3. Square Pegs in Round Holes: Organizational Diversity Between Early Moundville and Cahokia

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Abstract: Variation in the political economic organization of Mississippian polities has long been recognized. There have been few studies, however, that have examined these differences in any detail. We offer a comparison between Moundville and Cahokia, two of the largest and most complex Mississippian polities in the greater Southeast. Well-demarcated differences in settlement patterns, community patterns, and craft production reveal important organizational dissimilarities between Moundville and Cahokia during the early Mississippian period. By highlighting these differences we hope to problematize the overuse of societal types as a means of analyzing and comparing Mississippian polities.

Archaeological research in the late prehistoric Southeast has revealed considerable variation in the organization of Mississippian polities. Most notable are differences in regional population densities, the scale of mound construction at political centers, and the intensity of craft production and exchange (Blitz 1999; Rees 1997; Steponaitis 1991). Societal types such as simple vs. complex and corporate vs. network have been introduced to grapple with this variation (King 2001; Steponaitis 1978; Trubitt 2000). As heuristic tools, such concepts provide a useful framework by which to understand general structural differences in the political economy of Mississippian polities. These types, however, often mask a wide range of organizational variability and thus are not as useful for providing more detailed understandings of organizational differences between polities (Blitz 1999; Feinman and Neitzel 1984; Yoffee 1993).

Moundville in the Black Warrior Valley of west-central Alabama and Cahokia in the American Bottom region of southwestern Illinois represent two of the larg-

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est and most complex Mississippian societies in the late prehistoric Southeast. Generally speaking there are many similarities between these regional settlements. Maize agriculture formed an important part of their subsistence economies (Lopinot 1997; Scarry 1986, 1998).[1] Multitiered settlement hierarchies characterized their regional political structures (Knight and Steponaitis 1998; Milner 1990). Elaborate display goods bearing politically charged iconography were manufactured at mound centers and later buried with high-status individuals (Fowler et al. 1999; Peebles and Kus 1977).

Even more notable, the inhabitants of both polities shared aspects of a similar cosmology and religious tradition expressed through platform mound ceremonialism, iconography, and elite political culture (Knight 1997). The chiefly elite of these polities employed a number of similar political-integrative strategies and had to contend with a similar set of social and environmental constraints. Over the long term, Moundville and Cahokia had similar historical trajectories of political centralization and decline (Knight 1997).

Because of these generalized similarities archaeologists have sorted Moundville and Cahokia into a number of the same organizational categories. On the basis of their multitiered settlement hierarchies both polities have been classified as complex chiefdoms (Pauketat 1994; Steponaitis 1978). Along with Etowah and Spiro they have also been grouped together as the four most politically complex chiefdoms in the late prehistoric Southeast. More recently, both polities have been reinterpreted in light of the dual-processual model proposed by Blanton and colleagues (1996). Accordingly, Moundville and Cahokia have been classified as corporate-based chiefdoms during their early Mississippian occupations and network-based chiefdoms during their late Mississippian occupations (King 2001; Trubitt 2000).

This chapter examines organizational differences that existed between Moundville and Cahokia during the era immediately following each polity's regional consolidation. Specifically, we consider data on early Mississippian (A.D. 1050–1260) settlement patterns, community organization, and craft production (Figure 3-1). On the basis of our findings, we contend that despite the number of organizational categories they have come to share, Moundville and Cahokia were quite different from one another in terms of social and political complexity. Outlining major differences between two polities that have often been characterized as similar provides a warning against an overreliance on societal types to explain organizational variability in the Mississippian Southeast.

Settlement Patterns

The regional consolidation of middle-range societies often involved a similar transition from a dispersed to a nucleated pattern of settlement (Stanish 1999). Nucleated populations would have provided the chiefly elite with a ready supply of labor for aggrandizement strategies ranging from the construction of monumental architecture to the recruitment and training of warriors for conquest and raiding. Thus, it is not surprising that in many instances of regional

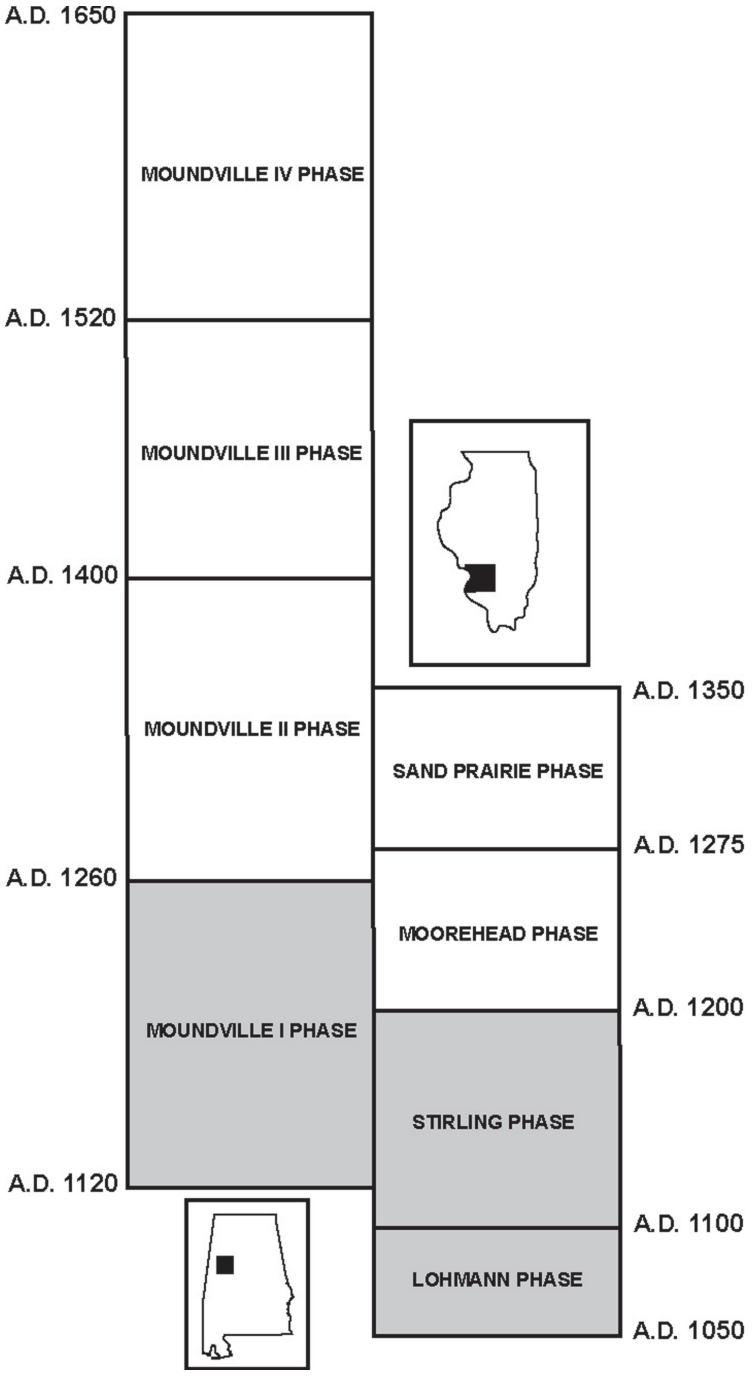

Figure 3-1. *Phase-based chronologies for the Black Warrior Valley and American Bottom regions (early Mississippian phases designated by gray blocks; Hall 1991; Knight et al. 1999).*

political consolidation population nucleation was accompanied by the undertaking of large-scale labor projects, marked differences in household status, and an increase in the production of display goods bearing politically charged iconographic motifs (Stanish 1999:123–124).

It stands to reason that the population density at political centers, especially during the early phases of regional consolidation, is somehow correlated with the size of the labor force available to chiefly administrators. Of course nucleation is not always correlated with political centralization. Other factors such as endemic warfare create situations in which populations gather for mutual protection rather than just serving the political interests of an elite class. Thus, in addition to nucleation, a thorough study of settlement patterns must also involve a consideration of site sizes, locations, and the presence or absence of fortifications and monumental architecture (Morse 1990; Peebles and Kus 1977; Steponaitis 1978).

