1

# New Directions in Moundville Research

VINCAS P. STEPONAITIS AND C. MARGARET SCARRY

Between the start of the second millennium AD and the onset of European colonization, the American South was home to a set of Indian cultures that are now called Mississippian. These people inhabited the South's many river valleys and organized themselves into polities that the early Spanish explorers described as provincias, or provinces, and which were headed by caciques, or chiefs (Clayton et al. 1993). Such polities appear to us nowadays as geographical clusters of archaeological sites, which are separated from other, contemporary clusters by uninhabited areas (Hally 1993). The most important sites within these clusters are also marked by large pyramidal mounds, built of earth, which were platforms for such buildings as chiefly residences, temples, and lodges that served political and religious ends. Hundreds of these mound sites were built and used across the South during Mississippian times, but only a few stood out in the number of earthworks and the scale of their monumental construction. One of these was Moundville, the second-largest Mississippian center ever built, whose regional history is the subject of this book.

Located in the Black Warrior Valley of west central Alabama, Moundville was marked by at least 29 pyramidal mounds arranged around a plaza (figure 1.1). This site was clearly a major political and religious center, not only for the people living in its region but also for the wider Mississippian world. Its chronology and history are reasonably well understood, at least in broad outline (Knight and Steponaitis 1998). Moundville began around AD 1100 as a dispersed settlement with two small mounds. Not long after AD 1200, it experienced a burst of construction that transformed it into a major center. Most of the mounds were built at this time, as was a large, bastioned fortification wall, made of thousands of logs,



Figure 1.1. The Moundville site.

which protected the site on the sides away from the river. Initially the site had a substantial resident population, which presumably provided the labor for this construction. At about AD 1300, however, the character of the site changed dramatically. Much of the resident population dispersed into the countryside, the fortifications were dismantled, and Moundville became a "necropolis," a place of ritual where the dead were brought from outlying settlements for burial. Indeed, many of Moundville's residential neighborhoods were turned into cemeteries, which were used by the same social units that had once lived there (Wilson 2010). During this time the site was inhabited mainly by the social elite—chiefs, priests, and their retainers. Literally thousands of people were buried at Moundville during the fourteenth and fifteenth centuries. After AD 1450 the level of activity began to decline, and by AD 1650 the site was abandoned.

At its peak Moundville was far and away the largest site in the region, but there were also many contemporary settlements scattered along a 50km stretch of the Black Warrior Valley just below the Fall Line at Tuscaloosa (figure 1.2). These other settlements, which constituted Moundville's immediate hinterland, were of two kinds. Some were small, local centers marked by a single pyramidal mound; at least 14 such sites are currently known (Welch 1998). The second category comprised hundreds of small sites without mounds, which are generally called "farmsteads" or "hamlets." These smaller residential sites tend to occur in geographical clusters, each associated with a local center (Myer 2002a, 2002b). Many people lived in these outlying settlements, particularly when Moundville itself was a necropolis. The subsistence economy was based on farming, with maize as the principal crop. Craft production of various items, including ritual paraphernalia, took place not only at Moundville, but also in the hinterland (e.g., Marcoux 2007; Sherard 1999; Wilson 2001).

The classic, long-standing interpretation of this evidence is that Moundville was the center of a chiefdom—a polity that was politically centralized but lacked the elaborate bureaucracy that is typical of states (Peebles and Kus 1977; Wright 1977). Beginning in the 1970s, Peebles' pioneering analysis of funerary evidence showed that Moundville's social organization was hierarchical, with marked social distinctions that were visibly expressed in mortuary rituals (Peebles 1974; Peebles and Kus 1977). Settlement studies published soon thereafter argued that the distinction between Moundville and the local centers was a political hierarchy, and that the spatial distribution of these centers was well suited for the movement of tribute from the hinterland to the paramount center (Peebles 1978; Steponaitis 1978). Later studies found direct evidence of such tribute or "provisioning" of foodstuffs at Moundville (Scarry and Steponaitis 1997), examined the circulation of craft items within the polity (Welch 1991), and refined the conclusions of earlier burial and settlement studies in myriad ways. Much of this work culminated in a 1998 volume called Archaeology of the Moundville Chiefdom, which presented a new synthesis of Moundville and its region (Knight and Steponaitis, eds. 1998).



Figure 1.2. The Black Warrior Valley, encompassing Moundville and its immediate hinterland.

