1. A New History of Moundville

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WITHIN THE LAST DECADE there have been several advances in our understanding of the specifics of Moundville's developmental history. For example, critical segments of the regional chronology have been refined. Differences between early and late Moundville I phase communities have come into sharper focus. We have incipient chronologies of mounds and sheet midden deposits based on diagnostic sherds. The palisade has been firmly dated. We synthesize these and other refinements according to the following scheme: intensification of local production (AD 900–1050); initial centralization (AD 1050–1200); regional consolidation (AD 1200–1300); the paramountcy entrenched (AD 1300–1450); and collapse and reorganization (AD 1450–1650).

Moundville, located on the Black Warrior River in west-central Alabama, is not only one of the largest Mississippian centers in the Southeast but also one of the most intensively studied (Peebles 1981). During the late nineteenth century, the site was mapped by agents of the Smithsonian Institution (Steponaitis 1983b). In the first decade of the twentieth century, it was dug by Clarence B. Moore (1905, 1907). Between 1930 and 1941, excavations were continued on a grand scale by the Alabama Museum of Natural History using Civilian Conservation Corps federal relief labor (Peebles 1979). And since the 1950s, a number

of smaller excavations have been undertaken, some of which continue to this day (Scarry 1986; Knight 1992). Only a fraction of the collections generated by this fieldwork have ever been thoroughly analyzed; even so, scholars using these materials have produced an impressive array of studies of social organization (Peebles 1974; Peebles and Kus 1977), political economy (Steponaitis 1978; Welch 1991; Welch and Scarry 1995), subsistence (Scarry 1986; Michals 1981; Peebles and Schoeninger 1981), health (Powell 1988), settlement patterns (Peebles 1978; Bozeman 1981, 1982), and chronology (Steponaitis 1983a).

Over the past ten years, new data and new insights coupled with refinements in chronology have led to substantial revisions in our understanding of Moundville's history. Our purpose here is to collate these recent advances into a new synthesis that draws heavily on, and provides a context for, the remaining chapters in this volume. First we describe Moundville and its setting, then we discuss the ceramic chronology, and finally we present our new interpretations of late prehistoric developments in the Black Warrior Valley.

THE MOUNDVILLE SITE

Moundville occupies a high, flat terrace of Pleistocene age on the eastern side of the Black Warrior River at Hemphill Bend, 24 kilometers (15 miles) south of the fall line, in an area where the alluvial valley of the Black Warrior cuts through the Fall Line Hills of Alabama. The terrace on which Moundville lies forms an abrupt bluff rising 17 meters (55 feet) above the river, well above the 100-year flood level. There are only a few such places in the alluvial valley of the Black Warrior where a high terrace directly abuts the river.

A schematic map of Moundville is shown in figure 1.1. Most previously published maps include only the prominent truncated mounds, some 20 in number, originally identified in the publications of C. B. Moore (1905, 1907). There are, however, additional low mounds, and we include those that have been confirmed. Also on this map we show the location of the Oliver Rhodes site, an area excavated during the Depression years that should be considered a part of the Moundville settlement, although it is on the opposite side of a small, unnamed stream. Our map offers what we believe to be a reasonable projection of the palisade line that effectively delimits the occupied area on the west, south, and east sides, where, as the map depicts, it perhaps terminates at Carthage Branch.

