southeastern earth lodges, and their architectural components, were potent cosmological referents.

Architecturally, the Moundville earth lodge complex is comparable to other Southeastern earth lodges. In general, Southeastern earth lodges share a suite of structural components, which often were patterned similarly in the lodges’ floor plans and architecture: exterior earth coverings, exterior earth embankments, wall-trenched entryways and passageways, four central support posts, central hearth, single-set post walls with split- or whole-cane lathing, dugouts or slide-trenches for situating large posts, daubed or wooden partitions, daubed interior walls, daubed interior superstructure, and cribbed superstructure or wall plates. Only some Southeastern earth lodges exhibited sunken or semi-subterranean floors (cf. Crouch 1974:2, 136), but most earth lodge floors were manipulated: for instance, whereas the floor of the Moundville earth lodge was “somewhat dished out toward the center” (Knight, in press:5), the floor of the Macon earth lodge sloped slightly to a low point (Fairbanks 1946:95). Overall, most Southeastern earth lodges did exhibit a significant percentage of these architectural components.

Like the earth lodge form *in toto*, individual earth lodge architectural components likely were imbued with cosmological power. For instance, not only did an earth lodge's four central support posts delineate an area for differential use from the space surrounding it (cf. Pauls 2005), but the central posts possibly were symbolic supports for the sky vault—the “superstructure” of the cosmos in Creek and Cherokee cosmology and mythology (cf. Hudson 1984; Lankford 1987). The four central posts held similar cosmological significance for the Mandan, and the Hidatsa believed “the earthlodge was a living entity whose spirit lived in the central beams” (Nabokov and Easton 1989:126). Within the area delineated by the four central support posts, the hearth was the central place within an earth lodge and the container of fire, the significance of which is related to creation stories and renewal rites in multiple North American Indian cosmological and mythological narratives. Socializing was frequent at and around the hearth, and the hearth itself possibly was symbolic of an *axis mundi*—a cosmologically potent feature in Great Plains and Southeastern Indian cosmology and mythology that connected the three levels of existence by extending up to the sky vault, through the earth lodge's smoke hole, and down to the under world, through the hearth. Analogous to the four corners of platform mounds being oriented to the four world quarters (Knight 1986:676-677), an earth lodge's four central beams and hearth possibly signified the support of the cosmos and the interconnected planes of existence.

In addition to principal architectural components, like exterior wall posts and entryways, the interior furniture of Southeastern earth lodges regulated and structured movement through a lodge's interior space. Generic furniture forms and architecture shared by Southeastern earth lodges include the following: continuous or semi-continuous benches along interior walls, clay seats, clay altars, and clay platforms. The Moundville earth lodge's

Bench complex I and *Bench complex II* seemingly follow the architectural footprints of Southeastern earth lodges' interior benches. Moreover, like the Macon earth lodge's expansive clay banquet (Fairbanks 1946), the interior furnishings of Southeastern earth lodges likely were socially and ritually significant architectural components.

Taken together, the cosmological and social significance of earth lodges' architectural components and interior spaces likely were inextricable from the structures themselves (cf. Bourdieu 1970). As unique and potent symbols of solidarity, earth lodges possibly were architectural forms structured by cosmological narratives and, by extension, were cosmological narratives writ large on anthropogenic landscapes.

The preceding paragraphs explicate general temporal and architectural trends of Southeastern earth lodges. Although I drew parallels between Southeastern earth lodges and Great Plains earth lodges, I neither assert that there is an easy blanket explanation for all North American earth lodges, nor do I suggest that all earth lodges were created equal—that they all followed a morphological template formulated from a “pan-Indian” experience of the earth lodge as an architectural form.

Chapter 7

Conclusions and Avenues for Further Research

The Moundville earth lodge complex appeared relatively late in the site's history—a time when Moundville's social, economic, and political underpinnings had dissolved. Diagnostic pottery markers from the earth lodge and Structure 2 are consistent with the early fifteenth-century radiocarbon dates Knight (in press) applied to the complex. Given that the complex's stratigraphy was rather complicated, and the use dates for the diagnostic pottery are debated, determination of a *terminus post quem* and *terminus ante quem* for the complex's affiliated deposits was difficult. Based on diagnostic pottery, it was possible to posit a tentative early Moundville III *terminus post quem* for the complex's directly affiliated deposits. Based on the pottery diagnostics recovered from the deposits overlying the complex, a tentative late Moundville III *terminus ante quem* was applied to the complex's affiliated deposits and, by extension, the complex itself.

Not only did the complex appear late in Moundville's history, but it was afforded a prime location within the site—adjacent to the site's largest mound, in one of the last areas of the site to be abandoned. The site's northern extent was the last area to be abandoned, and it is probable that site activities were concentrated on and around the mounds that were still occupied. Mound V had enough surface area to accommodate such activities. This scenario is plausible given the pottery, stone, copper, and shell artifacts, and mineral pigments recovered from the complex's stratigraphic deposits. If the fills for the complex's stratigraphic deposits were derived from Mound V's peripheries, and were developed there *in situ*, then the high

proportion of jars and utility ware, the proportion of flaring-rim bowls, and the multiple bowl shapes suggest communal activities took place on and around Mound V. Given the pottery evidence, it seems plausible that small-scale gatherings occurred around Mound V and possibly were directly related to the complex.

Like the pottery and other ceramic artifacts, the complex's stone artifacts suggest that Mound V and its immediate peripheries were areas of small-scale stone and craft production and recycling. Of course, this supposition requires that the stratigraphic deposits' fills were derived from Mound V's peripheries, and were developed there *in situ*. Due to the fact that, together, the complex's stratigraphic deposits and select features yielded every stage of stone tool, nonlocal raw materials, crafting paraphernalia, and fragmented ceremonial objects, it seems probable that Mound V and its peripheries were sites of group activities related to stone working or recycling. At a time when the site was a fully functional necropolis, it is possible that the last few elite inhabitants attempted to gather and recycle relatively high-status, nonlocal stone, shell, and copper into useable implements. All such activities quite possibly were related to the complex's function as a public structure.

Of course, it can be problematic to assume that the soils for the complex's deposits were derived from Mound V's peripheries, as no direct evidence of such activities is presently known. Generally speaking, though, it is unlikely that those who built the complex ventured far to procure such soil; soil borrow pits adjacent to several of Moundville's mounds attest to this point. How exactly such deposits correlate with mound summit activities also is debated, but Knight (n.d.:15, 816, 855) asserts that mound flanks often accumulated midden from mound-summit activities, as the summits typically were swept clean of debris prior to mound additions or other such augmentation; thus, mound flanks

contain material that likely was once produced by mound-summit activities. That said, Mound V's peripheries possibly contained materials that had been produced by activities related to the complex; subsequently, then, these materials possibly were recycled back into the complex as fill deposits. While this is not the most desirable method to posit activities related to Mound V and the complex, it is the most appropriate course given the data.