Our purpose in this book is to draw together some strands in the enormous amount of research that has taken place at Moundville since that 1998 synthesis was published. Despite the criticism that the term chiefdom has endured in recent years (e.g., Pauketat 2007), we still find it useful in describing the kind of "middle-range" societies that Moundville represents. We accept many of the criticisms that have been made-particularly that chiefdoms have sometimes been "essentialized" into a rather rigid, idealized category, based on Polynesian examples, which can prevent one from recognizing the variability in social forms that appear in the archaeological record. The answer to this criticism, in our view, is not to throw away the term, as some would have us do, but to recognize that it encompasses a great deal of variability, which can become an object of study in itself. In other words, the concept of a chiefdom still retains value as a descriptive and comparative tool, so long as one does not define the category too rigidly or assume too much about the range of social features it entails. Ultimately, the variability in chiefdoms is a matter that must be explored empirically with archaeological evidence, not assumed a priori.

This is the spirit, we believe, that has animated much of the recent research at Moundville, and that the chapters in this book exemplify. Indeed, one can see a clear trend in the way Moundville studies have evolved over the past four decades. The initial reconstructions of Moundville as a chiefdom were based on the simplified, neo-evolutionary taxonomies of Service (1962) and Fried (1967) and relied heavily on ethnographic analogies with Polynesia (Peebles and Kus 1977; Steponaitis 1978). Since then, the trend has been toward increasingly nuanced interpretations that rely on better archaeological data and more directly on analogies with historical Indian cultures in the American South—societies not far removed, in either time or space, from the archaeological case at hand. The resulting interpretations have not been unduly constrained by neo-evolutionary assumptions and have given us a much richer, more detailed understanding of Moundville and the people who lived there.

In the remainder of this chapter, we discuss several lines of research on Moundville that have played out over the past two decades, not only to review what has been done since the 1998 synthesis, but also to lay the groundwork for the subsequent chapters herein. We see four major themes in this recent work. Described in the briefest of terms, these are (1) chronology, (2) mounds and social memory, (3) iconography and religious practice, and (4) Moundville's hinterland. Let us now consider each of these themes in turn. Together, they lead us to a new perspective on Moundville, which is discussed at the end.

## Chronology

Moundville's internal chronology was first worked out in the 1970s and consisted of five ceramic phases: West Jefferson (AD 900-1050), Moundville I (AD 1050-1250), Moundville II (AD 1250-1400), Moundville III (AD 1400-1550), and Alabama River (AD 1550-1700). The West Jefferson phase was first recognized at outlying sites in the upper reaches of the Black Warrior drainage (Jenkins and Nielsen 1974; O'Hear 1975). The Moundville I-III phases were defined at Moundville itself, based on stratigraphic evidence and a gravelot seriation (Steponaitis 1980, 1983a). And the Alabama River phase was recognized in an analysis of ceramic assemblages from both central Alabama and the Black Warrior Valley (Cottier 1970; Sheldon 1974). During the 1990s the last phase was renamed to Moundville IV, to differentiate the protohistoric ceramic assemblages in the Black Warrior Valley from those in neighboring regions (Little and Curren 1995). Continuing excavations at Moundville and surrounding areas in the 1990s and 2000s yielded additional ceramic stratigraphy, which resulted in some minor adjustments to the ceramic varieties diagnostic of each phase, but the sequence of phases remained remarkably intact (Knight 2010).

One major change to the chronology in recent years has been the addition of a new unit, the Carthage phase, just before the West Jefferson phase (Jenkins 2003). Like the latter, the Carthage phase has a ceramic assemblage dominated by plain, grog-tempered sherds; but, unlike West Jefferson, its pottery has much higher frequencies of cord marking and limestone tempering. In absolute dates, the Carthage phase is roughly estimated to last from AD 600 to the start of West Jefferson times.

The second major change has been a significant shift in the absolute dates associated with some of the phases, particularly at the early end of the original sequence. This refinement was a direct result of the accumulation of new radiocarbon dates from Moundville (Knight 2010), the increasing use of stable-isotope corrections and tree-ring calibrations for such dates, and the easy availability of software for statistically pooling and analyzing dates using Bayesian techniques (e.g., Bronk Ramsey 1995, 2009).