Traditionally, southeastern archaeologists have directly inferred the scale of political complexity of a given Mississippian polity on the basis of the number of sites with public architecture in its settlement system. Sites with one platform mound are considered to be the administrative centers of simple chiefdoms. In contrast, complex chiefdoms are defined as consisting of a number of single-mound centers under the administrative control of a single paramount center with multiple mounds. Blitz (1999) has recently questioned this approach, arguing that the fusion of simple chiefdoms into more inclusive political units occurred along an organizational continuum, resulting in an array of loosely to more highly centralized political entities.

Blitz (1999:583) proposes that the degree of regional political centralization can be more accurately "measured by the relative distance between platform mounds." That is, the political integration of social groups in a Mississippian settlement system should be represented in the spatial proximity of their political and ceremonial facilities. This observation provides an added dimension to our earlier discussion of population nucleation and political complexity. Success in incorporating other social groups into a hierarchical settlement system would have expanded chiefly power bases and regional political networks. Such events should be represented archaeologically in episodes of numerous mound construction events at regional political centers. In some sense then, the density and proximity of contemporaneous mound sites in a region can be used to evaluate the political ties among social groups in a Mississippian polity.

Moundville

Large-scale surveys of the Black Warrior Valley have identified five sites with mounds dating to the late Moundville I phase (A.D. 1200–1260; Figure 3-2). The paramount center of Moundville is the largest of these sites and is located on a high terrace on the eastern side of the Black Warrior River at Hemphill Bend (Knight and Steponaitis 1998:2). The Moundville site encompasses 70 ha and consists of 32 mounds arranged around a rectangular plaza (Figure 3-3).

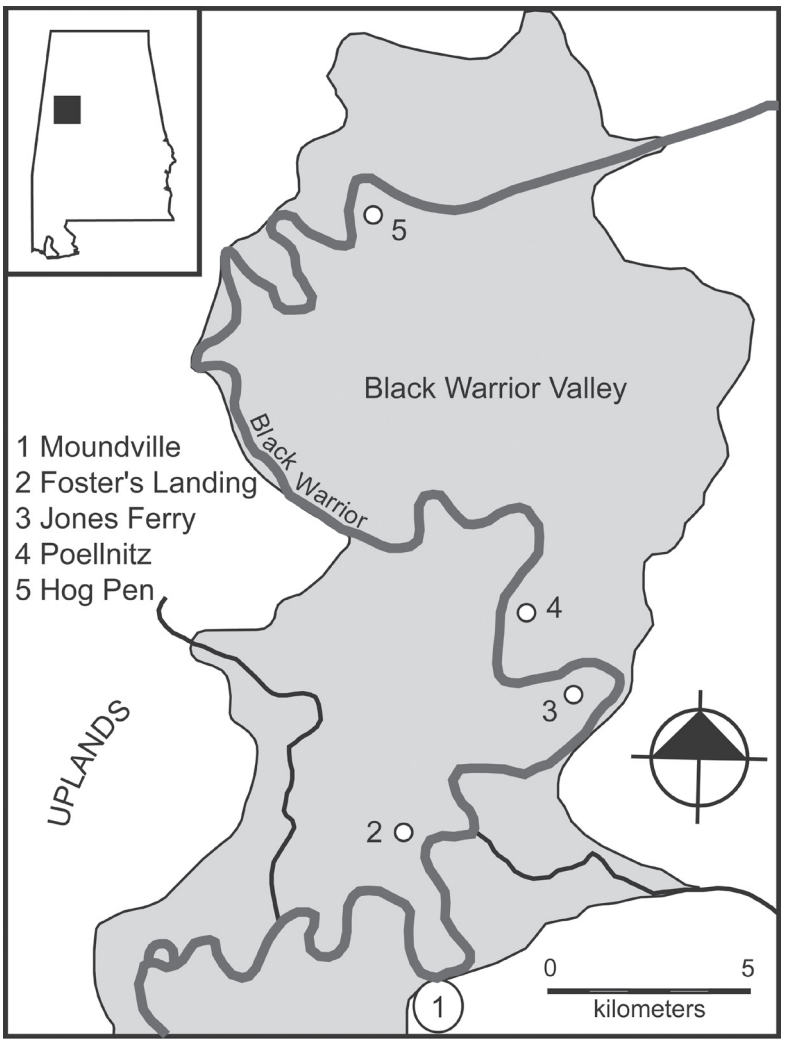

Figure 3-2. *Early Mississippian mound centers in the northern Black Warrior Valley.*

Mounds are distributed in paired groups and have been interpreted as the political and ceremonial facilities of a number of politically integrated social groups (Knight 1998). Initial construction of all the mounds appears to have begun by the late Moundville I phase (Knight 1998). The Moundville site was a densely occupied community at this time with an estimated 1,050–1,680 people packed into the area between the central plaza and the palisade that encircles the site (Steponaitis 1998:42). Four smaller mound sites—Poellnitz, Hog Pen, Jones Ferry, and Foster's Landing—are located north of Moundville along the Black Warrior River (Figure 3-2). Each of these sites has a single mound, the largest 3 m in

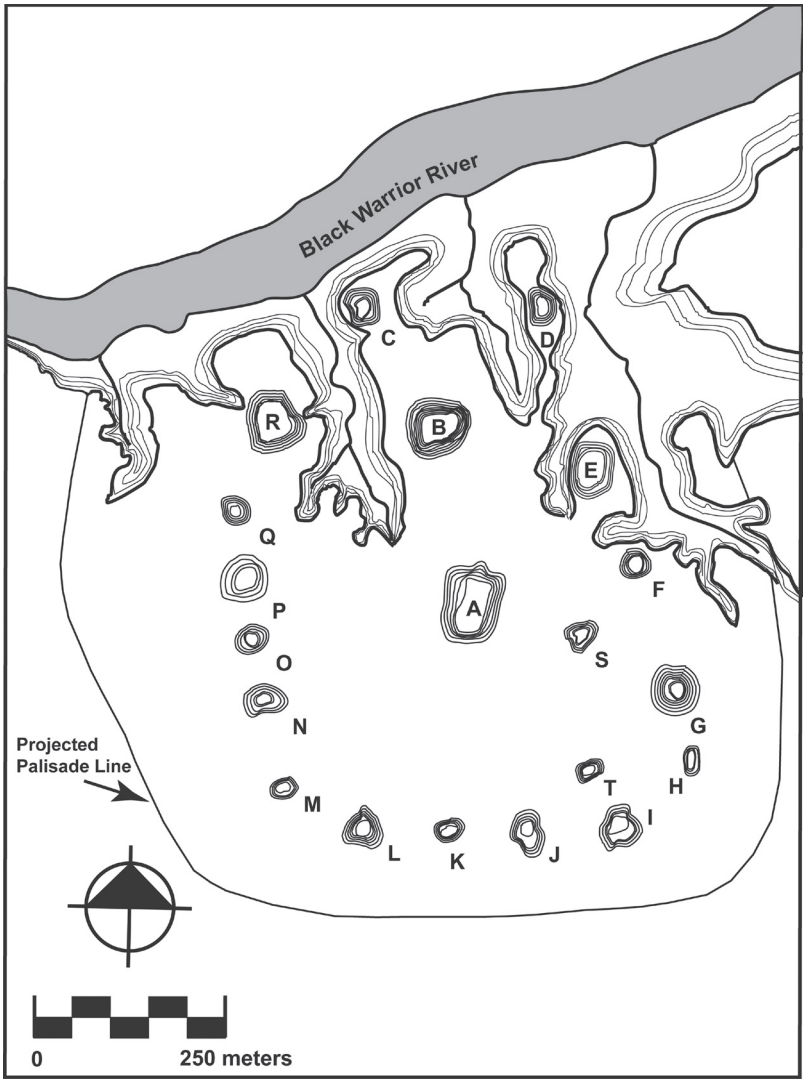

Figure 3-3. *The Moundville site.*

height. Controlled surface collections have revealed only a light scatter of late Moundville I materials associated with each of these sites (Bozeman 1982; Rees 2001). These low artifact densities suggest an absence of nucleated villages associated with these rural mound centers.