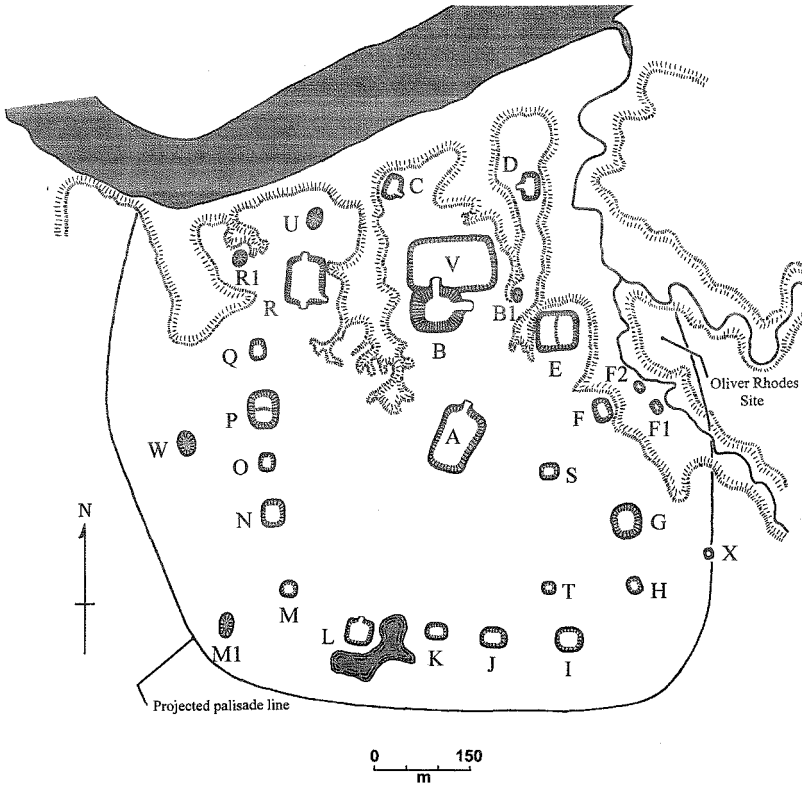

Fig. 1.1. Schematic map of the Moundville site.

The contiguous occupied area is approximately 75 hectares (185 acres) in extent. Within this zone we show the locations of 29 earthen mounds. The initial 22 letter designations were inherited from the work of Moore, and the lettering has been continued as additional mounds were recognized. Our figure for the number of mounds is perhaps conservative; a sketch map prepared by Nathaniel T. Lupton in 1869 shows peripheral mounds not presently accounted for (Steponaitis 1983a:144). Also, a topographic survey made by an engineering firm in April 1930 interprets three additional low rises as artificial mounds, which would bring the total to 32.

Present evidence suggests that for the most part, the extent of the occupied area is coincident with the palisade line, which we will discuss shortly. Moundville thus has the aspect of a compact, bounded settlement, in this respect similar to other fortified Mississippian centers. There are a

few cases where Mississippian settlement areas are known to exist on the same terrace, but outside the palisade system. One example is the excavated tract known as the Picnic Area, which lies at the northwest margin of Moundville. Excavations there in 1991–1992 (chap. 4) revealed evidence of a small cluster of houses that largely predate the palisade. Another is a small mound site, the Asphalt Plant mound (1Tu50), that occupies the terrace just to the northeast of Moundville (Steponaitis 1992). This also predates the palisade, and as Welch argues in chapter 7, it probably was part of the early Moundville I phase community at Moundville.

We know that fortifications enclosed the Moundville settlement on three sides. The north side was protected by the river bluff, and deeply entrenched Carthage Branch to the northeast may have also played a role in the site's defenses. Slightly mounded remains of the palisade line along the southern boundary of the site were still visible to observers in the mid-nineteenth century (Steponaitis 1983b: 129–130). Regarding the precise position of this stockade, we have unambiguous information from modern excavations in just two localities. Excavations during 1991–1992 in the northwest riverbank section of Moundville, mentioned above, revealed evidence for multiple episodes of bastioned palisade construction. Closely corresponding evidence from the opposite side of the site was recovered during University of Alabama field schools (1978–1984) in the area east of Mound G (Vogel and Allan 1985). The palisade trenches in both areas reveal at least six episodes of renewal, some in place and others offset slightly from previous versions. Bastions, spaced 30–40 meters apart, were 4 meters wide and 7 meters deep, incorporating square towers.

A previous map prepared by Peebles (1971:81) was the earliest modern attempt to trace the palisade, and subsequent depictions (e.g., Morgan 1980:114) are based on Peebles's map. Peebles utilized unpublished information from Depression-era excavations that showed long trenchlike features in three localities: west of Mound O, west of Mound Q, and through the Oliver Rhodes site. He also used aerial photographs in his attempt to project the fortification line. Another set of linear features, discovered west of Mound P by John Walthall with a University of Alabama field school in 1976 (Allan 1984) was subsequently attributed to the palisade system. Unfortunately, it is difficult to tell how much of the latter evidence actually pertains to Moundville's fortifications. Neither the mapped features identified by Peebles from the 1930s records nor those excavated by Walthall in 1976 very much resemble the elaborate rebuilt bastion and curtain wall sequences discovered more recently.

Our evidence for the placement of the southern portion of the palisade line is admittedly tenuous. We base it on two scraps of evidence. First, Lupton's sketch map from 1869 shows the "remains of an irregular breastwork" that arcs distinctly south of Mound M1 on the southwest margin of the site and continues to the east (Steponaitis 1983b:144). Second, systematic augering in the area south of mounds I and J reveals a drop in the density of artifacts approximately 100 meters south of these mounds, a drop that may coincide with the palisade line in this vicinity (Steponaitis et al. 1994).