In a widely cited but unpublished paper, Knight, Konigsberg, and Frankenberg (1999) used these advances to reestimate the boundaries of the five original phases. They relied on a large corpus of new radiocarbon dates that, when added to those previously available, yielded a total of 107 samples dated by radiocarbon, three by paleomagnetism, and two by thermoluminescence. Their statistical analysis of these dates entailed the following steps:

- All the radiocarbon dates were corrected for isotopic fractionation. Samples for which the <sup>13</sup>C/<sup>12</sup>C ratios were unknown (mostly on those submitted prior to 1990) were corrected using the average value in the dataset as a whole. This estimated correction had the effect of shifting uncalibrated dates 40 years later than the original determination.
- The corrected radiocarbon dates were then calibrated for changes in atmospheric carbon, using the most recent tree-ring curves. This calibration had the greatest effect on dates around AD 1000, generally pushing them about a century later.
- Each date was assigned to a single phase in the sequence, West Jefferson through Moundville IV, based on its archaeological context.
- The dates assigned to each phase were then examined statistically for anomalies, using Bronk Ramsey's (1995) agreement index. Thirty-eight dates, about a third of the total, were identified as outliers and eliminated from further consideration.
- To estimate the most likely boundaries between phases, the remaining dates were subjected to the Gibbs Sampler, a statistical algorithm that estimates a target distribution (in this case, for a phase boundary) by repeatedly sampling from a set of prior distributions (the radiocarbon dates). Two additional constraints were imposed on the model based on prior assumptions: (1) that adjacent phases did not overlap, and (2) that the Moundville IV phase ended before the start of French colonization in 1699. This analysis was accomplished using an early version (2.18) of Bronk Ramsey's (1995) OxCal program.

The Gibbs Sampler yielded a probability distribution for each phase boundary, and these results are summarized in table 1.1. Compared to the original estimates, the West Jefferson phase was shortened and shifted

Phase Boundary	Original Estimatesª	Knight et al. Estimates <sup>b</sup>		Current Estimates <sup>f</sup>	
		Mean <sup>c</sup>	Range <sup>d</sup>	Mean <sup>g</sup>	Range <sup>h</sup>
Moundville IV end	1700	1690 <sup>e</sup>	1686-1699	1690	1683-1699
Moundville III–IV	1550	1520	1480-1550	1520	1466-1545
Moundville II–III	1400	1400	1381-1409	1390	1383-1417
Moundville I–II	1250	1260	1242-1267	1250	1237-1271
West Jefferson– Moundville I	1050	1120	1098-1140	1120	1104–1149
West Jefferson start	900	1020	990-1055	1070	1021-1109

### Table 1.1. Phase Boundaries in the Moundville Chronology

<sup>a</sup>After Steponaitis 1983a: figure 23.

<sup>b</sup>Derived using the Gibbs Sampler algorithm in OxCal version 2.18; after Knight et al. (1999). <sup>c</sup>Rounded to the nearest decade.

<sup>d</sup>Plus or minus one standard deviation from the mean.

<sup>e</sup>Estimated here as the midpoint of the one-standard-deviation range, rounded to the nearest decade. Knight et al. (1999: figure 7) set this boundary at 1650, without explanation. We assume that their earlier date is based on external archaeological evidence, not the statistical procedure. <sup>f</sup>Derived using the Markov chain Monte Carlo (MCMC) algorithm in the current OxCal version 4.2, using exactly the same dates, with the same outliers eliminated, as Knight et al. (1999). The dates themselves come from numerous theses and publications (Bozeman 1982: 62; Curren 1984: 241; Jenkins and Nielsen 1974: 155–58; Knight 2010: tables 4.13, 5.7, 6.6, 6.13, 6.20; Scarry 1986: 150, 164; Scarry 1995: 92–93; Steponaitis 1983a: 104, 126; Walthall and Wimberly 1978: 118, 120; Welch 1986: 53; Welch 1998: table 7.1).

<sup>g</sup>Rounded to the nearest decade.

<sup>h</sup>Plus or minus one standard deviation from the mean.

about a century later, the Moundville I phase was also shortened to accommodate this shift, and the remaining three phases stayed roughly where they had been, with only minor adjustments to their boundaries.

In assessing these results, one must keep two caveats in mind. First, the dates for adjacent phases show a great deal of overlap (figures 1.3, 1.4). This does not necessarily mean that the estimated boundaries are wrong, but it does provide grounds for caution. In other words, the Gibbs Sampler identifies the most likely boundaries given the available data, but these boundaries are not the only plausible ones. As additional data accumulate and statistical methods evolve, the estimates could well change. Indeed, running the same set of dates through the current version of Ox-Cal (4.2), which uses a related but different sampling algorithm (Bronk

Ramsey 2009), yields a somewhat different result.<sup>1</sup> The most likely start of the West Jefferson phase is pushed five decades later, and the start of the Moundville II phase moves a decade earlier (table 1.1; figures 1.3, 1.4).