Recent large-scale pedestrian surveys of the Black Warrior Valley conducted by Hammerstedt (2000) and Myer (2002) have greatly improved our understanding of rural settlement patterns in the Black Warrior Valley. These studies have revealed that with few exceptions, the rural settlement of the Black Warrior Valley was organized into clusters of small farmsteads located no more than 5 km from single-mound centers (Myer 2002). The chronological relationship of farm-

steads within these clusters is not clear. It is possible, however, that these clusters formed dispersed communities centered around single-mound sites in the rural countryside of the Black Warrior Valley.

Cahokia

The early Mississippian Cahokia polity (Lohmann phase, A.D. 1050–1100, and Stirling phase, A.D. 1100–1200) can be readily divided into three areas of settlement (Figure 3-4). First and foremost there is the sprawling, linear conglomeration of about 200 mounds and habitation areas that comprises the Cahokia, East St. Louis, and St. Louis sites. Second, there is the rest of the American Bottom floodplain, which within about 25 km of Cahokia contains two major multi-mound centers, Pulcher (Kelly 1993, 2002) and Mitchell (Porter 1977), and eight single-mound centers, all of which are poorly understood and have been badly damaged by modern agriculture and development (Emerson 2002). Lohmann and Horseshoe Lake are the best documented of the single-mound centers (Esarey and Pauketat 1992; Gregg 1975; Pauketat et al. 1998) and are dominated by early Mississippian habitation covering as much as 11 ha. Third are the upland mound centers that cluster along Silver Creek and early transportation corridors (Figure 3-4; Alt 2001; Koldehoff 1989; Koldehoff et al. 1993). These sites are also poorly understood. Two of the four, Emerald and Pfeffer, have recently produced evidence of early Mississippian habitation and mound construction. Pfeffer is part of a complex of a dozen or more upland farming villages and farmsteads dating to the Lohmann and early Stirling phases (Koldehoff 1989; Koldehoff et al. 1993; Pauketat 1998a; Wilson 1998). The clustering of early Mississippian villages in the eastern uplands contrasts with the settlement pattern in the northern and southern floodplains characterized by mound centers and dispersed farmsteads. This pattern of settlement has led some archaeologists to conclude that upland communities may have been more loosely tied to the paramount center of Cahokia than those in the floodplains (Alt 2001; Pauketat 2003; Wilson 1998).

The Cahokia site, encompassing 1,300 ha and at least 104 mounds, is the largest in a complex of closely spaced mound centers in the northern floodplain and bluffs of the American Bottom (Fowler 1989). As many as 8,000–15,000 people may have occupied this site during the early Mississippian period (Milner and Oliver 1999; Pauketat and Lopinot 1997). Two other multiple mound centers, the St. Louis and East St. Louis sites, are included within the northern settlement complex. Located on the bluffs of the western side of the Mississippi River, the St. Louis site is scattered across approximately 30 ha and included 26 mounds, most of which were arranged around a central plaza (Marshall 1992). It is unclear when this mound center was established as no systematic excavations were conducted at the site prior to its destruction. However, the recovery of a long-nosed god maskette from one of the mounds (Williams and Goggin 1956) indicates an early Mississippian component. More is known about the East St. Louis mound center east of the Mississippi River. Prior to its destruction, this center included a minimum of 45–50 mounds and an associated village dating to the Lohmann and Stirling phases (Figure 3-4; Kelly 1994). A chain of mounds spans the 8 km between the Cahokia and

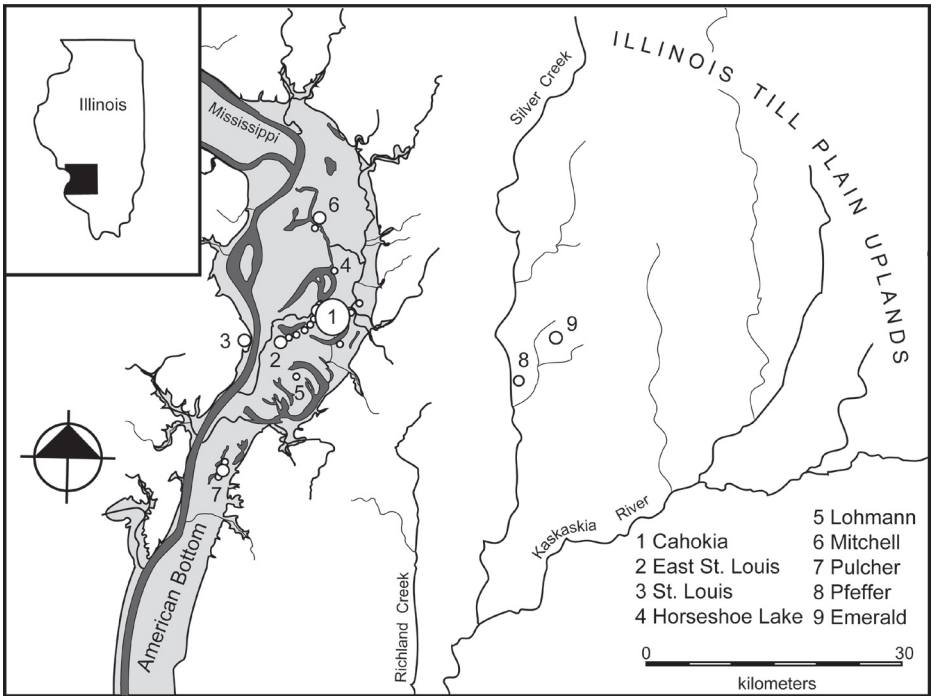

Figure 3-4. *The American Bottom region featuring selected mound centers (base map courtesy of Timothy Pauketat).*

East St. Louis sites (Pauketat 1994). Together the Cahokia, East St. Louis, and St. Louis mound sites seem to have formed what Pauketat (1994) has referred to as an administrative complex of closely spaced political centers (Figure 3-4). While it is well known that Cahokia is by far the largest Mississippian center in eastern North American, few realize that the East St. Louis center is the second largest and the St. Louis center is fourth (Emerson 2002)—with Moundville falling at third.

Settlement Comparison

Overall the Cahokia site encompassed an area over 17 times more expansive than the Moundville site and had a population 6 to 14 times larger. In addition, the density of mound centers in the northern floodplains of the American Bottom reveals an expansive ceremonial complex not present in the Black Warrior Valley. The political relationships between these clustered mounds and habitation areas need to be more fully examined. If, however, the proximity of mound centers in the northern American Bottom floodplain corresponds at all with political centralization, then early Cahokia was something other than a network of loosely affiliated and semiautonomous simple chiefdoms.

The Cahokia site also differs from the Moundville site in terms of the number and scale of lower-order mound centers and other settlements in its political orbit. The early Mississippian occupation of the American Bottom consisted of numer-

ous, differentially organized settlement districts that were variably integrated into a centralized Cahokia political order. Moreover, outlying early Mississippian mound centers in the American Bottom were sizable, nucleated centers, while those in the Black Warrior Valley were associated with dispersed communities of farmsteads. To some degree these contrasting settlement patterns probably relate to interregional differences in population density. But regional population density itself is a variable strongly shaped by political and historical factors, an observation that can be obscured by an overreliance on societal categories.

There is evidence of abrupt and large-scale settlement changes that correspond with the early Mississippian regional political consolidation of both the Black Warrior Valley and the American Bottom (Knight and Steponaitis 1998; Pauketat 1994; Pauketat and Lopinot 1997). The processes of political centralization in both regions entailed the abandonment of previous mound centers and the establishment of new ones (Knight and Steponaitis 1998; Pauketat 1997). Many sizable communities in the American Bottom and Black Warrior Valley dissipated at this time with former inhabitants either scattering into dispersed farming communities or relocating to mound centers (Emerson and Milner 1982; Milner et al. 1984). Moreover, in the Cahokia example regional political consolidation may have entailed the immigration and integration of diverse, nonlocal groups (see Alt, Chapter 14, this volume; Holley 1989; Pauketat 1998b, 2003). Rather than gloss over these differences in population density and settlement organization, we argue that they represent important interpolity variation in the intensity and scale of Mississippian political centralization.