Given that earth lodges and their spatially proximate buildings are thought to have been geared toward public activities (e.g. Rudolph 1984:33; cf. Boudreaux 2007:37), it is even more perplexing as to why the Moundville earth lodge, and conjoined Structure 2, not only would be built at such a juncture in Moundville's history, but rebuilt. Of course, even if earth lodges were oriented to public use, I do not discount the likelihood that they also were appropriated for particular uses by a sodality. The possibility that the complex acted as a council house for a sodality cannot be entirely discounted (cf. Knight n.d.:13). Both possibilities are not mutually exclusive, as the complex could have served as a fulcrum for public activities, attended by the site's attenuated population, and as a more exclusive domain for a given sodality's esoteric activities. Was the complex's construction an attempt for social solidarity among the site's remaining elites? Was it an attempt by the remaining elites to attract the non-elite population back to the site—to recharge the dwindling economy with non-elite "skill-power" (cf. Helms 1992)? If the complex was not for public use, was it built by and for the remaining elites as an arena for esoteric activities or council? Why the complex was destroyed and never again resuscitated from the ashes of Structures 1b and 2b will remain unknown. It is possible, though, that the complex's end signified the termination of more than just the complex itself: at a time when Moundville was largely abandoned, the

pair's fiery demise potentially was a large-scale termination ritual enacted to "close" Mound V.

The complex's construction, reconstruction, and destruction possibly signified the site's functional reorientation from a political center to a necropolis. Consideration of this supposition requires an assessment of the complex's directionality: the direction to which its primary entrance in the western portion of *Sandy-clay Berm* was oriented. Unlike entrances of other Southeastern earth lodges (e.g., Fairbanks 1946:fig.21; Rudolph 1984:fig.4), the Moundville earth lodge's only known entrance opened west and was the only way to access Structure 2. In Southeastern Indian mythology and cosmological narratives, West is associated with death, spirits, and the Under World (e.g., Lankford 1987:119). The fact that the complex's only entrance faced west suggests that its construction possibly was intimately associated with Moundville's functional reorientation as a necropolis. Both of the complex's burials suggest that, in some capacity, the complex functioned as a space for interment. Moreover, certain of the complex's associated artifacts, such as the owl figurine and Alabama River Incised vessel, also possibly signified Moundville's function as a necropolis. For many Southeastern Indian groups, owls were believed to be harbingers of death, spirits incarnate, or avatars of dangerous shape-shifters (Riggs, personal communication, 2009). Additionally, the incised scroll motif on the inverted Alabama River Incised, *var. unspecified* vessel spirals clockwise—a motif associated with the Under World (cf. Lankford 2007a, 2007c; Riggs, personal communication, 2009). That said, it is possible that these two seemingly distinct artifacts actually were thematically similar, in that they were associated with death and the Under World. Of course, these interpretations are based on relatively minimal evidence, but when coupled with the complex's architectural orientation and its

temporal emergence, such artifacts potentially illuminate how the site's functional reorientation was manifested in the complex's architecture, and potentially its use.

Even after its destruction, the complex still held some importance for the site's remaining inhabitants, as suggested by Feature 39's intact vessel. Comparable in form to Feature 39's vessel, other intact pottery vessels have been recovered from relatively clean floors of several Southeastern earth lodges and other comparable structures (e.g., Caldwell and McCann 1941:26; Dickens 1976:83; Polhemus 1987:137). Perhaps the most comparable example comes from the Macon earth lodge: "part of a large pottery vessel [lay] on the [earth lodge] floor near the northeast post" (Fairbanks 1946:97). Emplaced on intentionally swept floors, these vessels potentially were tangible commemorative referents of a given earth lodge's building stage or the episodic renewal of architectural components. While the cleanliness of the complex's floor is rather atypical of large public structures, the floors of which usually contain trace artifacts, it is possible that there was a need for a thorough sterilization of the space. Whether or not Feature 39 was intentionally excavated to Feature 49B specifically, it is interesting that this potential offering extended down through both stages' stratigraphy, almost to the earth lodge's first floor—in effect, the lodge's beginning point.

Avenues for Further Research

With my preliminary interpretations of the complex's architecture, pottery, and stone complete, as well as the general comparison of the complex with its Southeastern earth lodge cohort, the perennial "Where do we go from here?" question can be addressed and answers offered. The pottery and stone data I presented and interpreted likely represent a fraction of

what remains buried beneath Mound V's surface. Mound V's faunal assemblage remains unanalyzed; however, the faunal remains are relatively fragmentary and heavily decayed. Additional excavation undoubtedly would recover more of the complex's artifact assemblage, which could bolster or refute my tentative conclusions about Mound V's peripheries being loci of small-scale tool and craft manufacture and recycling, both during and after the complex's tenure.

Geophysical technologies, like the fluxgate gradiometer used to further delineate the earth lodge's architectural footprint, and GIS (Geographic Information Systems) mapping are less invasive and potentially more profitable alternatives than excavation. Such mapping could fully delineate Structure 2 and thus create a more complete picture of it and its articulation with the earth lodge. Moreover, such geophysical and mapping techniques would mitigate impact of Mound V's summit. A complete image of Structure 2 could blunt or support my supposition about how the baked clay "patio" articulated with Structure 2's north wall. Likewise, a complete geophysical unveiling of the complex also could clarify the relationships between the complex's wall lines (i.e., the exterior and leaner post lines) and the extraneous postholes (i.e., *Extraneous feature's* postholes). Whether by shovel or fluxgate gradiometer, additional delineation and analysis of the complex can only offer more insight into this unique architectural phenomenon.

As stated previously, the complex did not exist in an architectural vacuum. Southeastern Mississippian architectural corollaries can be used to architecturally contextualize the complex. Moreover, as Southeastern earth lodges' architectural descendants, Creek and Cherokee council-houses and townhouses also can be useful analogs to Southeastern earth lodges. Multiple ethnohistoric accounts (e.g., Adair 1775; Bartram

1798; Swanton 1928, 1946) mention architectural parallels between these historic Southeastern structures, stomp grounds, and their architectural precedents (see Waring and Holder 1945b; Hally 2002; Riggs 2008). Additionally, architectural descriptions of Great Plains earth lodges, specifically those of the Hidatsa and Mandan, also offer insight into the construction technologies used to craft earth lodges (e.g., Roper 2005; Scullin 2005).

Southeastern Indian cosmological narratives offer insight into the earth lodge construction process and the potentiality that earth lodges were cosmologically important, potent symbols (cf. Hudson 1984; Lankford 1987; Knight 1989). Although they should be taken with a grain of salt, direct-historical analogies and cosmological narratives of temporally and geographically comparable architectural forms can provide invaluable information for Southeastern earth lodge research. Such information potentially can clarify whether or not the Moundville earth lodge complex fits comfortably with, or is anomalous relative to its Southeastern earth lodge cohort. Moreover, it is possible that such analogies and narratives can offer additional insight into why the complex was materialized on Moundville's landscape at a time when Moundville had transitioned from a once thriving political center to a depopulated necropolis.

Appendix A: Stratigraphic Deposits

Appendix A's Table A.1 includes a description of the earth lodge's stratigraphic deposits and their constituent features and stratigraphy (i.e. "Cuts"); these descriptions correspond to those provided in the main text. In Table A.1, features contained within parentheses were lumped together as an analytical unit (e.g., Structure 1b's Features 33, 34, and 35 were considered together as *Bench complex I*).