It is also important to recognize a difference in the way the Gibbs Sampler or any related technique determines boundaries in the middle of the sequence, as compared to the ends. In the middle, phase boundaries have dates on *both* sides, which constrain the algorithm from two directions simultaneously and yield estimates that, in essence, balance these opposing probabilities. At each end of the sequence, on the other hand, dates exist on only one side of the boundary. As a result, these boundaries are much less constrained by the available dates, and may be more prone to error. This problem is undoubtedly why Knight et al. (1999) imposed an external (albeit reasonable) constraint of 1699 on the terminal date of the Moundville IV phase. Because of idiosyncrasies in the calibration curve, many of the Moundville IV dates have distributions that extend far beyond 1699 (see figure 1.5). Absent that external constraint, the Gibbs Sampler would have pushed the "best fit" terminal date well into the eighteenth century—a result that would be implausible, because we know from historical evidence that the Black Warrior Valley was abandoned by that time (Knight 1982). Again, this observation does not invalidate the algorithm but simply reminds us that its results, like those of any statistical procedure, should be taken with a grain of salt.

For present purposes, we are inclined to adopt the phase boundaries estimated by the current iteration of OxCal for the middle of the sequence, but to modify the date at the beginning (figure 1.5). We feel the start of the West Jefferson phase is not well enough dated to accept the AD 1070 estimate at face value. Rather, we prefer to adopt a more conservative, rounded estimate of AD 1000 instead, at least until more Late Woodland dates become available. It is worth noting that this rounded date is still within one standard deviation of the best estimate in the 1999 OxCal results. As for the end of the sequence, the Black Warrior Valley may well have been largely vacant by the mid-seventeenth century, based on the lack of historically documented sites and the rarity of European trade goods (Knight 1982; Knight and Steponaitis 1998: figure 1.2). Even so, for present purposes we see no harm in adopting a terminal date of AD 1690, as estimated from the radiocarbon evidence alone.

In sum, our best current estimates for the temporal spans of the phases in the local chronology are Carthage, AD 600–1000; West Jefferson, AD





Figure 1.3. Radiocarbon dates for the West Jefferson and Moundville I phases, showing their probability distributions and means. The most likely phase boundaries are shown as vertical lines (see Table 1.1). Key: the posterior probability distributions are shown in dark gray, the means of these distributions appear as circles, and the prior probabilities appear in light gray. Posterior probabilities and phase boundaries were calculated with the Markov chain Monte Carlo (MCMC) algorithm implemented in the current version of OxCal (4.2).





Figure 1.4. Radiocarbon dates for the Moundville II, Moundville III, and Moundville IV phases, showing their probability distributions and means. The most likely phase boundaries are shown as vertical lines (see table 1.1). See figure 1.3 for key.



Figure 1.5. Phase sequences in the Black Warrior Valley: (*left*) the sequence in 1998 (after Knight and Steponaitis 1998); (*right*) the current sequence.

1000–1120; Moundville I, AD 1120–1250; Moundville II, AD 1250–1400; Moundville III, AD 1400–1520; and Moundville IV, AD 1520–1690.<sup>2</sup>

## Mounds and Social Memory

From 1989 until 2002, Knight directed a long-term project investigating the history and function of the monumental earthworks at Moundville, which in many ways revolutionized our understanding of the site. By the mid-1990s, two major insights had already been gleaned. One was that most of the mound construction happened in a single extended burst during the thirteenth century AD (Knight and Steponaitis 1998). Another was that the overall layout of the mounds was planned at the outset, and that this layout constituted a "sociogram," in other words, a diagrammatic representation of the social order that existed at the time the construction took place (Knight 1998). Knight postulated a distinction between the mounds on the site's central axis, which were linked to the chiefdom's central institutions, and those along the plaza's periphery, which were used by local kin groups. The plaza-periphery mounds were arranged in pairs, reflecting a difference in function. Knight suggested that the larger mound in each pair supported an elite residence, and the smaller one served a mortuary function. Testing and refining this model served as an overarching framework that guided the project's research in subsequent years, culminating in two monographs (Knight 2009, 2010), as well as a series of articles and reports (Gage and Jones 2001; Jackson and Scott 2003; Knight 2004; Markin 1997), several master's theses (Astin 1996; Barry 2004; Gage 2000; Mirarchi 2009; Ryba 1997; Taft 1996), and a dissertation (Lacquement 2009).