Most writers agree that the larger mounds at Moundville are deliberately arranged around the margins of a single plaza (e.g., Moore 1905:5–6; McKenzie 1964:213; Peebles 1971:82–83; Steponaitis 1983a:4–6). This plan is basically quadrilateral, with mounds M through Q defining a western row, mounds I through L a southern row, and mounds F through H an eastern row. The northern boundary of the plaza, now encroached by the headward erosion of ravines, appears to be defined by mounds R, B, and E. Mound B, the largest mound of the group, is 17.3 meters high and contains an estimated 85,450 cubic meters of earth. In this plaza-periphery group, all of which are oriented roughly to the cardinal directions, there is an alternation between small mounds containing burials and larger mounds lacking burials. In the center of the plaza is Mound A, whose orientation is skewed to the east relative to the others. Also present inside the plaza-periphery group, near the east margin of the plaza, are two low mounds, S and T, whose purpose is unknown. North of the plaza-periphery group, isolated on ridges formed by deep ravines, are mounds C and D, both flat-topped earthworks known to contain high-status burials.

Other mounds lie outside the plaza-periphery group to the east and west. Two low, elongated mounds, U and M1, possess dense concentrations of burials and may be true burial mounds (Moore 1905:220–240, 1907:343). Mound F1, a small truncated mound on the opposite side of the site that was partially excavated during the 1930s, also contains numerous burials and thus appears to present a situation comparable to mounds U and M1. Its companion mound, F2, seems never to have attracted the attention of archaeologists, nor has mound B1, located northeast of Mound B. Mound R1, isolated on a ridge west of Mound R, is a low, unexcavated rise shown on maps as early as the 1930s but only recently confirmed through probing as being constituted of artificial fill. On the eastern margin of the site is Mound X, a basal remnant of a mound encountered during palisade excavations in this vicinity by a University of Alabama field school (Vogel and Allan 1985). This mound is of special interest because

of its relation to the palisade, which postdates the mound and crosses over a portion of it. Like the Asphalt Plant mound, we attribute Mound X to the early Moundville I phase community at Moundville.

Mound W, completely excavated during the Depression era, is said to have been an occupied natural rise rather than a deliberate construction (Peebles 1979:4; Walthall and Wimberly 1978:121), based on examination of the excavation notes by Peebles. Because it was identified as a mound in the 1930s and is discussed in the literature by this name, we include it on our map.

Evidence of off-mound habitation, of variable density (Peebles 1973, 1978:381), is spread throughout the area around the plaza-periphery mound group and inside the palisade line. During the Depression-era excavations, much information was obtained about structure patterns, including ordinary houses and more specialized patterns interpreted as public buildings (McKenzie 1964; Peebles 1971:83). More recent excavations along the northwest riverbank (Scarry 1995) have provided additional data on residential structures. Peebles (1978:381) has suggested that "most day-to-day debris was discarded into the river and ravines"; while it is reasonable to suppose that some such dumping occurred, it should be noted that rich middens are also found within habitation areas on the level terrace. A century of cultivation may well have destroyed much of the sheet midden at the site. Occupational debris is also found inside the plaza-periphery group, but only in the immediate vicinity of the mounds. Limited test excavations in the central plaza by a University of Alabama field school in 1988 and auger testing by the University of North Carolina in 1993 (Steponaitis et al. 1994) show it to be basically free of cultural debris.

There is some evidence of artificial leveling of the plaza area by filling along its margins early in the construction history of the site. Recent excavations at the bases of mounds F and G showed artificial fills up to a meter in depth, apparently intended to build up surface depressions to the same level as the rest of the plaza. Similar fills may also be present on the west margin of the plaza, based on evidence from a small test excavation in the vicinity of Mound O.

CERAMIC CHRONOLOGY

Moundville's internal chronology was worked out in the late 1970s (Steponaitis 1980a, 1980b) and since then has been refined as additional evidence has accumulated (Steponaitis 1983a, 1992; Little and Curren

1995). The ceramic sequence now consists of five phases, spanning the period AD 900–1650 (fig. 1.2). All but the last of these phases have been further subdivided into early and late subphases, each about 75–100 years long. This degree of temporal control provides an unusually good opportunity to trace the history of Moundville and its surrounding sites.