Table A.1. The earth lodge's stratigraphic deposits and their encompassed units, cuts, and features.

Stratigraphic Deposit	Additional Description	Encompassed Units/Cuts/Features
Humus	Humus, earth lodge area	Cut 1 of units 73R129, 75R129, 77R125, 77R129, 79R125, 79R127, 79R129, 81R125, 81R127, 81R129, 83R125, 83R127, 83R129
Overlying fill	Fill overlying roof/wall fall, Structure 1b	Cut 2 of units 79R125, 79R127, 81R125, 81R127
Intrusive fea.	Features intrusive to earth lodge deposits	Features 31, 39, and 47
Roof/wall fall	Structure 1b conflagration roof/wall fall	Cut 3 of units 79R125, 79R127, 81R125, 81R127; Feature 22 and "structure floor"
Berm cover	Soil covering berm slope, earth lodge	Cut 2 of units 73R129, 75R129, 77R129, 79R129, 81R129, 83R125, 83R127, 83R129; Cut 3 of unit 73R129; Feature 20
Str. 1a/1b fea.	Structure 1a/1b features	Features: 32 (32A-P), 37 (37A-H), 38 (38A-C), 40, 41, 44 (44A-B), (51, 52, [52A-C], 53, 54, 55, 57), 59, 60
Str. 1b floor	Structure 1b features	Features: 26, 29, 30, (33, 34, 35), 36, 42, 43 (43A-B), 45, 48 (48A-E)
Clean fill	Clean fill between Structures 1a and 1b	Cut 4 of units 79R125, 79R127, 81R125, 81R127
Str. 1a floor	Structure 1a features	Features 49A and 49B

Table A.2 includes a description of Structure 2's stratigraphic deposits and their constituent features and stratigraphy; these descriptions correspond to those provided in the main text. Albeit classified as a *Structure 2a floor* feature, Feature 9 likely was present for both Structure 2 stages, but is classified with the chronologically earliest stage.

Table A.2. Structure 2's stratigraphic deposits and their encompassed units, cuts, and features.

Stratigraphic Deposit	Additional Description	Encompassed Units/Cuts/Features
Humus	Humus, Structure 2 area	Cut 1 of units 71R131, 73R131, 75R131, 77R131, 78R134, 78R136, 79R131, 79R132, 81R131
Upper levels	Mixed upper levels (overlying humic soil included with yellow clay cap)	Cuts 2, 3 of unit 71R131; Cut 2 of unit 73R131; Cuts 2, 3 of unit 75R131; Cut 2 of unit 77R131; Cuts 2-6 of unit 78R134; Cuts 3-5 of unit 78R136; Cuts 3, 4 of unit 78R138; Cut 2 of unit 79R131; Cut 2 of unit 79R132; Cut 2 of unit 81R131
Str. 2b floor	Structure 2 features	Features: 11 (11A-D), 12 (12A-Q), 14 (14A-I), 16, 28, 46 (46A), 50, 56, 58
Str. 2a floor	Floor-level features	Features: 1, 2, 3, and 4 (each is a small section of a larger fired floor); (9), the clay “patio” north of Str. 2

The only trace of Mound V's final summit structure was a posthole quartet dubbed Feature 27. The vestigial yellow clay blanket mantle associated with Structure 2's *Upper levels* likely was the stratigraphic layer on which this final summit structure was imposed.

Table A.3 includes a description of the residual deposits *Central Mound V*, *CCC fill*, and *Extraneous features*, their constituent features, and stratigraphy; these descriptions correspond to those provided in the main text.

Table A.3. Residual stratigraphic deposits and their encompassed units, cuts, and features.

Stratigraphic Deposit	Additional Description	Encompassed Units/Cuts/Features
Central Mound V	Excavations in central Mound V area	Cuts 1, 2 of unit 28R90; Cuts 1, 2 of unit 30R90; Cuts 1-3 of unit 32R90; Cut 1 of unit 65R90; Cuts 1, 2 of unit 69R90
CCC fill	CCC stabilization fill	Cut 2 of unit 78R136; Cuts 1, 2 of unit 78R138
Extraneous fea.	Extraneous, unassociated features	Features: 5, 6, 7, 10, 13, 15, 18, 19, 23

Appendix B: Type and Variety Counts

Appendix B contains pottery type and variety counts by structure, stratigraphic deposit, and feature. Although most of the sherds enumerated in Appendix B's tables were discussed in the thesis body, a few residual types and varieties were omitted for analytic and descriptive reasons. All types and varieties, including those omitted from the formal analyses, are enumerated here. For each Appendix B table, only the stratigraphic deposits and features that contained artifacts are represented.

Table B.1. Earth lodge pottery type and variety counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.	Types and Varieties																					Totals													
	Barton Incised Barton	Baytown Plain/Koyer	Mississippi Plain/Warrior	Bell Plain/Hale	Mdville Inc/Moundville	Mdville Inc/Oliver	Mdville Inc/Unspecified	Carthage Inc/Abron	Carthage Inc/Carthage	Carthage Inc/Fosters	Carthage Inc/Moon Lake	Carthage Inc/Unspecified	Mdville Eng/Elliott Creek	Mdville Eng/Havana	Mdville Eng/Hemphill	Mdville Eng/Maxwells Crossing	Mdville Eng/Middletown	Mdville Eng/Prince Plamnton	Mdville Eng/Toplerville	Mdville Eng/Tuscaloosa	Mdville Eng/Wiggins		Mdville Eng/Unspecified	Alabama River Applique	Alabama River Incised/unspecified	Alabama River Painted, wr. Cork	D'Olive Inc/unspecified	Parkin Punctated Harris	Parkin Punctated Parkin	Pensacola Inc/Gaigue	Pinquemine Brushed/unspecified	Pouncey Ridge Punctated/unspecified	Totals		
Earth Lodge																																			
Humus		2	334	122					2		6		1	1			1				7														476
Overlying fill			964	288				1	3		12		1	1	1		1			1	21	3		1		1								1298	
Intrusive fea.																																			
Fea. 47																																			
Fea. 39			8	7																	1			1											17
Fea. 31			23	4																															27
Roof/wall fall																																			
Cut 3			304	125					1	3	6								1		1	5	1											447	
Str. floor			13	4																		1													18
Fea. 22			1	2																															3
Berm cover			369	186					2		3				5		1			1	21													588	
Cut 2	1	1	1925	691	1			1	2	1	18		1	11			1			5	1	65	1			1		1			1		2730		
Fea. 20			76	43	1						3			1							5													129	
Str. 1a/1b fea.																																			
Fea. 60			1																																1
Fea. 59			9	5							1				1						1														17
Fea. 57			26	16																		2													44
Fea. 55			3																																3
Fea. 54			62	23						1												3													90
Fea. 53			30	15																															45
Fea. 52			34	26																		2													62
Fea. 51			18	17																															35
Fea. 44			18	7																		1													26
Fea. 41			10	4																															14
Fea. 40			25	11																		1											1		38
Fea. 38			29	18							1			1								1													50
Fea. 37			1	53	44																	1													99
Fea. 32			4	2																															6
Str. 1b floor																																			
Fea. 48			69	27							1																								97
Fea. 45			6																																6
Fea. 43			58	32					1																										93
Fea. 42			33	15		1					1											1		1											50
Fea. 36			36	7																															43
Fea. 35			6	1																															7
Fea. 34			3	1																															4
Fea. 33																																			
Fea. 30			2	1																															3
Fea. 29			5	1							1																								7
Fea. 26			117	44							1									1		3													166
Clean fill			208	69						1	1				1					1		4													286
Str. 1a floor																																			
Fea. 49B			80	53					1		1	1		2							5													144	
Fea. 49A			144	50	1		1				2		1								3														202
Totals	1	4	5106	1961	3	1	2	6	13	2	1	57	1	3	24	1	2	3	1	9	2	154	5	2	1	1	1	1	1	1	1	1	7371		