In chapter 2 of the present volume, Knight reviews the major findings of his mound excavations and revisits the idea of Moundville as a sociogram. He evaluates four alternative models of the social arrangements that may have been expressed in the site's layout and concludes that his original model still fits the data, albeit with some adjustments. In his current view, the plaza-periphery mounds were likely associated with kin groups or "houses," which were ranked relative to each other but were in many respects autonomous. The functions of individual mounds were highly variable, as were the activities that took place on their summits. The latter included crafting ritual objects of copper and stone, preparing and consuming food, burying the dead, and bone handling unconnected with mortuary rituals. Although the pairing of the mounds was still evident, a simple "residential" versus "mortuary" dichotomy did not adequately capture their variability, and there was no evidence at all of the mortuary temples so often described in ethnohistoric accounts. All in all, Knight suggests that this variability reflects a ritual complementarity and interdependence among kin groups, like that sometimes seen ethnohistorically in Indian tribes from the South and Great Plains—a kind of organic solidarity (in Durkheim's sense) that created social cohesion.

Building on the notion of a sociogram, Wilson examines the spatial structure of Moundville's residential areas and cemeteries in chapter 3. He shows how, early in the site's sequence, off-mound residences were arranged in clusters that corresponded to kin groups. Later in time, when Moundville became a necropolis, the residences were abandoned, but their former locations became cemeteries, presumably used by the same kin groups that once lived there. Wilson's analysis points to the persistence and continuing importance of these kin groups throughout Moundville's history and provides an interesting example of how nonelite groups used spatial order and ritual to create social memory and maintain their identity over many generations.

The theme of social memory as inscribed in spatial order is further explored by Blitz in chapter 4. Focusing on Moundville's "big bang," when the site's grand plan was first laid out, Blitz shows how the creation of this new sociogram simultaneously entailed the erasure of the more modest layout that preceded it. He argues persuasively that this erasure was not inadvertent, but rather a deliberate example of "selective forgetting," as one social order was replaced by another.

All in all, these studies have yielded many new insights on how Moundville's spatial configuration served as an arena in which power, identity, and social memory were actively created and negotiated throughout the site's history. In so doing they provide an appropriate backdrop for the next line of research to be discussed, which deals with iconography, religious practitioners, and ritual objects.

## Iconography and Ritual Practice

Moundville has long been known for its representational art, so it is perhaps not surprising that a great deal of research since 1998 has focused on iconography. Much of this new work has been done under the auspices of

the Mississippian Iconography Workshop, a group of scholars who meet annually and have thus far published a pair of edited volumes (Lankford et al., eds. 2011; Reilly and Garber, eds. 2007). As a charter member of this group, Lankford has been particularly influential in shaping our understanding of Moundville's imagery. He persuasively showed that much of the representational art at Moundville relates to stories about the "Path of Souls," that is, the journey taken by souls after death (Lankford 2004, 2007c, 2011a). It is no coincidence that this imagery was produced mostly in the fourteenth and fifteenth centuries AD, when Moundville was a necropolis, a place where the dead were brought for burial from throughout the region. He also argued that Moundville's distinctive imagery-with its emphasis on serpents, felines, and the swastika, or "swirl cross"-was oriented mainly to the Beneath World, the portion of the layered Mississippian cosmos that lay below the Middle World of humans and could be entered through caves and water (Lankford 2007b, 2011b). The political and ritual implications of these iconographic themes are not difficult to imagine. As Steponaitis and Knight (2004: 180) have said:

It is reasonable to speculate that at least some of the priests and chiefs who lived at Moundville had a special connection with the Beneath World. It is also possible that Moundville itself may have been seen as a propitious point of entry to the Path of Souls. . . . In either case, such beliefs would have provided powerful ideological support for the social and political power wielded by Moundville's elite residents.

So who were these priests and chiefs? Building on his previous work, Lankford examines an interesting hypothesis in chapter 5: that Moundville was home to a medicine society, analogous (or perhaps ancestral) to the Midé Society and similar groups known ethnohistorically from the western Great Lakes and eastern Plains. These were sodalities of shamans and priests who had spiritual powers used in healing and mortuary ritual, and who had close connections to the Beneath World. Their ritual activities took place in specially constructed lodges, often involved shell beads, and invoked the help of animal spirits, prominent among which were owls. Lankford argues that the wooden "greathouse" on Mound E and the earthlodge on Mound V had features characteristic of such lodges and may have been used in similar ways. He also notes the presence of owl effigies in the earthlodge and elsewhere on the site. Although his evidence is more suggestive than conclusive, Lankford's detailed examination of this hypothesis takes us far beyond the generic references to "elites" so common in the literature, to a detailed, ethnographically grounded consideration of *who* the ritual practitioners at Moundville may have been. He also highlights the important role that medicine societies may have played at Moundville and other Mississippian sites (cf. Byers 2006, 2013).