Community Patterns

Large-scale excavations at the Moundville and Cahokia sites provide an opportunity to examine community-level organizational differences between the paramount centers of these chiefdoms. Power asymmetries are often built into the spatial structure of communities (Nielson 1995). Thus, proximity of social groups to platform mounds, plazas, and other politically important areas forms an important spatial axis through which intercommunity differences in power relations were manifested. Variation in the sizes, types, and spatial arrangements of non-mound architecture provides an important source of information about intercommunity power relations (Kent 1990; Nielson 1995). House size is a common method used by archaeologists to infer household wealth and status (Kramer 1982; Netting 1982; Wilk 1983). Big houses require more resources in terms of building materials and labor investment than small houses. Larger houses also indicate larger households, as social groups tend to create architectural spaces of the appropriate size for the number of people who use those spaces (Naroll 1962). Because of their greater access or control over certain resources, wealthier households not only attract more kin to residential locations than poorer households but may also experience higher reproductive success.

Larger and wealthier households may also possess a greater number and variety of architectural features such as storage structures and ceremonial facilities. Amass-

ing large stores of surplus foodstuffs provides wealthy households with a competitive edge over their poorer neighbors. Differential control over ceremonial facilities and ritual items appears to have been particularly important in the Mississippian Southeast where the availability of fertile soils and other basic resources would have limited the potential for elite control over the economic means of production.

Moundville

Wilson's (2001, 2005) recently analyzed data from the 1939 and 1940 Roadway excavations are generating new insight into early Mississippian community organization at Moundville. The Roadway excavations were conducted at Moundville within a sinuous corridor, 15 m wide and 2.4 km long, that was to be disturbed by the construction of a road now encircling portions of the plaza and high-density residential areas east, west, and south of the mounds. In addition, several large block excavations occurred prior to the construction of an entrance building and site museum (Peebles 1979). Examination of the maps and artifacts from these excavations has revealed a minimum of 132 structures, the majority of which date to the late Moundville I phase.

Wilson (2005) has identified a tri-modal distribution of structure sizes based on floor area. These three size classes, referred to as Class I, Class II, and Class III structures, have average floor areas of 21 m^2, 43 m^2, and 62 m^2, respectively. On the basis of their size, frequency, and construction styles, we argue that both Class I and II structures were likely domestic houses. The larger size of Class II structures may indicate larger and/or higher-status households (Netting 1982). Class III structures vary in shape from square to rectangular. On the basis of their rarity, large size, and the lack of typical domestic features such as interior hearths, we argue that Class III structures likely served nondomestic functions.

An examination of the distribution of structures along the Moundville Roadway reveals that the Moundville community was segmented into a number of densely packed, multihousehold groups separated by areas lacking residential occupation (Figure 3-5). These multihousehold groups consist almost exclusively of Class I structures, although several residential districts also include a small number of Class II structures. The occasional presence of Class II structures may represent some degree of status differentiation within multihousehold groups. It is also possible that Class II houses postdate the nucleated late Moundville I occupation of the center. Regardless, these multihousehold groups consist of a similar combination of structure shapes, sizes, and styles. Overall, there is little architectural evidence of status differences among the multihousehold groups identified in the Moundville Roadway.

Class III structures represent the largest buildings in the Moundville Roadway and probably served as public facilities of some kind. Individual Class III structures appear to have been built and maintained as corporate ceremonial facilities by different multihousehold groups. Indeed, the presence of ritual items such as turtle shell rattles, clay pipes, and fineware pots in residential midden deposits hint at a well-developed ceremonial life that took place within the spatial domain of these multihousehold groups.

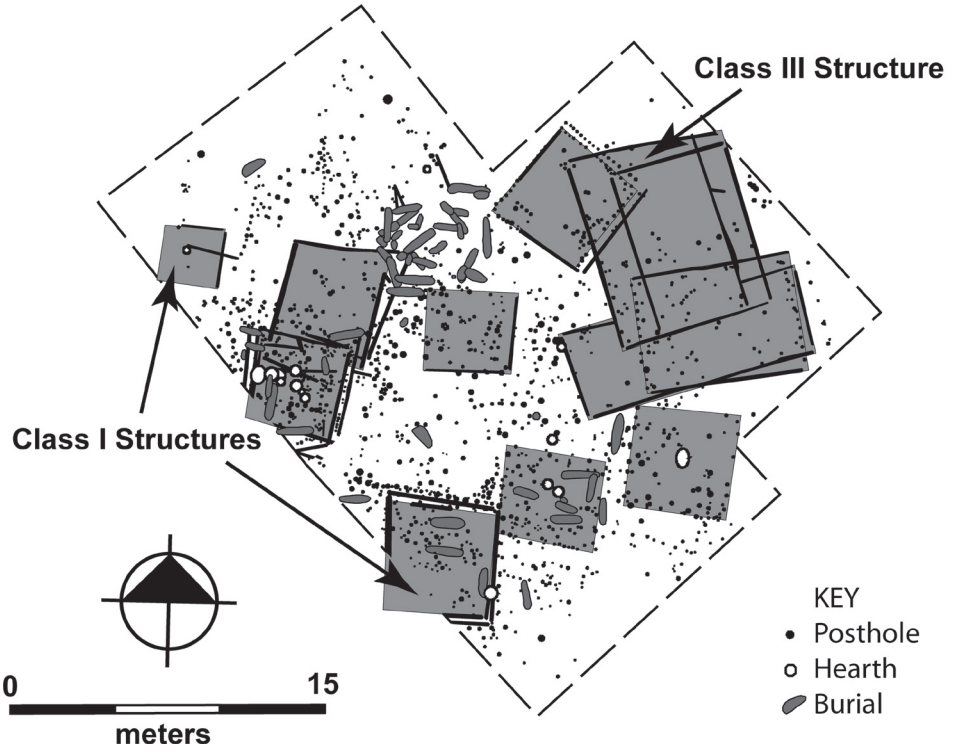

Figure 3-5. *Early Mississippian buildings from the Roadway excavations at the Moundville site (southwest of Mound F).*

Cahokia

Architectural analyses of early Mississippian structures in the American Bottom have also revealed the presence of an array of structure sizes, shapes, and functions. Pauketat's (1994, 1998b) analysis of Lohmann phase structures from the Tract 15A and Dunham Tract excavations at Cahokia revealed a bimodal distribution of structure sizes. The smaller size class has a median floor area of 11 m^2 and the larger a median floor area of 26 m^2 (Figure 3-6; Pauketat 1998b). Pauketat also identified a class of ceremonial circular buildings, or sweatlodges. Similar to Moundville, the early Mississippian community in this portion of the Cahokia site was divided into a number of densely packed multihousehold groups. In contrast to Moundville, however, there are some subtle indications of status differences among multihousehold groups at Cahokia.

A close examination of Tract 15A and the Dunham Tract reveals a number of multihousehold groups arranged around a rectangular plaza (Figure 3-6). Multihousehold groups on the northern end of the plaza include many examples of the larger size class of houses. These large houses, however, are scarce or absent from multihousehold groups on the southern edge of the plaza (Pauketat 1994, 1998b). This pattern also correlates with the distribution of circular sweatlodges:

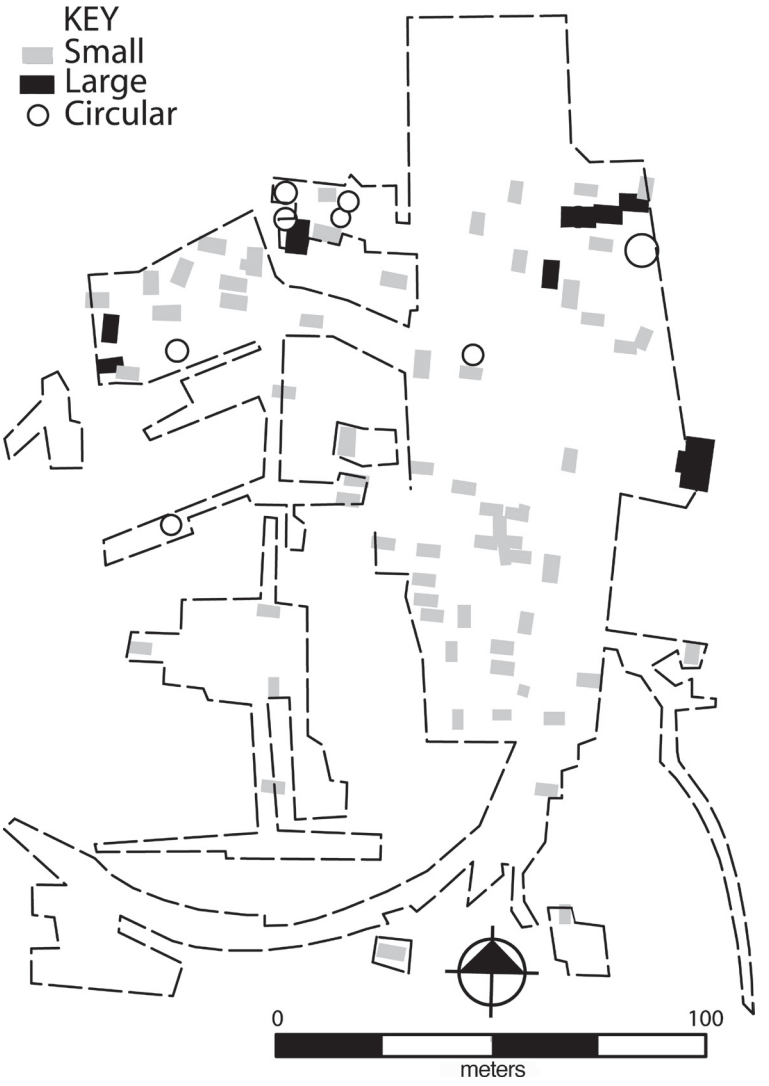

Figure 3-6. *Early Mississippian buildings from the Tract 15A excavations at the Cahokia site (adapted from Pauketat 1998b:Figure 6.34).*

multihousehold groups on the northern end of the plaza include a number of these ceremonial buildings while those to the south have relatively few (Pauketat 1994, 1998b).

The abundance of large houses and sweatlodges among northern Tract 15A residential groups also contrasts with other early Mississippian multihousehold groups at Cahokia. Three Lohmann phase multihousehold groups were uncovered during the Interpretive Center Tract (ICT) II excavations southeast of the Grand Plaza (Collins 1990; Holley 1989). Only one large house and one sweatlodge were identified among these residential groups.

The distribution of larger houses at Cahokia suggests that some multihousehold groups included larger and higher-status households than others (Netting 1982; Pauketat 1994). It is also significant that some multihousehold groups included sweatlodges and others did not. Indeed, those households more closely associated with sweatlodge ceremonialism probably enjoyed elevated positions of status in the greater Cahokia community. The presence of rural civic and ceremonial nodes dispersed across the bottoms and the uplands is also notable, especially during the Stirling phase (Emerson 1997a, 1997b; Pauketat 1998a).

Community Pattern Comparison

There are several important similarities in community organization between the Moundville and Cahokia sites during their early Mississippian occupations. First, both communities were segmented into multihousehold groups consisting of a variety of building shapes, styles, and sizes. Circular sweatlodges served as ceremonial buildings for small-scale Cahokia residential groups. Likewise, large rectangular structures served as public buildings for small-scale domestic groups at Moundville. On some level then, the basic building blocks of both Mississippian societies appear to be similar. Moundville, however, differs from Cahokia in its relative lack of architectural evidence of social inequality between multihousehold groups. Moundville's coresidential groups consist of a similar range of building sizes and types. Cahokia's multihousehold groups, on the other hand, were not all created equal. Some multihousehold groups at the Cahokia site include large houses and ceremonial buildings while others do not.

It is noteworthy that these residential organizational differences at Cahokia are subtle and quickly obscured when architectural data are aggregated into broader spatial and social units. Figure 3-7 presents the distribution of Lohmann phase structure floor areas from the Tract 15A and the ICT-II excavations at Cahokia as box plots.[2] If the notches of any two boxes do not overlap, then the medians of the two distributions are significantly different at the .05 level (see also McGill et al. 1978; Scarry and Steponaitis 1997; Wilkinson et al. 1992). The notched confidence intervals of both distributions overlap in these box plots showing no statistically significant differences in structure floor size between these areas. A comparison of early Mississippian structure floor areas at the Moundville site yields similar results. Figure 3-8 plots the distribution of structure floor areas from the northern and southern halves of the Moundville Roadway. As in Figure 3-7, the notched confidence intervals of both distributions in Figure 3-8 overlap. Thus, there are no statistically significant differences in structure size between these two portions of the site.

Craft Production

Archaeological data on craft production and exchange provide the final line of evidence for our comparison. Here we consider how the production and use of selected utilitarian and nonutilitarian goods structured social relationships at early Moundville and Cahokia. Craft industries can be considered

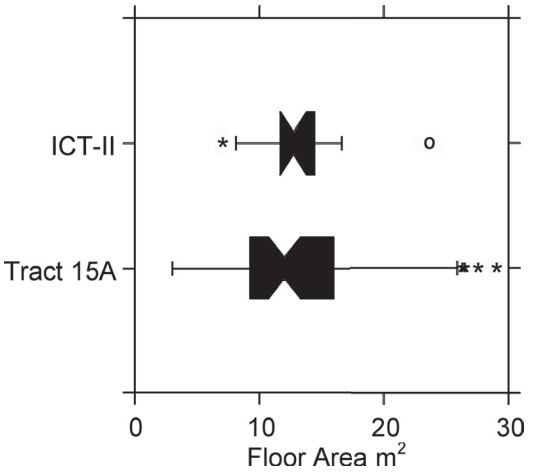

Figure 3-7. *Lohmann phase structure floor areas from the ICT-II and Tract 15A excavations at the Cahokia site (Collins 1990; Pauketat 1998b).*

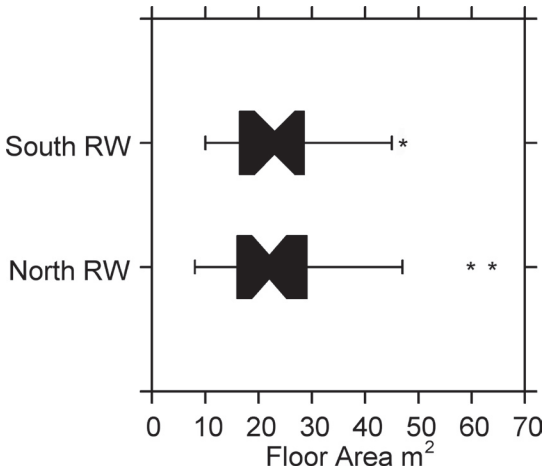

Figure 3-8. *Structure floor areas from the northern and southern parts of the Moundville Roadway (Wilson 2005).*

centralized and under elite control on the basis of the relative concentration of production debris at political centers vs. outlying sites. Costin (1991:14) argues that the degree of centralization varies based on administrative needs to control "raw materials, technology, the quality of the output, finished inventories, and final distribution." The concentration of production debris at archaeological sites also provides information regarding the size and organization of social groups involved in manufacturing tasks. For example, production activities performed in a domestic context will generate more dispersed patterns of debris than those centered around kilns, forges, and other specialized production facilities.

For comparative purposes, increases in the scale of production units or the intensification of production activities should be conceived as interrelated strategies aimed at increasing the output of craft items. Either strategy will increase logistical demands in terms of the centralized acquisition of raw materials, tools, and methods of distribution.

It is beyond the scope of this endeavor to synthesize all of the available evidence on early Mississippian craft production in the American Bottom and Black Warrior Valley. Thus, we restrict our discussion to a subset of the display goods and agricultural tools from both regions.[3] For the Black Warrior Valley we discuss fineware pots and greenstone celts, but we also critically evaluate previous models of Moundville craft production. For the American Bottom we discuss the production of marine shell beads and basalt celts.