Table B.2. Structure 2 pottery type and variety counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.	Types and Varieties														Totals				
	Baytown Plain/Roper	Mississippi Plain/Warrior	Bell Plain/Hale	Mdville Inc/Moundville	Mdville Inc/unspecified	Carthage Inc/Akron	Carthage Inc/Carthage	Carthage Inc/Fosters	Carthage Inc/unspecified	Mdville Eng/Havana	Mdville Eng/Hemphill	Mdville Eng/Maxwells Crossing	Mdville Eng/Middleton	Mdville Eng/Prince Plantation		Mdville Eng/Taylorville	Mdville Eng/Tuscaloosa	Alabama River Appliqué	
Structure 2																			
Humus	1	738	190		1				6			2	1			13	952		
Upper levels	1	1376	495	2	6	3	1		4	1	2		4	1	6	52	1956		
Str. 2b floor																			
Fea. 58		100	74							1					3	5	183		
Fea. 56		2															2		
Fea. 50		48	14		1											1	64		
Fea. 46		12	9													1	22		
Fea. 16	1	51	25						2		1					2	82		
Fea. 14		234	77	1					2		1					4	319		
Fea. 12		437	196		1		1	5	4	3			2	2		11	663		
Fea. 11		291	109		3				3		1					6	414		
Str. 2a floor																			
Fea. 3		1															1		
Fea. 2			2														2		
Totals	3	3290	1191	3	12	3	2	1	22	6	8	2	1	6	3	10	95	2	4660

Table B.3. Residual deposit pottery type and variety counts by stratigraphic deposit and feature.

Residual deposit Deposit Fea/Strat.	Types and Varieties											Totals	
	Baytown Plain/Roper	Mississippi Plain/Warrior	Bell Plain/Hale	Mdville Inc/unspecified	Carthage Inc/unspecified	Mdville Eng/Hemphill	Mdville Eng/Prince Plantation	Mdville Eng/Stewart	Mdville Eng/Taylorville	Mdville Eng/Tuscaloosa	Barton Inc/Demopolis		
Residual deposit													
Central V	2	554	101	3	3	1	1		1		13	1	680
CCC fill		58	17								3		78
Extran. fea.													
Fea. 19		9	2										11
Fea. 15		9											9
Fea. 13		3											3
Fea. 10		53	14						2				69
Fea. 7		4	3										7
Fea. 6		4	4					1		1			10
Totals	2	694	141	3	3	1	1	1	1	1	2	17	867

Appendix C: Painted Ware Counts

Appendix C contains painted ware counts by structure, stratigraphic deposit, and feature. All painted ware counts pertain to a particular painted treatment and “ware” designation for each recorded sherd (e.g., red filmed fineware vs. red filmed coarseware). For each Appendix C table, only the stratigraphic deposits and features that contained artifacts are represented.

Table C.1. Earth lodge painted ware counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.	Painted Treatment							Totals
	Red Filmed, Fineware	White Filmed, Fineware	Red on White, Fineware	White on Red Fineware	Polychrome/Negative Painted	Red Filmed, Coarseware	White Filmed, Coarseware	
<i>Earth lodge</i>								
Humus						12	9	21
Overlying fill	2	2	11	2		29	23	69
Intrusive fea.								
Fea. 31						1		1
Roof/wall fall								
Cut 3	1	1	6			5	12	25
Berm cover		1		2	1	13	9	26
Cut 2	2		12			45	39	98
Fea.20	1	1				1		3
Str. 1a/1b fea.								
Fea. 59							1	1
Fea. 54							1	1
Fea. 53						1		1
Fea. 52	1							1
Fea. 44						1	1	2
Fea. 41			1			2		3
Fea. 40						1		1
Fea. 38			1			1	1	4
Fea. 37		1				2		3
Str. 1b floor								
Fea. 48						1	1	2
Fea. 43						3		3
Fea. 36	1	1				3		5
Fea. 26			1			5	4	10
Clean fill			1			1	9	11
Str. 1a floor								
Fea. 49B	1					1	1	4
Fea. 49A	1	1					4	6
Totals	10	7	34	4	1	132	111	2 301

Table C.2. Structure 2 painted ware counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.	Painted Treatment								
	Red Filmed, Fineware	White Filmed, Fineware	Red on White, Fineware	White on Red Fineware	Black on White, Fineware	Polychrome/Negative Painted	Red Filmed, Coarseware	White Filmed, Coarseware	Totals
Structure 2									
Humus	1	4					24	23	52
Upper levels	3	1	2				38	35	79
Str. 2b floor									
Fea. 58	1						3	1	5
Fea. 50							2	2	4
Fea. 16		1	1						2
Fea. 14	1			1			5	4	11
Fea. 12			1		2		7	3	13
Fea. 11			1			2	8	12	23
Totals	6	2	9	1	2	2	87	80	189

Table C.3. Residual deposit painted ware counts by stratigraphic deposit and feature.

Residual deposit Deposit Fea/Strat.	Painted Treatment			
	Red on White, Fineware	Red Filmed, Coarseware	White Filmed, Coarseware	Totals
Residual deposit				
Central V	1	6	2	9
Extran. fea.				
Fea. 13			1	1
Fea. 10			1	1
Totals	1	6	4	11

Table C.4. Surface collection and clean-up painted ware counts.

Collection location Fea/Unit/Strat.	Painted Treatment			
	White Filmed, Fineware	Red on White, Fineware	Red Filmed, Coarseware	Totals
Surface				
General surf.		1	1	2
78R136			1	1
Clean-up				
78R134		1	1	2
Totals	1	2	2	5

Appendix D: Vessel Shape Counts

Appendix D contains vessel shape counts by structure, stratigraphic deposit, and feature. Unlike those of the tables in the main text, the Appendix D tables' vessel shape categories are split a bit further (e.g., whereas bottles and corner points were lumped in the main text's tables, they are listed separately in the Appendix D tables). Only those sherds that exhibited diagnostic vessel shape characters—i.e., inflection point and rim—were classified as a specific vessel shape. All vessel shapes except the indeterminable shapes are enumerated here. Although a large percentage of each deposit's vessel shapes were classified as indeterminable, all such sherds were not enumerated in the formal tables and are omitted here to conserve space. For each Appendix D table, only the stratigraphic deposits and features that contained artifacts are represented.