The sequence begins with the West Jefferson phase (AD 900–1050), which was first delineated using evidence excavated from three small sites in the upper reaches of the Black Warrior drainage, about 90 kilometers northeast of Moundville (Jenkins and Nielsen 1974; O'Hear 1975). The pottery at this time was predominantly a plain, grog-tempered ware classified as Baytown Plain. Cord-marked, incised, and punctated decoration occurred in very small quantities. Late in the phase, shell-tempered pottery also started to appear. The only vessel forms made were bowls and jars, the latter often with loop handles.

The next three phases—consecutively numbered Moundville I, Moundville II, and Moundville III—were first set up as subdivisions of what had formerly been called the "Moundville culture" (Jones and DeJarnette 1936) and the "Moundville phase" (McKenzie 1966). They were initially based on two lines of evidence from Moundville: a seriation of gravelots and a stratigraphic analysis of midden deposits (Steponaitis 1983a). Subsequent excavations and analyses have generally confirmed the basic sequence and led to some refinements (e.g., chap. 4; Scarry 1995; Steponaitis 1992; Welch 1991, 1994). Particularly important has been the clear subdivision of Moundville I into early and late subphases (Steponaitis 1992:4–6), a distinction that was only vaguely perceived in the initial chronology (Steponaitis 1983a:132).

The span from Moundville I through Moundville III was a time of great diversity in vessel forms and decoration. The pottery was predominantly shell-tempered and comprised two major wares. One consisted of burnished, finely tempered bowls and bottles that were used for serving and storage; these nowadays fall into the types Bell Plain, Moundville Engraved, and Carthage Incised. The other consisted mainly of jars that were used for cooking; these vessels fall into the types Warrior Plain and Moundville Incised. The distinctions among phases can be seen in changing frequencies of these types, as well as in the appearance and disappearance of particular ceramic varieties, decorative modes, and attributes of vessel shape.

Specifically, the Moundville I phase was marked by relatively high frequencies of the decorated type Moundville Incised, with lesser amounts of Carthage Incised and Moundville Engraved. Jars typically had two handles and either folded or folded-flattened rims. Bottles were

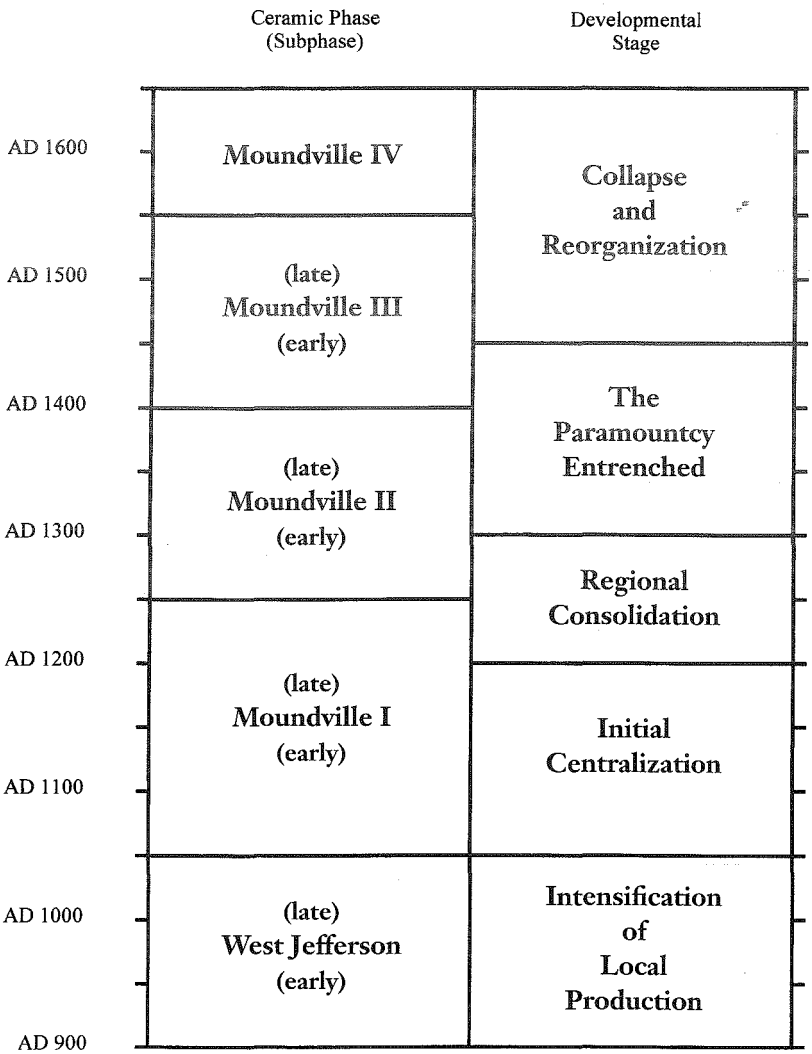

Fig. 1.2. Ceramic chronology and developmental stages used in chapter 1.