Moundville

In a series of oft-cited works regarding the nature of craft production at Moundville, Christopher Peebles, Susan Kus, and Paul Welch (Peebles and Kus 1977; Welch 1986, 1991, 1996) constructed a model in which specialization and elite sponsorship were important components of Moundville's political economy. In the earliest of these works, Peebles and Kus (1977:442–443) identified three discrete extramural activity loci in off-mound areas of the site that were characterized by concentrations of artifacts related to shell bead manufacture, hide processing, and ceramic production (Figure 3-9). Later, Welch (1986, 1991, 1996) identified a fourth production locus for greenstone artifacts. Welch (1991:170) also examined the regional distribution of craft production and concluded that the manufacture of certain politically and economically important items was restricted to the Moundville site. The resulting model of Moundville's economy was one in which craft production was tightly controlled by Moundville's elite as a means to establish and maintain political authority (e.g., Steponaitis 1991; Welch 1991, 1996). This model has subsequently been used to support analogies drawn between the role of craft production in the centralized political and social organizations of the Moundville and Cahokia polities (e.g., King 2001; Trubitt 2000).

Recent research at the Moundville center and surrounding sites has questioned the scale, distribution, and intensity of craft production as well as the prominence given to this activity in models that seek to explain how political authority developed within the polity (Knight 2001; Marcoux 2000; Markin 1997; Wilson 2001).[4] Our discussion here is based on a summary of two recent research projects. The first project, conducted by Marcoux (2000), consisted of a distributional study of display goods manufacturing debris in the Black Warrior Valley. On the basis of Marcoux's findings, there appears to be relatively little direct evidence of display goods production at the Moundville site. Out of all of the records and artifacts that Marcoux inspected, the only direct evidence related to the manufacture of display goods at the Moundville site consisted of six isolated items in an incomplete stage of production and two concentrations of items related to craft production.[5] Furthermore, examination of artifacts and excavation records did not confirm the existence of any of the four off-mound special production loci

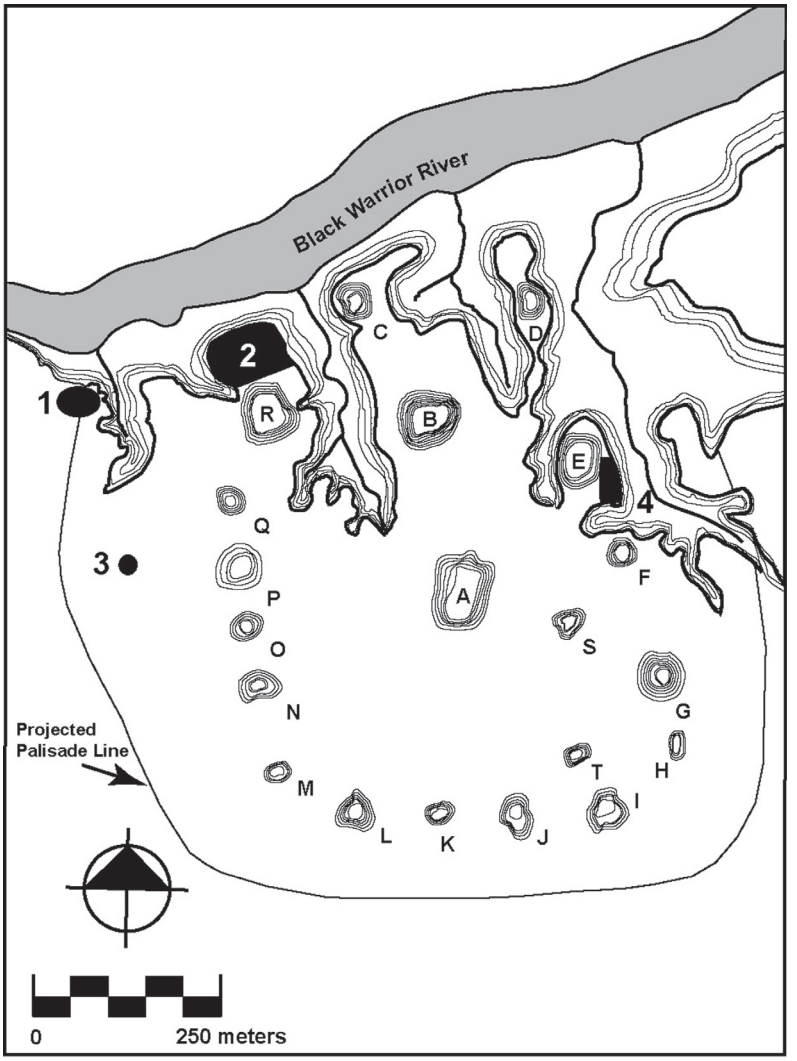

Figure 3-9. *Loci of craft production at Moundville as identified by Peebles and Kus (1977) and Welch (1991, 1996): (1) mica; (2) greenstone; (3) pottery; (4) marine shell.*

identified by Peebles, Kus, and Welch. Instead, the incomplete specimens and the two concentrations of craft-related artifacts were recovered either from mound-summit contexts or from contexts immediately flanking the mounds (Figure 3-10; see also Wilson 2001).

Marcoux (2000) also considered indirect evidence of craft production by quantifying finished display goods associated with Moundville burials whose decorative style reflected local manufacture. Although consideration of this evidence bolstered arguments for the existence of craft production at Moundville, the fre-

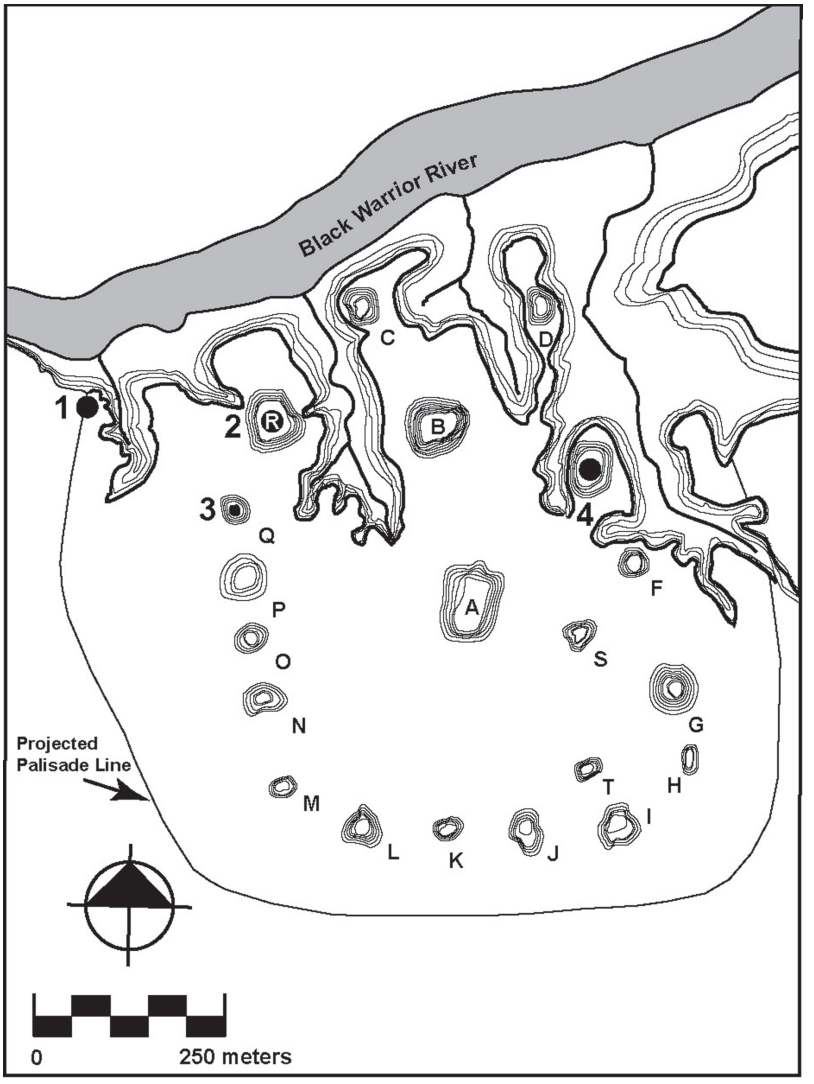

Figure 3-10. *Revised distribution of craft production loci as identified by Marcoux (2000): (1) mica; (2) oblong stone pendants; (3) stone palettes; (4) oblong stone pendants, greenstone ornaments, stone palettes, quartz beads, and mace-head stone pendant.*

quencies of these finished items simply did not measure up to what would be expected if strategies encouraging wealth accumulation and competition were pervasive in Moundville society.[6]

Another result of this project, and perhaps of greater import to this chapter, was Marcoux's conclusion that much of the evidence for craft production postdates the early Mississippian period. With the exception of a small cache of unworked mica found in a Moundville I phase house, the evidence discussed above

was recovered from contexts that are thought to date to the late Moundville II and early Moundville III phases.[7] It is important to note, however, that no excavations have been conducted on mound summits dating to the early Mississippian period. Nevertheless, the timing and evidence of craft production suggests that this activity was a relatively small-scale affair restricted primarily to elite households within the Moundville site.