Table D.1. Earth lodge identifiable vessel shape counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.	Vessel Shape														Totals	
	Burnished Jar	Neckless Jar	Standard Jar	Bottle Cornerpoint	Bottle Neck	Bottle/Bowl Pedestal Base	Bottle/Bowl Slab Base	Bottle/Bowl Simple Base	Cylindrical Bowl	Flaring-Rim Bowl	Outslanting Bowl	Restricted Bowl	Short-Neck Bowl	Simple Bowl		Other Bowl
Earth lodge																
Humus			7		2				1	3		1		1	1	
Overlying fill	1	1	19	1	3					6		1	3	7	2	
Intrusive fea.																
Fea. 39														2	1	
Roof/wall fall																
Cut 3	1		8	1	1					4				8	1	
Str. floor				1												
Berm cover	2	1	4	3	3			4	1				7	2		
Cut 2	1		31	6	10	1	2	1		9		10	4	18	3	
Fea.20			1									1				
Str. 1a/1b fea.																
Fea. 59										1						
Fea. 57					1											
Fea. 54										1						
Fea. 53				1	1											
Fea. 52			2	1												
Fea. 51														1		
Fea. 44					1											
Fea. 40			2													
Fea. 38			2								1					
Fea. 37			1		2									2		
Fea. 32									1	1						
Str. 1b floor																
Fea. 48														1		
Fea. 43			1													
Fea. 42			4							1						
Fea. 36			3													
Fea. 26	1		6		1	1				1		1			1	1
Clean fill			1	12		2				2		1		2		
Str. 1a floor																
Fea. 49B	1		2							1			1	1	1	
Fea. 49A			2	1								1		1		
Totals	7	3	109	13	27	2	2	1	6	31	1	16	8	51	12	1

Table D.2. Structure 2 identifiable vessel shape counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.		Vessel Shape																		
		Burnished Jar	Neckless Jar	Standard Jar	Subglobular Bottle	Bottle Cornerpoint	Bottle Neck	Bottle/Bowl Pedestal Base	Bottle/Bowl Slab Base	Bottle/Bowl Simple Base	Cylindrical Bowl	Flaring-Rim Bowl	Outslanting Bowl	Pedestaled Bowl	Restricted Bowl	Short-Neck Bowl	Simple Bowl	Other Bowl	Plate	Totals
<i>Structure 2</i>																				
	Humus		2	12		1	1				4	1	1	1	1	7				31
	Upper levels	2	4	26	1	4	2	1	2	2	8				3	1	17	2		77
	Str. 2b floor																			
	Fea. 58			1		1	2		1							3				8
	Fea. 50										1				1		1			3
	Fea. 16	1		1	1						1					2				6
	Fea. 14	2	1	8				1				1		1	1	6	1			22
	Fea. 12			8		2	4	1		2	6	1		2	1	12				39
	Fea. 11	1		9		1	3					1		1	1	9		1		27
	Totals	6	7	65	2	9	12	2	3	3	4	20	4	1	8	6	56	4	1	213

Table D.3. Residual deposit identifiable vessel shape counts by stratigraphic deposit and feature.

Residual deposit Deposit Fea/Strat.		Vessel Shape									
		Neckless Jar	Standard Jar	Bottle Neck	Flaring-Rim Bowl	Outslanting Bowl	Restricted Bowl	Short-Neck Bowl	Simple Bowl	Other Bowl	Totals
<i>Residual deposit</i>											
	Central V		3	1	2	1	1	3	7	1	19
	CCC fill		3						2		5
	Extran. fea.										
	Fea. 15						1				1
	Fea. 13			1							1
	Fea. 10		1						4		5
	Fea. 7	1							1		2
	Fea. 6								1		1
	Totals	1	7	2	2	1	2	3	15	1	34

Table D.4. Surface collection and clean-up identifiable vessel shape counts by test unit and general area.

Collection location Fea/Unit/Strat.		Vessel Shape			
		Flaring-Rim Bowl	Simple Bowl	Standard Jar	Totals
<i>Surface</i>					
	General surf.	1			1
	77R132	1			1
	79R129		1		1
<i>Clean-up</i>					
	77R125		1	1	2
	Totals	2	2	1	5

Appendix E: Secondary Vessel Shape Feature Counts

Appendix E contains secondary vessel shape feature counts by structure, stratigraphic deposit, and feature. Although the majority of the diagnostic secondary vessel shape features were discussed in conjunction with particular vessel shapes, the reader will note that other, more peripheral and less temporally-confined secondary vessel shape features are enumerated here (e.g. “handles”). For each Appendix E table, only the stratigraphic deposits and features that contained artifacts are represented.

Table E.1. Earth lodge secondary vessel shape feature counts by structure, stratigraphic deposit, and feature.

<i>Structure</i>	<i>Secondary Vessel Shape Feature</i>																	
<i>Deposit</i>																		
<i>Fea/Strat.</i>																		
<i>Earth lodge</i>	<i>Appliqué Neck Fillet</i>	<i>Widely Spaced Nodes</i>	<i>Beaded Rim</i>	<i>Beaded Shoulder</i>	<i>Cutout Rim</i>	<i>Folded Rim</i>	<i>Folded-Flattened Rim</i>	<i>Scalloped Rim</i>	<i>Grouped Nodes</i>	<i>Handles</i>	<i>Notched Lip</i>	<i>Downturned Lug</i>	<i>Horizontal Lug</i>	<i>Other partial nodes</i>	<i>Other partial lug</i>	<i>Other lug</i>	<i>Adorno</i>	<i>Totals</i>
Humus				1		1								1				3
Overlying fill	3	1	1			1	1	1	1	2	1					1		13
Roof/wall fall																		
Cut 3	1		6							3	1		1	2			1	15
Berm cover		1	1			2	1			6	1				1			13
Cut 2	1		4				2			7							4	18
Str. 1a/1b fea.																		
Fea. 53						1				1								2
Fea. 51			1															1
Fea. 37			1															1
Str. 1b floor																		
Fea. 26						3				1								4
Clean fill			1			1				3		1					1	7
Str. 1a floor																		
Fea. 49B					1													1
Totals	5	2	15	1	1	9	4	1	1	23	3	1	1	3	1	1	6	78

Table E.2. Structure 2 secondary vessel shape feature counts by structure, stratigraphic deposit, and feature.

<i>Structure</i>		<i>Secondary Vessel Shape Feature</i>										
<i>Deposit</i>												
<i>Fea/Strat.</i>												
<i>Structure 2</i>		<i>Appiqué Neck Filler</i>	<i>Band of Nodes</i>	<i>Beaded Rim</i>	<i>Beaded Shoulder</i>	<i>Folded Rim</i>	<i>Handles</i>	<i>Indentations</i>	<i>Notched Lip</i>	<i>Horizontal Lug</i>	<i>Adorno</i>	<i>Totals</i>
Humus				1		1	3					5
Upper levels		2		2		1	9		1		1	16
Str. 2b floor												
Fea. 58				1	1		1	1		1		5
Fea. 14				1		1	1					3
Fea. 12			1	3			2					6
Fea. 11				1				1	1			3
Totals		2	1	9	1	3	16	2	2	1	1	38

Table E.3. Residual deposit secondary vessel shape feature counts by stratigraphic deposit and feature.