adorned with pedestals and had a slender, ovoid profile. Bowls existed in both restricted and shallow forms, the latter having the appearance of plates with straight, flaring rims. Over the course of this phase, grog-tempered pottery disappeared, Carthage Incised and Moundville Engraved gradually became more popular, and folded-flattened rims declined in frequency. In addition, early Moundville I assemblages often contained a distinctive kind of burnished ware—an early (and yet unnamed) variety of Bell Plain with a gray, finely textured paste—that fell out of use in late Moundville I times.

During the Moundville II phase, varieties of Moundville Engraved and Carthage Incised proliferated, while Moundville Incised declined in frequency and eventually disappeared. Common designs on the engraved wares included representational motifs as well as curvilinear scrolls made up of multiple, closely spaced lines. Such designs were often arranged around indentations in the vessel's surface. Bottles became subglobular in shape, usually with pedestal or slab bases. Bowls included hemispherical, cylindrical, and terraced rectanguloid forms. Jars typically had unmodified rims and either two or four handles.

Early in the Moundville III phase, Moundville Engraved and Carthage Incised continued to predominate among the decorated wares; late in the phase, however, the former type all but vanished. Among burnished wares, common shapes included subglobular bottles with simple bases, hemispherical bowls with beaded rims, short-necked bowls, and deep flaring-rim bowls. The number of handles found on jars continued to proliferate, with four, eight, and sometimes even more handles being used.

Our chronological sequence ends with the Moundville IV phase, until recently called the Alabama River phase and before that the Burial Urn culture (Cottier 1970; Curren 1982a, 1982b, 1984; DeJarnette 1952; Little and Curren 1995; Sheldon 1974). Although the Moundville IV ceramic complex showed stylistic links with its predecessors and retained shell as the dominant tempering agent, in many ways it was very different, encompassing a new suite of types. Carthage Incised continued to be made, along with the closely related type Pensacola Incised. New types included Alabama River Incised and Alabama River Appliqué. The major vessel types were short-necked bowls, flaring-rim bowls, and globular jars. Although this phase coincides with the period of initial Spanish exploration and colonization of the Southeast, European trade goods are rarely found in Moundville IV deposits.

A NEW VIEW OF MOUNDVILLE'S HISTORY

We now present a brief summary of Moundville's development. Our account incorporates the refinements to the cultural chronology discussed above and includes recent conclusions on a number of topics, several of which are treated in the chapters to follow. For detailed arguments and supporting data the reader is referred to those chapters and the citations therein. The history is set forth in terms of five developmental stages, which are given descriptive names as follows: (a) intensification of local production, (b) initial centralization, (c) regional consolidation, (d) the paramountcy entrenched, and (e) collapse and reorganization. Ceramically, the first stage coincides with the West Jefferson phase, the second with early Moundville I, the third with late Moundville I and early Moundville II, the fourth with late Moundville II and early Moundville III, and the fifth with late Moundville III and Moundville IV (see fig. 1.2).

Intensification of Local Production (AD 900–1050)

The terminal Woodland predecessor of Moundville culture in the Black Warrior Valley is the West Jefferson phase, first defined from excavations at the West Jefferson Steam Plant sites (Jenkins and Nielsen 1974), located above the fall line 70 kilometers to the northeast of Moundville. West Jefferson phase sites south of the fall line, closer to Moundville, are known primarily from survey data. These most often appear as large surface scatters, none of which, however, has been excavated as yet. From the existing information about these sites, it is our impression that the intensity of occupation seen here is not as great as in the corresponding period in the neighboring Tombigbee Valley to the west, where more information is available.