The second project was conducted by Wilson (2005) and consisted of the analysis of artifacts recovered from the 1939–1940 excavations of the Moundville Roadway, the 1932 excavations north of Mound E, and the 1930s excavations north of Mound R. This project focused more exclusively on the early Mississippian occupation of the Moundville site.

Based on the wide distribution of pottery anvils, broken woodworking tools, flaked stone debitage, and sandstone abraders from the Moundville Roadway, Riverbank, and elsewhere at the site, it appears that many utilitarian production activities were organized on a household level at early Moundville (Scarry 1995; Wilson 2001). Moreover, there is evidence that the nonelite manufactured a number of ritually important items such as pigments, clay pipes, and certain effigy pots that were used, broken, and discarded in the context of household activities (Scarry 1995:56–57, 80; Wilson 2001:126). That being said, there is only minor evidence from early Mississippian contexts at Moundville for the production and use of display goods or other items to which access was restricted by the ruling elite.

Perhaps the best evidence for an elite-sponsored craft industry at early Moundville is a subset of stylistically similar serving vessels recovered from the Moundville Roadway excavations (Wilson 2005). These pots differ from other early Mississippian wares at Moundville in terms of greater labor investment and a higher degree of stylistic standardization. Vessel forms include a variety of bowls, beakers, and bottles. Potters used a combination of slab, coil, and mold techniques to shape these vessels (Wilson 2005). Moreover, vessel surfaces are often highly burnished, reduced, and decorated with incised and excised curvilinear designs filled with a hematitic slip (Figure 3-11; Welch 1989; see also Wilson 1999). This complex production sequence would have required considerable skill and labor investment by local potters.

Sherds from these elaborate serving vessels make up less than 1% of the total Moundville Roadway pottery assemblage. Despite their small scale of production these pots were widely distributed at Moundville. A small number of fineware sherds have been identified in nearly every late Moundville I midden that has been analyzed at Moundville (Scarry 1995; Steponaitis 1983; Wilson 2005). Thus, these elaborate serving wares appear to have been centrally manufactured and widely circulated among early Mississippian residential groups at Moundville.

A second finding generated by Wilson's (2001) analysis of the Moundville Roadway assemblages relates to the production of woodworking tools known as greenstone celts. Welch (1991:164–165, 1996:81) has argued that the production of utilitarian greenstone celts was centralized at Moundville, based on the identification of greenstone production debris in the northeastern portion of the site and the presence of greenstone celt preforms in the Moundville Roadway assem-

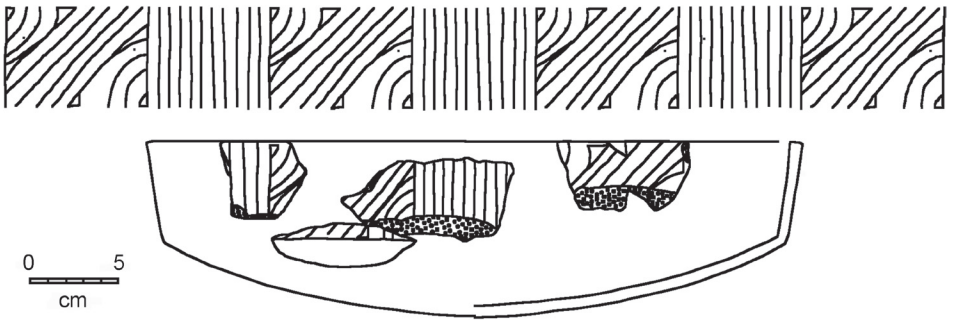

Figure 3-11. *Fineware carinated bowl from the Moundville Roadway excavations (southwest of Mound F).*

blage. By controlling access to greenstone celts, Welch (1996) argues, the Moundville elite would have effectively controlled the ability of commoners to clear agricultural fields and conduct other basic tasks like house construction. Thus, in dominating the production and distribution of greenstone celts, the Moundville elite could have exerted control over the agricultural means of production in the Black Warrior Valley.

More recently, Wilson's (2001) expanded analysis of greenstone tool production, use, and recycling disputes these earlier findings by revealing only scant evidence for the production of utilitarian woodworking tools at Moundville. On the basis of his results, Wilson (2001) argues that most utilitarian greenstone tools must have been either crafted at the greenstone outcrops in northeastern Alabama or transported to the Black Warrior Valley as late-stage preforms. The upshot of this study is that there is little direct evidence that the Moundville elite exerted control over the economic means of production in the Black Warrior Valley.

Cahokia

A number of patterns characterize early Mississippian craft industries in the American Bottom. First, production was unevenly distributed across the landscape (Pauketat 1993:139; Yerkes 1989). Not every early Mississippian household was involved in all of the various craft industries in the region. That being said, craft production was not completely restricted to the Cahokia site or even to mound centers, for that matter. There is evidence for the small-scale manufacture of shell beads and basalt celts at numerous early Mississippian sites in the rural countryside of the American Bottom (Milner et al. 1984:163; Pauketat 1997; Yerkes 1983, 1989:97–98, 1991). Moreover, differences in the paste and style of decorated pottery suggest the possibility of multiple production loci for some early Mississippian finewares.[8]

Second, there are vast differences in the scale of manufacturing activities at various production loci throughout the region. The Cahokia marine shell bead

industry provides a good example of this phenomenon. Shell beads appear to have been important wealth and status items at early Cahokia based on their abundance in elite mortuary contexts as exemplified in burials like those excavated in the Powell Mound and Mound 72 (Ahler and DePuydt 1987; Fowler et al. 1999). Over the years thousands of artifacts related to the production of shell beads have been recovered from the Kunnemann Tract, one of the many mound and village groups that make up the Cahokia site (Mason and Perino 1961). Holley's (1995) controlled surface collection revealed that production refuse was unevenly scattered throughout the western residential portion of the Kunnemann Tract. Moreover, an abundance of production debitage was recovered from Holder's excavations of Kunnemann Mound (Pauketat 1993). Thus, it appears that many of the inhabitants of the Kunnemann mound and village group participated in this industry. It is noteworthy that an abundance of other domestic artifacts were also recovered from the Kunnemann Tract, revealing that inhabitants did not manufacture shell beads to the exclusion of other domestic-economic tasks. Similar concentrations of shell-working debris have been identified at the Powell and Fingerhut tracts at the Cahokia site (Kelly, Chapter 12, this volume; Kelly et al. 1997; Winston 1963).

Pauketat (1997) has contrasted the evidence for shell bead production debris at the Kunnemann, Powell, and Fingerhut tracts with that in other portions of the Cahokia site such as Tract 15A and ICT-II, where production debris is scarce or absent. It is also important to note that shell bead production debris has been recovered from a number of farmsteads in the rural American Bottom. The organization of rural bead production, however, appears to have been small in scale and intermittent in occurrence, perhaps related to a single household's connections with particular kin groups (see Kelly, Chapter 12, this volume).

The regional distribution of basalt celt production debris is in many ways comparable to that of the shell beads discussed above. Celts were important woodworking tools used to clear fields and acquire building materials and firewood. In the American Bottom, these woodworking tools were made from a fine-grained igneous basalt quarried from the St. Francois mountains in Missouri. Pauketat's (1994, 1998b) analysis of Tract 15A artifact assemblages revealed that celt-making debris was scattered over a 15,613-m^2 area of the Cahokia site and highly concentrated in several features. The abundance of ordinary domestic tools and other refuse from Tract 15A reveals that celt production was scheduled around other domestic activities.