<i>Residual deposit</i>		<i>Secondary Vess. Shape Feature</i>					
<i>Deposit</i>							
<i>Fea/Strat.</i>							
<i>Residual deposit</i>		<i>Beaded Rim</i>	<i>Folded Rim</i>	<i>Handles</i>	<i>Indentations</i>	<i>Other Lug</i>	<i>Totals</i>
Central V		1	1	1		1	4
Extran. fea.							
Fea. 10		1			1		2
Totals		2	1	1	1	1	6

Table E.4. Surface collection and clean-up secondary vessel shape feature counts by test unit and general area. In this table, (w.)=west and (prof.)=profile.

<i>Collection location</i>		<i>Sec. Vess. Shape. Fea.</i>			
<i>Fea/Unit/Strat.</i>					
<i>Surface</i>		<i>Appiqué Neck Filler</i>	<i>Beaded Rim</i>	<i>Downturned Lug</i>	<i>Totals</i>
79R129			1		1
<i>Clean-up</i>					
77R125			1		1
General balk				1	1
79R125 w. prof.		1			1
Totals		1	2	1	4

Appendix F: Modified Stone Total Counts

Appendix F contains all modified stone counts by structure, stratigraphic deposit, and feature. For each Appendix F table, only the stratigraphic deposits and features that contained artifacts are represented. In each table, (T.G.)=Tuscaloosa-gravel, (F.P.)=Fort Payne, and (UID)=unidentifiable.

Table F.1. Earth lodge modified stone counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.	Flaked Stone															Ground Stone																				
	Decortication flake (T.G.)	Decortication flake (F.P.)	Blade-like flake (F.P.)	Other flake (T.G.)	Other flake (F.P.)	Other flake (Crystalline quartz)	Other flake (UID chert)	Other flake (Knox chert)	Shatter (T.G.)	Shatter (F.P.)	Shatter (Crystalline quartz)	Shatter (Coastal Plain chert)	Flint Creek chert	Shatter (Tallahatta quartzite)	Core/fragment (F.P.)	Tested pebble (T.G.)	Tested pebble (F.P.)	Microdrill/perforator (UID chert)	Madison point (T.G.)	Madison point (Crystal quartz)	Madison point (Fossiliferous F.P.)	Preform I (T.G.)	Retouched pebble (Crystalline quartz)	Other: Unifacial tool fragment	Ground sandstone	Sandstone palette fragment	Sandstone abrader	Hematitic sandstone saw	Polished greenstone chip	Celt fragment	Other: Shale pendant fragment	Other: Ground limonite	Other: Sandstone anvil	Totals		
Humus				5	1			2		1						1		1			1	1		2											19	
Overlying fill			6	4	2			2	1	2			2	1	1			2						2	1	1			1			1	1		30	
Intrusive fea.																																				
Fea. 39										1																										1
Roof/wall fall																																				
Cut 3										1								1							1											3
Berm cover							1		1																											8
Cut 2	1	1	8	2			2	11	2	4	1	2								2			1	4			2	1	1	1					46	
Fea.20	1		1	3																															5	
Str. 1a/1b fea.																																				
Fea. 57				3																																3
Fea. 54				1																																5
Fea. 44								3																												3
Fea. 38																																				1
Fea. 37						1														1																1
Str. 1b floor																																				
Fea. 48			2																																	2
Fea. 45				2																																2
Fea. 43			1	2	1				3	2										1																11
Fea. 42					1																															1
Fea. 26			1	1				1																												3
Clean fill			1					3	1																											5
Str. 1a floor																																				
Fea. 49B		1																																		11
Fea. 49A	1			1	1	1																														4
Totals	3	1	3	26	20	3	1	3	22	9	10	1	2	2	1	1	1	1	1	1	1	1	1	1	9	1	1	1	3	6	2	2	1	1	164	

Table F.2. Structure 2 modified stone counts by structure, stratigraphic deposit, and feature.

Structure		Flaked Stone																								Ground Stone							
Deposit	Fea/Strat.	Decoronation flake (T.G.)	Decoronation flake (F.P.)	Blade-like flake (T.G.)	Blade-like flake (F.P.)	Other flake (T.G.)	Other flake (F.P.)	Other flake (Quartz crystalline)	Other flake (Knox chert)	Other flake (Dover chert)	Other flake: Hematite	Other flake (Coastal Plain agate)	Other (Ft. Payne Dover chert)	Shatter (Bangor chert)	Shatter (T.G.)	Shatter (F.P.)	Shatter (Quartz crystalline)	Shatter (UID chert)	Core/fragment (F.P.)	Tested pebble (T.G.)	Tested pebble (F.P.)	Microdrill/perforator (F.P.)	Madison point (T.G.)	Madison point (F.P.)	Other: Retouched flake (T.G.)	Other: Retouched flake (F.P.)	Ground sandstone	Sandstone palette fragment	Polished greenstone chip	Broken celt	Totals		
Structure 2	Humus		3			3	5		1					2	5	2					1						1					1	24
	Upper levels	1		1	2	4	5					1	1	3				1	1	2		1	1	1								2	27
	Str. 2b floor																																
	Fea. 58					1	1	1						1									1		1					1			7
	Fea. 16																			1													1
	Fea. 14					1	1				1																						3
	Fea. 12			2		2	1	1						1	1				1										1				10
	Fea. 11						1		1	1				1																			4
	Totals	1	5	1	2	11	14	2	1	1	1	1	1	8	6	2	1	2	2	3	1	1	2	1	1	1	1	1	2	1	1	1	76

Table F.3. Residual deposit modified stone counts by stratigraphic deposit and feature.

<i>Residual deposit</i>		Flaked Stone										
Deposit												
Fea/Strat.												
<i>Residual deposit</i>		Decortication flake (T.G.)	Other flake (T.G.)	Other flake (F.P.)	Other flake (Dover chert)	Other flake (Tallahatta quartzite)	Shatter (T.G.)	Shatter (F.P.)	Shatter (Quartz crystalline)	Shatter (Tallahatta quartzite)	Hematitic sandstone saw	Totals
Central V		3	4	5	1	1	4	2	1	1	1	23
CCC fill				3								3
Extran. fea.												
Fea. 19			1									1
Fea. 15												0
Totals		3	5	8	1	1	4	2	1	1	1	27

Table F.4. Surface collection and clean-up modified stone counts by test unit and general area.

<i>Collection location</i>		Flaked Stone						Ground Stone	
Fea/Unit/Strat.									
<i>Surface</i>		Decortication flake (F.P.)	Other flake (F.P.)	Madison point (F.P.)	Madison point (Quartz crystalline)	Ground sandstone	Celt fragment	Totals	
General surf.					1			1	
<i>Clean-up</i>									
29R125-127						1		1	
77R125		1						1	
<i>Unit</i>									
83R127, Cut 3			1	1				2	
75R125, Cut 2			1				1	2	
Totals		1	2	1	1	1	1	7	

Appendix G: Mineral Pigments, Copper, and Shell

Appendix G contains all mineral pigments, copper, and shell counts by structure, stratigraphic deposit, and feature. For each Appendix G table, only the stratigraphic deposits and features that contained artifacts are represented.