The big picture is a little clearer. Available evidence points to a general climate of social circumscription, endemic warfare, and resource stress afflicting a large section of the Southeast during terminal Woodland times. In several directions from the Black Warrior, certain river valleys harbored unusually large numbers of people in relatively large riverine settlements. The central Tombigbee Valley, the Guntersville Basin area of the Tennessee Valley, and the Alabama River Valley, for example, all possess terminal Woodland sites in great abundance according to survey data. Riverine settlements are closely spaced, site sizes are large, and midden development is extensive, as opposed to

intermediate areas, which seem to have held decidedly fewer people. In each of the crowded valleys we find archaeological evidence for warfare. Subsistence stress due to local overcrowding is particularly well documented in the Tombigbee Valley.

Until we obtain better information on West Jefferson phase sites in the Black Warrior Valley, we can only speculate about the specific effects such broad-scale conditions may have had in an area with a seemingly more modest population. It is possible, for example, that a coalescence of West Jefferson phase peoples into a few relatively large villages was a response to endemic warfare. In any event, these were the dominant conditions under which local West Jefferson phase peoples began manifestly to intensify their production of both agricultural products and craft goods.

Our knowledge of West Jefferson subsistence economy is based primarily on data from the original West Jefferson Steam Plant sites in the upper Warrior Basin. These sites show a trend toward increased food production through time. Early West Jefferson phase peoples relied almost entirely on wild foods. A mobile settlement strategy employing warm-season floodplain villages and cold-season extractive camps has been suggested by Welch (1981). Later in the West Jefferson phase, around AD 950–1000, maize production intensified, while acorn and hickory nut procurement remained relatively stable (Scarry 1993a).

Evidence also exists for the intensification of craft production at West Jefferson phase sites, in particular the manufacture of shell beads. Microlithic tools commonly occur at large West Jefferson settlements. A study of microwear on these tools by Pope (1989) shows that most of them were used to drill shell. Here we call attention to the fact that shell pendants and beads, worn as jewelry and sewn onto garments, occur in burials of this era in various parts of the Southeast, in contexts that suggest that they constituted a standard of wealth (Steponaitis 1986:384, 1991). In this post-Hopewellian era, during which the exchange of valuables across the landscape was otherwise suppressed, the domestic production, display, and exchange of shell ornaments appear to have flourished in some areas. Locally in the Black Warrior Valley, we suspect that wealth in the form of shell beads was being manipulated by community leaders at this time, in their competitive efforts to attract followers, and that this activity prefigures the strategies of later elites.

It is not clear whether Moundville itself was occupied at this time. Typical grog-tempered West Jefferson series pottery is definitely scattered across portions of the site, and an apparent concentration of this

material west of mounds O and P has been interpreted in the past as evidence of a small West Jefferson phase settlement (Walthall and Wimberly 1978:122–123; Steponaitis 1983a:151–152). However, no West Jefferson phase pit features have yet been documented anywhere at the site; moreover it is now reasonably well established that West Jefferson series pottery continued to be made and used at Moundville during the succeeding early Moundville I phase (Scarry 1995:234–235). This leads us to suspect at this point that Moundville was probably *not* occupied prior to about AD 1050.

Initial Centralization (AD 1050–1200)

The next period, which corresponds to the early Moundville I phase, is marked by the appearance of many of the material hallmarks of Mississippian culture: platform mounds, quadrilateral wall trench architecture, and shell-tempered pottery in a variety of new vessel shapes. Apparently some grog-tempered pottery identical to that of the local West Jefferson phase was still being made. Conspicuous changes are evident in such domains as the subsistence economy, settlement organization, and social structure.

During this period, dependence on corn became more pronounced, continuing the trend toward agricultural intensification begun during West Jefferson phase times (chap. 4). Other native crops, including squash, chenopod, maygrass, and sunflower, were also cultivated as minor components of the agricultural complex, and beans were introduced. Nut use, in contrast, declined precipitously from West Jefferson phase levels. In short, this period saw the emergence of a stable agricultural economy in the Black Warrior Valley, one in which corn contributed about 40 percent of the average caloric intake in the diet (chap. 6).

An abrupt change in settlement is also evident. Nucleated communities gave way to smaller and more dispersed farming settlements. Also, small, truncated mounds, probably the residences of an emerging elite, began to be built.

Most of the population of the Black Warrior Valley at this time was apparently living in small farming settlements to which we have applied the label "farmsteads," an example being the Oliver site reported by Michals (chap. 8). Survey and excavation data are not abundant, however, and other settlement types, as yet unrecognized, may also exist. Small clusters of houses dating to this period have been excavated at the Big Sandy Farms site (Ensor 1993) and at the northwest riverbank

locality at Moundville (chap. 4). Individual houses have been identified in smaller excavations at several localities in the Moundville vicinity: north of Mound R, south of Mound E, and at the base of the Asphalt Plant mound. In this small sample, architectural diversity is pronounced, with rectangular single-set post houses, wall-trench houses, and small semisubterranean houses all counted as present, apparently juxtaposed in the same settlements. Because of the small scale of excavations to date we do not, however, possess a very good picture of what any of these settlements looked like in its entirety.