As with Cahokia's shell bead industry, there is an absence or scarcity of celt-making debris at a number of other areas at the Cahokia site. Celt production debris has also been identified at several small early Mississippian sites outside of Cahokia (Kelly, Chapter 12, this volume; Pauketat et al. 1998; Rohrbaugh 1995). Moreover, several caches of finished and unfinished celts have been identified at mound centers and villages in the greater American Bottom region (Pauketat 1997). Overall, it appears that sizable portions of the Cahokia community and its rural populace participated in the production of both display goods and agricultural tools. There were, however, important scalar differences at distinct production loci, demonstrating that not all Cahokians participated in these industries equally.

Craft Production Comparison

The major differences in early Mississippian craft production between the Moundville and Cahokia polities can be directly linked to scale and regional distribution. Larger portions of the regional populace participated in craft production activities in the American Bottom than in the Black Warrior Valley. Moreover, the scale of production in the American Bottom was many times greater than in the Black Warrior Valley. Archaeologists simply have not identified off-mound concentrations of early Mississippian craft production debris at the Moundville site. This is a pattern that contrasts sharply with the organization of early Mississippian craft production in the American Bottom. It is also important to note the presence of numerous caches of both finished and unfinished tools and raw materials in the American Bottom (Esarey and Pauketat 1992; Hoehr 1980:43; Moorehead 1922:31; Rau 1869; Titterington 1938). Such tool and raw material caches appear to have been scarce in the Black Warrior Valley. The exception to this pattern is several small caches of freshwater mussel shells that may have been used for domestic pottery production (Peebles 1971). These organizational differences suggest that craft production served different socioeconomic purposes or was structured by different political dynamics in the Moundville and Cahokia polities, the implications of which are discussed below.

Summary and Conclusion

Collectively our comparisons of settlement patterns, community patterns, and craft production have highlighted some important differences and similarities between the early Mississippian polities of Moundville and Cahokia. First, there are clear interregional differences in the scale and organization of both polities' settlements. The sprawling distribution of mound and village groups in the northern American Bottom is unparalleled in other parts of the region as well as elsewhere in the late prehistoric southeastern and midwestern United States. The relationships among these and other mound centers in the American Bottom require further investigation. Nevertheless, the high density of mound and village groups in this northern floodplains settlement district suggests that it was a nexus for political and ceremonial activity in the region (Emerson 2002; Pauketat 1994). Additional early Mississippian mound centers, villages, hamlets, and farmsteads are located in the southern floodplains and in the adjacent uplands to the east. These settlement data portray an expansive Mississippian polity composed of differently organized settlement districts that were probably differentially integrated into the regional political economy.

The early Moundville polity, on the other hand, was composed of only a single nucleated multiple-mound center and clusters of farmsteads centered on a number of small and lightly populated subsidiary mound sites. These settlement pattern data bring the macroscale organizational differences between Cahokia and Moundville into sharp relief. There were many more political groups that made

up the early Cahokia polity than the early Moundville polity and they were organized and distributed differently.

Cahokia and Moundville are more comparable in terms of residential organization. The presence of multihousehold residential groups that include ceremonial buildings at both Cahokia and Moundville indicates general organizational similarities between the most basic social groupings in these polities. However, there are subtle indications of status differentiation among Cahokia residential groups that have not been identified at Moundville. More expansive excavations at Moundville may yet reveal such domestic inequalities. On the basis of the current evidence, however, we argue that the most well-demarcated status differences at Moundville were between the elite living on platform mounds and the rest of the community. It is also possible that intergroup relations of inequality were more fully developed late in Moundville's occupational history.

Our comparison of craft production has also provided insight into organizational differences between the Moundville and Cahokia polities. It appears that craft production in the American Bottom was conducted by both the elite and attached kin groups. Broad segments of the Cahokia polity participated in the manufacture of both display goods and certain utilitarian tools. That being said, there were important organizational differences in craft production between Cahokia and its periphery and even between different residential areas within the Cahokia site. Kelly (Chapter 12, this volume) has argued convincingly that the uneven distribution of craft production debris at Cahokia and elsewhere in the American Bottom was structured by its clan-based social organization. Particular coresidential kin groups were responsible for the manufacture of certain craft goods as part of a system of ritualized reciprocity that served to socially integrate the greater Cahokia community.

Like Cahokia, Moundville consisted of a number of socially integrated clans, each of which probably had different ceremonial obligations (Knight 1998). However, crafting was organized differently in the early Mississippian Black Warrior Valley than in the American Bottom. There is no evidence of off-mound concentrations of crafting debris like those identified at Cahokia (Marcoux 2000; Wilson 2001). Early Mississippian craft production at Moundville was primarily organized on the household level. The small-scale manufacture of fineware pottery and possibly that of mica artifacts stand out as the most probable examples of early Mississippian craft industries that not every Moundville household participated in (Scarry 1998). Much of the elaborate material culture for which Moundville is best known postdates the early Mississippian occupation of the region (Marcoux 2000).

In this chapter we have outlined some important organizational differences between the early Mississippian polities of Moundville and Cahokia. While both polities shared certain commonalties in terms of their developmental histories there were obvious differences between their regional settlement patterns, the residential organization of their paramount centers, and their craft industries. The heuristic value of any model should be evaluated by how much organizational variability it can account for. Based on the results of this study we argue that there is limited analytical utility in categorizing both of these Mississip-

pian polities as complex chiefdoms, corporate chiefdoms, or any other societal category that does not address their organizational differences or the historical processes that produced them. Such differences demonstrate that significant organizational diversity existed even among the largest and most complex Mississippian polities.

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Notes

1. However, even this subsistence comparison can only be taken so far. Although maize was important in both regions, the cultivation of starchy seed crops was very prominent in the early Mississippian American Bottom (Scarry 2003:87).

2. Circular sweatlodges were excluded from this comparison.

3. For the purposes of this study, the term *display goods* (Muller 1997:17; alternatively known as "prestige goods" [Frankenstein and Rowlands 1978] or "skillfully crafted goods" [Helms 1993]) refers to artifacts that are rare, nonutilitarian, and ornately crafted (oftentimes with symbol-laden iconographic elements).

4. Marcoux consulted records from the various excavations at Moundville between 1869 and 1941 (Moore 1996; Peebles 1979; Steponaitis 1983) including hands-on inspection of relevant specimens housed in the special collections room at the Office of Archaeological Services in Moundville, Alabama. Marcoux did not have the opportunity to personally inspect any of the objects recovered from C. B. Moore's excavations. Other data analyzed in the project resulted from the 1990s University of Alabama excavations at Mounds Q, E, and F under the direction of Vernon J. Knight, Jr. Wilson's study included the analysis of artifacts recovered from the 1939–1940 excavations of the Moundville Roadway, the 1932 excavations north of Mound E, and the 1930s excavations north of Mound R.

5. These six items include a partially drilled and polished quartz crystal bead, four oblong sandstone pendant blanks, and a mace-shaped sandstone pendant blank. In addition to these isolated specimens, Mound Q midden deposits con-

tained craft-related items such as limonite saws, small bit-flaked stone tools, fragments of greenstone celts and chisels, pigments, and copper scraps (Knight 2001; Markin 1997). Mound E flank midden and summit midden contexts also contained concentrations of hematitic sandstone saws, hammerstones, and abraders; thin greenstone slabs exhibiting evidence of sawing (Wilson 2001); and sawed and snapped tabular micaceous sandstone debitage of the same thickness as formal notched and engraved sandstone palettes.

6. At first glance these locally made display goods, including fineware vessels, formal micaceous sandstone palettes, tabular stone pendants, copper symbol badges, and copper gorgets, appear to be quite ubiquitous, numbering over 280 specimens; however, this impression is tempered by the fact that almost half of the items are pottery vessels whose place of manufacture may have been outside the Moundville center. Also, considering that the chiefdom existed for some 400 years and the burial sample upon which Marcoux's study was based numbered over 3,100 individuals, the total amount of display goods within the chiefdom does not appear to have been very large.

7. A small concentration of unworked mica was also identified in a single context at the northwest fringes of the Moundville site. No direct evidence, however, for the manufacture of mica items, in the form of partially manufactured artifacts, has been found.

8. There is a subset of brown paste finewares in the American Bottom that are stylistically less homogeneous than other elaborate serving wares. Based on this standardization they may have been centrally produced at Cahokia.

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