Table G.1. Earth lodge unmodified stone, mineral, copper, and shell counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.	Mineral/Unmodified Stone							CU/Shell	
	Pigment quality hematite	Pigment quality limonite	Glauconite	Petrified wood	Muscovite mica	Greenstone shatter	Other (Copper)	Other (Shell)	Totals
<i>Earth lodge</i>									
Humus	5			1	6	1			13
Overlying fill	23	2		3	10	2			40
Intrusive fea.									
Fea. 47	1	3							4
Roof/wall fall									
Cut 3						1			1
Berm cover	3				2		1		8
Cut 2	21	2	6		4				33
Fea.20	3								3
Str. 1a/1b fea.									
Fea. 54	1				1		1		5
Fea. 53	3								3
Fea. 52	1								1
Fea. 44	4	1							5
Fea. 41	1								1
Fea. 40	1				4				5
Str. 1b floor									
Fea. 48	1				1				2
Fea. 45								1	1
Fea. 43	2	3			2				7
Fea. 42	3								3
Fea. 26	3	1							4
Clean fill					11				11
Str. 1a floor									
Fea. 49B			2		6		1		11
Fea. 49A	4				5	1			10
Totals	80	12	8	4	52	5	3		171

Table G.2. Structure 2 unmodified stone, mineral, and copper counts by structure, stratigraphic deposit, and feature.

Structure Deposit Fea/Strat.		Mineral/Unmodified Stone							Other/CU				
		Pigment quality hematite	Pigment quality limonite	Petrified wood	Bituminous coal	Muscovite mica	Galena	Greenstone shatter	Other (Tallahatta quartzite)	Other (Silica froth)	Other (Slag)	Other (Copper)	Totals
<i>Structure 2</i>													
Humus		11			1			4					16
Upper levels		39	4	1		4	4	1					56
Str. 2b floor													
Fea. 58		1				1							2
Fea. 50		1											1
Fea. 16		2											2
Fea. 14		10											10
Fea. 12		10	4			1			1	1			17
Fea. 11		2	1					1			1		5
Totals		76	9	1	1	6	4	6	1	1	1	3	109

Table G.3. Residual deposit unmodified stone and mineral counts by stratigraphic deposit and feature.

Residual deposit Deposit Fea/Strat.		Unmodified Stone/Other						
		Pigment quality hematite	Pigment quality limonite	Petrified wood	Bituminous coal	Greenstone shatter	Other: Vitrified sand	Totals
<i>Residual deposit</i>								
Central V		9	2			1		12
CCC fill		2		1	3			6
Extran. fea.								
Fea. 15							1	1
Totals		11	2	1	3	1	1	19

Table G.4. Surface collection and clean-up mineral counts by test unit.

Collection location Fea/Unit/Strat.		Mineral/Other			
		Pigment quality hematite	Pigment quality limonite	Bituminous coal	Totals
<i>Surface</i>					
Unit					
83R127, Cut 3		2	1	2	5
Totals		2	1	2	5

Appendix H: Provenience Information for Photographed Artifacts

Table H.1 contains provenience information for each artifact appearing as a figure in the text, including its accession number and affiliated deposit, unit, cut, or feature.

Table H.1. Provenience information for photographed artifacts.

Fig.	Artifact Description	Accession # [A999.]	Deposit	Unit, Cut, or Feature
2.5	Alabama River Incised, <i>var. unspecified</i> vessel	54.3135	<i>Intrusive fea.</i>	79R129, Cut 4, Fea. 31
3.2	Mississippi Plain sherd	54.572.1		
3.2	Bell Plain sherd	54.525.1	<i>Str. 2b floor</i>	77R131, Cut 2, Fea. 12
3.3	Mississippi Plain discoidal	54.320	<i>Central Mound V</i>	28R90, Cut 2
3.3	Mississippi Plain discoidal	54.4	<i>Central Mound V</i>	28R90, Cut 2
3.4	Moundville Incised, <i>var. Moundville</i> jar fragment	54.1685.1	<i>Str. 2b floor</i>	79R132, Fea. 14
3.5	Carthage Incised, <i>var. Carthage</i> rim	54.1620.1	<i>Roof/wall fall</i>	79R127, Cut 3
3.5	Carthage Incised, <i>var. Akron</i> rim	54.1250.1		Surface
3.6	Moundville Engraved, <i>var. Wiggins</i>	54.2100.3	<i>Berm cover</i>	83R125, Cut 2
3.7	Carthage Incised, <i>var. Fosters</i>	54.1234.1	<i>Berm cover</i>	83R127, Cut 2
3.8	Moundville Engraved, <i>var. Hemphill</i> sun circle motif	54.922.1	<i>Str. 2b floor</i>	Fea. 11
3.8	Moundville Engraved, <i>var. Hemphill</i> sun circle motif	54.2408.1	<i>Str. 1a/1b fea.</i>	Fea. 38A
3.9	Pensacola Incised, <i>var. Gasque</i>	54.2779.2	<i>Str. 1a floor</i>	Fea. 49B
3.10	Parkin Punctated, <i>var. Parkin</i>	54.2072.1	<i>Berm cover</i>	
3.11	Pouncey Ridge Pinched, <i>var. unspecified</i>	54.3132.1	<i>Berm cover</i>	73R129, Cut 2
3.11	Plaquemine Brushed, <i>var. unspecified</i>	54.2425.1	<i>Str. 1a/1b fea.</i>	Fea. 40
3.12	Alabama River Painted, <i>var. Cork</i>	54.3137	<i>Overlying fill</i>	77R125, Cut 2, clean-up
3.13	White painted sherd	54.1179.1	<i>Berm cover</i>	75129, Cut 2
3.13	White painted sherd	54.2396.1		
3.13	Red painted sherd	54.109.1	<i>Upper levels</i>	75R131, Cut 2
3.13	Red painted sherd	54.107.1	<i>Humus (S. 2)</i>	75R131, Cut 1
3.14	Red on white painted sherds	54.225.1	<i>Upper levels</i>	81R131, Cut 2
3.15	Red on white painted sherds	54.1644.1	<i>Roof/wall fall</i>	81R127, Cut 3
3.15	Red on white painted sherds	54.132.2	<i>Humus (S. 2)</i>	81R131, Cut 1
3.15	Red on white painted sherds	54.3123	<i>Berm cover</i>	81R129, Cut 2
3.15	Red on white painted sherds	54.3127	<i>Str. 2b floor</i>	77R131, Fea. 12

Table H.1. Provenience information for photographed artifacts (continued).