Another set of recent studies, closely related to the iconographic work just discussed, has looked at two other aspects of the imagery at Moundville: the formal, stylistic attributes of representation (Gillies 1998; Knight 2007; Lacefield 1995; Schatte 1997) and the geological sources of raw materials on which the imagery appears (Gall and Steponaitis 2001; Steponaitis and Dockery 2011; Whitney et al. 2002). Taken together, these lines of research resulted in the definition of the Hemphill style, a distinctive mode of representation associated with items crafted locally in the Moundville region (Knight and Steponaitis 2011). In chapter 6, Phillips looks at four different genres of Hemphill-style objects-engraved pots, stone palettes, stone pendants, and copper gorgets-and how these were distributed among the people buried at Moundville. She finds that engraved pottery and stone pendants were buried with individuals of all ages and both sexes; that copper gorgets were buried with all ages but only males; and that stone palettes were typically buried with adults, mostly males, who were accompanied by an unusually rich assortment of other grave goods. She argues that the pottery, pendants, and gorgets represent ascribed religious identities, which in the case of gorgets was a gender-specific, male identity. The palettes, on the other hand, represent an achieved identity, probably that of a religious practitioner. By providing a richness of detail on how and by whom specific categories of Hemphill-style objects were used, Phillips brings us a step closer to understanding the functions of such objects, which in the past have simply been generically lumped under the heading of "status items" or "prestige goods."

Steponaitis takes an even closer look at the function of such objects in chapter 7. Focusing specifically on stone palettes, he argues that these were religious objects—portable altars that were kept in sacred bundles. This argument has two implications. First, ethnographic accounts clearly show that bundles were used only by people who had the spiritual power and religious training to do so properly. The unusual abundance of palettes in Moundville burials therefore suggests that this site was a center for the religious practices that involved these objects. Second, bundles could never be exchanged or given away as gifts. Rather, acquiring a bundle involved apprenticing oneself to an established practitioner, from whom one could learn the knowledge needed to use it. Thus, the presence of Moundville palettes at distant sites, a pattern well documented archaeologically, implies that Moundville was also a place of pilgrimage, where individuals from distant towns would come to acquire religious knowledge and then would return home with the bundled palettes that were a tangible sign of that knowledge and the spiritual power it entailed.

These studies, and several others undertaken since 1998 (e.g., Davis 2008; Marcoux 2007; Wilson 2001), have taken us far beyond Welch's (1991) seminal notion of Moundville as a prestige-goods economy, in which a chief's power depended on the ability to control local craft production and long-distance trade as a way to acquire socially valuable objects that could be given to followers as gifts. Although craft production did take place at Moundville (Knight 2004, 2010; Markin 1997), there is little evidence that such activities were centrally controlled or managed. Moreover, as suggested in chapter 7, many of the elaborate items that circulated over long distances in the Mississippian world were probably religious objects that could not be used as gifts to buy political loyalty (also see Steponaitis and Dockery 2011; Steponaitis et al. 2011). Possessing such objects undoubtedly contributed to an individual's power but did so in ways that were spiritual and ideological, rather than economic.

## Moundville's Hinterland

The social and political changes that led to the emergence of Moundville as a paramount center and to its ultimate demise also wrought changes in its hinterland communities. Archaeological investigations conducted prior to the mid-1990s had determined the chronological placements of the 14 single-mound centers, demonstrated that most were built on locations that had previously held West Jefferson villages, discovered that the resident populations at the outlying centers were quite small, and documented that the majority of the population living in the hinterlands resided at small dispersed sites generally construed as farmsteads (Bozeman 1982; Welch 1998). These lines of evidence were woven together to create a model of the Moundville polity in which a paramount chief at Moundville held ultimate political authority and controlled access to prestige goods. Subordinate chiefs, who were presumably close relatives of the paramount or drawn from cadet lineages, lived at the single-mound centers, overseeing ceremonies, acting as intermediaries between the paramount and the rural population, and facilitating the flow of provisions from the hinterlands to Moundville. People living at the small rural sites were cast as farmers, who procured and produced food for themselves, as well as provisions for the elite. These rural folks had limited if any access to prestige goods and looked to their chiefs for ritual services (Peebles and Kus 1977; Knight and Steponaitis 1998; Scarry and Steponaitis 1997; Welch 1991, 1998). This model provided the backdrop and framed interpretations for many of the chapters in the 1998 synthesis (Knight and Steponaitis, eds. 1998).