Small settlements were spread throughout the Black Warrior Valley. However, our impression is that occupation of the Moundville terrace was unusually dense. Judging from the distribution of diagnostic pottery, dwellings were concentrated along the edges of the terrace overlooking the Black Warrior River, as well as Carthage Branch and its tributaries (fig. 1.3A).

It is important that the only two mounds known to have been erected at this time in the Black Warrior Valley are found here as well. These are the Asphalt Plant mound (1Tu50) (Steponaitis 1992; see also chap. 7) and Mound X at the Moundville site. The locations of these mounds are shown in figure 1.3A, situated within what we visualize as a dispersed farming community. Although these mounds are relatively small, their construction still represents a substantial labor investment. They can be viewed, from one point of view, as tangible testaments to leadership. The apparent absence of contemporary mounds in other parts of the Black Warrior Valley is noteworthy, even though we presume the existence of local leaders up and down the valley, just as they must have existed in West Jefferson phase times. This suggests that even at this early stage in the region's political development, the Moundville locality was already filling the role of *primus inter pares* in the region.

Limited excavations at the Asphalt Plant mound revealed that its occupants, whom we reckon as leaders of a small-scale ranked society, were engaged in a traffic of raw materials, particularly nonlocal rocks and minerals (chap. 8; Steponaitis 1992). The mound sites must have served as central nodes of authority for leaders who employed the ritual of mound building and the accumulation and distribution of exotic goods as key elements of their efforts to expand and consolidate their authority in a competitive setting. This initial centralization of authority, moreover, may have been helped along by a need to lighten the burden of chronic interregional strife. Despite these developments, however, we do not believe that regional consolidation had yet been effectively achieved.

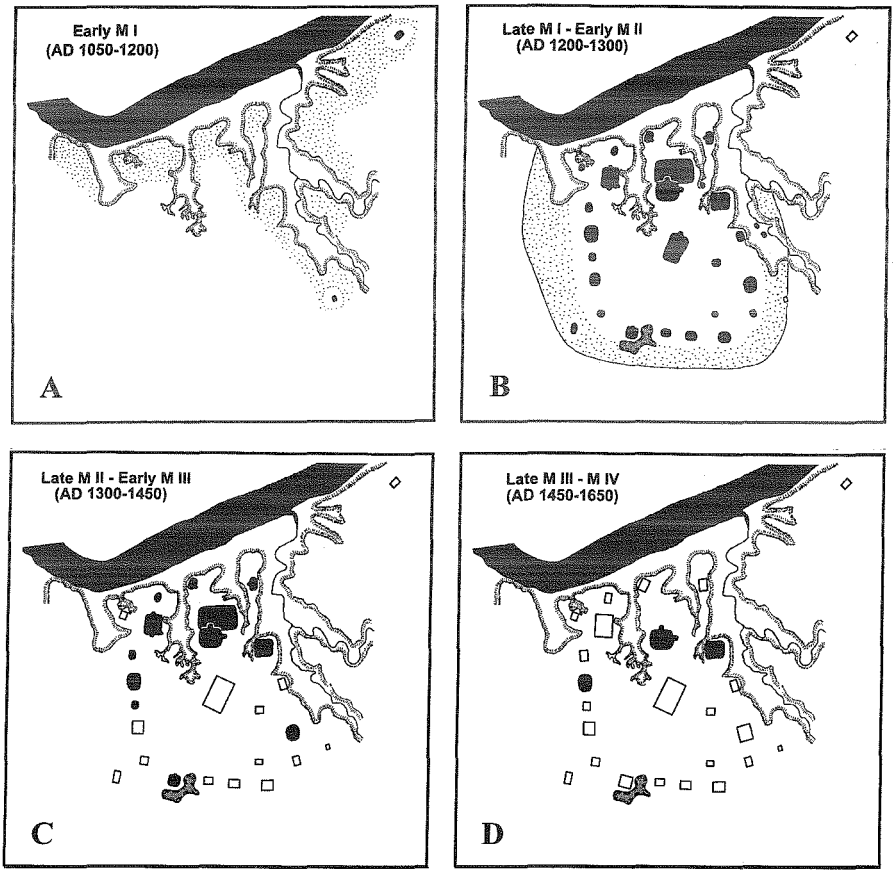

FIG. 1.3. Settlement changes at Moundville. *A*, Early Moundville I. *B*, Late Moundville I–early Moundville II. *C*, Late Moundville II–early Moundville III. *D*, Late Moundville III–Moundville IV. Occupied mounds are black; abandoned mounds are open rectangles; domestic occupation area is stippled.