Fig.	Artifact Description	Accession # [A999.]	Deposit	Unit, Cut, or Feature
3.15	Red on white painted sherds	54.532.2	<i>Upper levels</i>	79R131, Cut 2
3.16	Plate fragment with notched rim	54.1669.1	<i>Str. 2b floor</i>	73R131, Fea. 11
3.17	Jar collars with handles	54.2068.1	<i>Clean fill</i>	79R127, Cut 4
3.17	Jar collars with handles	54.108.1	<i>Upper levels</i>	75R131, Cut 2
3.17	Jar collars with handles	54.2740.1	<i>Str. 1b floor</i>	Fea. 42
3.18	Burnished jar fragment	54.489.1	<i>Upper levels</i>	73R131, Cut 2
3.19	Flaring-rim bowl	54.2782.1	<i>Str. 1a floor</i>	Fea. 49B
3.19	Flaring-rim bowl	54.1248.1		Surface
3.19	Short-neck bowl		<i>Str. 2b floor</i>	79R132, Fea. 14
		54.2130.1		
3.19	Restricted bowl	54.1604.1	<i>Berm cover</i>	73R129, Cut 2
3.20	“Other” bowl fragment	54.1177.1	<i>Berm cover</i>	75R129, Cut 2
3.20	“Other” bowl fragment	54.1178.1	<i>Berm cover</i>	75R129, Cut 2
3.21	Red painted bottle neck fragment	54.1588.2	<i>Overlying fill</i>	79R125, Cut 2
3.22	Bottle corner point	54.2803.1	<i>Str. 2b floor</i>	Fea. 58
3.22	Bottle neck	54.1202.1	<i>Berm cover</i>	77R129, Cut 2
3.23	Slab base	54.918.2	<i>Berm cover</i>	79R129, Cut 2
3.23	Slab base	54.1186.1	<i>Berm cover</i>	77R129, Cut 2
3.23	Simple base	54.1199.1	<i>Berm cover</i>	77R129, Cut 2
3.23	Pedestal base	54.2131.3	<i>Berm cover</i>	75R129, Cut 2
3.24	Simple bowl with beaded rim	54.1231.1		
3.24	Simple bowl with beaded rim	54.520.1		
3.24	Simple bowl with beaded rim	54.929.2	<i>Str. 2b floor</i>	77R131, Cut 2, Fea. 12
3.24	Simple bowl with beaded rim	54.1644.2	<i>Roof/wall fall</i>	81R127, Cut 3
3.24	Simple bowl with beaded rim		<i>Str. 2b floor</i>	77R131, Fea. 12
		54.926.2		
3.24	Simple bowl with beaded rim		<i>Str. 2b floor</i>	78R134, Fea. 58
		54.2686.4		
3.24	Simple bowl with beaded rim	54.2087.1	<i>Clean fill</i>	81R125, Cut 4
3.24	Simple bowl with beaded rim	54.493.1	<i>Upper levels</i>	73R131, Cut 2
3.25	Alabama River Appliqué jar rim	54.3117.1	<i>Berm cover</i>	75R129, Cut 2
3.25	Alabama River Appliqué jar rim	54.1617.1	<i>Roof/wall fall</i>	79R127, Cut 3
3.25	Alabama River Appliqué jar rim	54.2537.1		
3.26	Indentation on Moundville Engraved potsherd	54.2107.1		
3.26	Indentation on Moundville Engraved potsherd	54.2050.1		
3.27	Burnished jar with partial frog effigy limb on shoulder	54.2041.2	<i>Berm cover</i>	73R129, Cut 3
3.28	Partial effigy limb	54.1584.1	<i>Humus (E.I.)</i>	75R129, Cut 1
3.28	Partial effigy limb	54.2053.1	<i>Upper levels</i>	78R136, Cut 5
3.28	Effigy tail (lug)	54.2072.2	<i>Roof/wall fall</i>	81R125, Cut 3
3.29	Suckerfish effigy	54.918.1	<i>Berm cover</i>	79R129, Cut 2

Table H.1. Provenience information for photographed artifacts (continued).

Fig.	Artifact Description	Accession # [A999.]	Deposit	Unit, Cut, or Feature
3.30	Human-head medallion effigy	54.1651.1	<i>Berm cover</i>	83R125, Cut 2
3.31	Clay owl figurine	54.654	<i>Str. 2b floor</i>	77R131, Fea. 12
3.32	White-painted clay bead	54.2749	<i>Str. 1b floor</i>	Fea. 43
3.33	Incised clay pipe fragment	54.3116	<i>Berm cover</i>	75R129, Cut 2
3.34	Painted raptor effigy pipe fragment	54.3124	<i>Berm cover</i>	77R129, Cut 2
4.1	Glauconite	54.2642	<i>Str. 1a floor</i>	Fea. 49B
4.2	Pigment quality hematite	54.1485.1	<i>Overlying fill</i>	79R127, Cut 2
4.3	Microdrill/perforator (UID chert)	54.1024	<i>Roof/wall fall</i>	75R125, Cut 3
4.3	Microdrill/perforator (T.G.)	54.1511	<i>Roof/wall fall</i>	79R127, Cut 3
4.4	Madison projectile point (T.G.)	54.187	<i>Upper levels</i>	81R131, Cut 2
4.4	Madison projectile point (F.P.)	54.359	<i>Upper levels</i>	77R131, Cut 2
4.4	Madison projectile point (T.G.)	54.773.1	<i>Humus (E.l.)</i>	79R129, Cut 1
4.4	Madison projectile point (T.G.)	54.2596	<i>Str. 1a/1b fea.</i>	Fea. 38C
4.4	Madison projectile point (T.G.)	54.2666	<i>Str. 2b floor</i>	Fea. 58
4.4	Madison projectile point (crystal quartz)	54.2608	<i>Str. 1b floor</i>	Fea. 43
4.4	Preform (T.G.)	54.1548	<i>Humus (E.l.)</i>	83R127, Cut 1
4.4	Madison projectile point (F.P.)	54.1549		Surface
4.4	Madison projectile point (crystalline quartz)	54.1929		Surface
4.4	Madison projectile point (heated fossiliferous F.P.)	54.3113	<i>Berm cover</i>	75R129, Cut 2
4.4	Madison projectile point (fossiliferous F.P.)	54.3114	<i>Berm cover</i>	73R129, Cut 2
4.5	Retouched flake	54.33.1	<i>Humus (S. 2)</i>	79R131, Cut 1
4.5	Retouched flake (crystalline quartz)	54.1489.2	<i>Humus (E.l.)</i>	83R127, Cut 1
4.6	Gray micaceous sandstone palette fragment	54.367.1	<i>Str. 2b floor</i>	77R131, Cut 2, Fea. 12
4.7	Hematitic sandstone saw fragments	54.781.1, 2	<i>Berm cover</i>	79R129, Cut 2
	Hematitic sandstone saw fragment	54.322	<i>Central Mound V</i>	30R90, Cut 2
4.8	Shale pendant fragment	54.2000.1	<i>Berm cover</i>	83R129, Cut 2
4.9	Broken greenstone celt	54.3115	<i>Humus (S. 2)</i>	78R136, Cut 1
4.10	Copper pellet	54.2953	<i>Str. 1a/1b fea.</i>	Fea. 54A
4.10	Copper pellet	54.2950	<i>Str. 1a floor</i>	Fea. 49B
4.11	Eroded marine shell bead	54.2619	<i>Str. 1b floor</i>	81R127, Fea. 45

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