Several excavation and survey projects completed since 1998 expand our understanding of the nature and distribution of Moundville's hinterland communities. They also challenge some of the tenets on which the 1998 model was built. Rees' (2001) excavations at Fosters Landing, a mound and village center thought to date to Moundville IV, disclosed an earlier Moundville II mound stage. This should remind us that while single-mound centers with only Moundville I material are likely securely dated, mounds thought to have been constructed later in the polity's reign may have earlier stages—as they do at Moundville (Knight 1998). In 1995 Scarry and Scarry (1997) conducted small excavations at 1Tu570, a West Jefferson village; Grady Bobo (1Tu66), a West Jefferson village and Moundville I rural site; and Wiggins (1Tu768), a Moundville I hamlet. In 1999 and 2000, they conducted larger excavations at Grady Bobo. Work at these sites documented, among other things, evidence for feasting and ritual at small rural sites, indicating that some at least were more than simple farmsteads. Maxham (2000, 2004) used this evidence to argue for agency and construction of community identity not directly connected to or directed by chiefs. In 1998 and 1999, excavations were conducted by Johnson at Pride Place (1Tu1), a Moundville III village (Davis 2008, this volume; Johnson 1999, 2001; Johnson and Sherard 2000). Pride Place is located just below the Fall Line at Tuscaloosa near an outcrop of the finegrained sandstone from which Moundville palettes were made.

Two larger-scale survey and testing projects contributed much-needed data about the distribution of nonmound sites in Moundville's hinterland. Hammerstedt and Myer systematically surveyed two 4.8-km (3-mi) transects spanning the width of the Black Warrior Valley and conducted test excavations at three nonmound sites (Hammerstedt 2000, 2001; Ham-

merstedt and Myer 2001; Myer 2002a, 2002b, 2003). This work provided crucial information about the locations of rural settlements with respect to natural resources as well as to Moundville and the single-mound centers. The excavations at the nonmound sites produced further evidence of ritual and crafting at rural communities (Jackson 2003a, 2003b; Myer 2003). The second project consisted of surveys and test excavations (mostly conducted by the University of Alabama and PanAmerican Consultants) on hundreds of well pads that were part of the Moundville Coal Degasification Field. These pads were distributed over 265 sq km of the Black Warrior Valley and its adjacent uplands. The work covered areas not surveyed by Hammerstedt and Myer and provided valuable data on upland sites (Maxham 2004).

Four chapters in this volume use the additional excavation and survey data to refine our understanding of settlement patterns and offer new perspectives on site functions and relationships within and between communities.

In chapter 8, Hammerstedt, Maxham, and Myer summarize and synthesize the results of the two survey and testing projects. They analyze the locations of rural sites with respect to natural features—topography, water source, and soil type—as well as the placement of sites vis-à-vis distance to Moundville, single-mound centers, and other nonmound sites. In so doing, they demonstrate continuity in land use from West Jefferson through Moundville IV times. Not surprisingly, people living in rural settlements selected locations with ready access to water sources and deep, well-drained soils. People also chose to live near one another, creating clusters of nonmound sites around single-mound centers. The authors also delineate demographic shifts in the hinterlands through time. Rural population declined during Moundville I, when Moundville itself was a large community, and later rebounded as the resident population at Moundville declined. Notably, people moved back to areas that were long occupied, rather than dispersing to new settlement clusters.

Social practices at hinterland communities are examined by Scarry, Jackson, and Maxham in chapter 9. They present evidence from three rural hamlets to show that religious objects and regalia were crafted, and communal rituals were held, at places distant from the mound centers. They argue that rural folk were more than farmers, and that not all rural sites were farmsteads. Instead, these people exercised agency and created identity apart from the purview of Moundville's elites. Jackson, Scarry, and Scott synthesize the data on plant and animal foods in chapter 10. They argue that rural communities provisioned people living at Moundville and the single-mound centers but also suggest that the flow of food may have followed kinship paths in addition to being paid as tribute to the elite. They also identify consumption of special foods, particularly meat, in ritual contexts at Moundville and hinterland sites.

In chapter 11 Davis documents the rural production of ritual objects, specifically the stone palettes previously discussed in chapters 6 and 7. Davis uses experimental archaeology and evidence from Pride Place to show how the palettes were made and what tools were used at each stage in their manufacture. The palettes may have been crafted by specialists, not necessarily the same people who used them in rituals. Ultimately the palettes took on complex "lives" and meanings over the span of their use.

### New Perspectives on Moundville

The insights derived from the past two decades of work in the Black Warrior Valley—many of which inspire the chapters in this book—cause us to rethink the nature of Moundville. How do we accommodate our more detailed and nuanced understanding of the sociogram at Moundville, the erasure of earlier monuments to make way for a new social order, the associations of residential neighborhoods and later corporate cemeteries with mound pairs, and the complementarity of ritual activities associated with the various mounds? How does the recognition of Moundville as a religious center and place of pilgrimage affect our interpretations of its political organization and leaders? What was the nature of the relationships between Moundville and the single-mound centers with their clusters of rural hamlets?

We address these questions in chapter 12 with a new model for Moundville's organization, which draws heavily on the archaeological work of our colleagues and the ethnohistory of the Native South. Our model builds on the idea, presented by Knight in chapter 2, that Moundville was planned according to the logic of a ceremonial ground where ritual practitioners held sway. Most southern Indian societies had two crosscutting structural elements with distinct social roles, namely towns and clans. Towns were corporate entities, marked by a defined area of settlement and led by secular chiefs. Clans, on the other hand, were exogamous, matrilineal groups, which crosscut towns, linking people within a tribe or polity to one another. Clan priests held sacred knowledge and came to the fore during ritual performances, in which different clans played complementary roles. When people gathered at ceremonial grounds, they arrayed themselves by clan, rather than by town affiliation. We speculate that Moundville was constructed at a time when clan priests gained precedence over town chiefs and that its monumental sociogram was inspired by the layout of more ephemeral ceremonial grounds. That is, Moundville was built when people from multiple towns came together under the leadership of clan priests, thereby forming a community that was different from a conventional town. In so doing, they used a familiar spatial logic for organizing people from disparate communities. We further suggest that towns continued to exist and were represented by the outlying mound sites with their clusters of rural settlements. Presumably, the town chiefs lost some of their authority during the ascendency of the clan priests, but over time, as people moved away from Moundville and back to the hinterlands, towns and their chiefs regained political power.

There is much to be learned from continued work on Moundville and its hinterland. Future excavations as well as continued analyses of extant collections are sure to add to and amend our current understandings. Nonetheless, the present chapters, which range from detailed analyses of material objects to broader syntheses and applications of new theoretical frames, offer many new perspectives. To our minds, they also make the lives and activities of this region's people more tangible and connected to what we know from local ethnohistory and ethnography. At the same time, we believe that Moundville continues to be an important case for understanding the middle-range societies we call chiefdoms. Our interpretation of Moundville and its organization has come a long way from the Polynesian archetype of the conical clan ruled by a paramount chief.

### Acknowledgments

We are grateful to Vernon J. Knight for providing the radiocarbon dates used in this chapter, and for his advice on their reanalysis. Daniel Amrhein was very helpful in explaining the fine points of OxCal and the statistical procedures used herein. We also wish to thank Jon Marcoux and an anonymous reviewer for their thoughtful suggestions.

#### Notes

1. All the Oxcal 4.2 runs reported here excluded the same outliers previously identified by Knight et al. (1999). The outlier routine as currently implemented yields different results, not nearly as plausible, so we decided to use exactly the same set of "good" dates as in the previous study. This approach also has the effect of making the results of the two sampling algorithms more easily comparable.

2. Building on the work of Jenkins (1978, 2003), Paul Jackson (2004) has argued that West Jefferson and Moundville I represent overlapping, rather than sequential phases. His evidence consists of two late radiocarbon dates associated with grog-tempered pottery from the Cane Creek site (1Wa140) in Walker County: AD 1240 ± 80 (Feature 56) and AD 1130 ± 100 (Feature 76), both uncalibrated. He also cites a previously reported date from the Jones Ferry site in Tuscaloosa County of AD 1140 ± 70 on a probable West Jefferson feature (Welch 1998: 154-55, table 7.1). When calibrated with OxCal 4.2, the means of all three dates fall within the Moundville I phase as currently defined, but the 2σ confidence intervals for two of them (Cane Creek Feature 76 and Jones Ferry) also overlap substantially with the West Jefferson phase. The one date that does not overlap (Cane Creek Feature 56) came from an isolated cooking pit that contained only a single, plain, grog-tempered sherd of a type that continued being used in early Moundville I times (Knight and Steponaitis 1998:12). In other words, none of these dates by themselves invalidate the chronology used here. That said, we have no quarrel with the idea that the inhabitants of Cane Creek, located in the hills nearly 100 km north of Moundville as the crow flies, may have had a predominantly grog-tempered ceramic assemblage around AD 1200. Our chronology works for the lower Black Warrior drainage, and we would not be the least bit surprised if the ceramic sequence in the Cane Creek area were different.