Regional Consolidation (AD 1200–1300)

During the late Moundville I phase, certainly by AD 1250, a paramount center was constructed at Moundville, marking the political consolidation of an area minimally including a 40-kilometer segment of the Black Warrior Valley below the fall line at present-day Tuscaloosa. The event of regional consolidation is seen archaeologically in a number of ways.

Working with the curated collections from the 1930s, we have recognized that every mound for which we have sherd data has a strong

Moundville I phase component (Knight 1989, 1994). This suggests, contrary to previous scenarios (cf. Steponaitis 1983a, 1991), that construction of all of the major mounds was begun at roughly the same time, probably between about AD 1200 and 1250 (fig. 1.3B). According to present indications it was during this time that the basic plan of the center was established, including the layout of the central plaza and the positioning of central and peripheral mounds. Built into this configuration were an east-west bilateral symmetry, a pairing of residential mounds with mortuary temple mounds, and a ranking of social space (chap. 3; Peebles 1971).

The palisade was also first erected at this time. Recent excavations in the northwest riverbank area (chap. 4) provide direct radiocarbon dates of palisade features, indicating that the palisade was built initially around AD 1200 and remained in use, with approximately six rebuildings, until about AD 1300. With its construction, people began to move in large numbers inside the palisade walls, and thereafter virtually all domestic activity took place within its confines. The presence and maintenance of this elaborate work is strong testimony to a concern for military security during this period.

Thus, Moundville now assumed the character of a large, palisaded town, drawing in residents from a broad area. We estimate the resident population of this period as somewhat less than 1,000 people. Most of the sheet midden around the plaza dates to this time (chap. 2). In off-mound areas between the plaza and palisade there were compact arrangements of square wattle-and-daub houses with wall trench construction. Houses averaged about 19 square meters in floor area, which suggests they were inhabited by nuclear families. Cylindrical or bell-shaped storage pits were no longer used, which suggests that foodstuffs were stored above ground (chap. 4).

We wish to emphasize that the whole character of the Moundville settlement changed at this point. Prior to AD 1200, the settlement was unstructured and was spread out along the riverbank and the banks of Carthage Branch. With these changes, the settlement not only grew much larger but also became highly structured and formal, with public and domestic architecture carefully arranged around the quadrilateral plaza. The settlement was imposed on the landscape, in a flurry of coordinated activity in which plaza margins were artificially leveled to accommodate mounds, and existing constructions were cleared away to accommodate the new architecture. The most telling example of this is the case of Mound X, an early Moundville I phase construction that

was decommissioned in order to clear the path of the palisade along the eastern margin of the new community.

Another indicator of regional political consolidation was the construction of several second-order mound centers elsewhere in the Black Warrior Valley. Earlier mound sites were abandoned, and at least three new ones, the Jones Ferry, Poellnitz, and Hog Pen mounds, were built in the area north of Moundville (chap. 7). All of these are single-mound sites with minor off-mound occupation areas, probably inhabited by only a few people, despite the obvious large-scale communal labor involved in raising these earthworks. We suggest that they were occupied by elite subordinates to the paramount at Moundville, and served as secondary administrative nodes to focus local ritual and productive activity and to facilitate the flow of tribute to the primary center. Most of the people in the hinterlands of the polity presumably lived in dispersed farmsteads.

In the economic sphere, changes continued to occur. Agricultural production increased to the point that maize provided about 65 percent of calories in the diet (chap. 6). Moreover, plant remains of this period provide the first clear evidence of the provisioning of the elite by commoners. Corn cupules and nutshells, the by-products of food processing, are much more abundant at rural sites than in elite residential areas at Moundville, indicating that plant foods were being brought to the paramount center in processed or partially processed form to reduce their bulk for transport (Scarry and Steponaitis 1992). Another indication of the distinctiveness of elite foodways is the relative abundance of burnished service pottery over utilitarian cooking and storage pots in elite midden deposits (Welch and Scarry 1995). Such elevated frequencies of service ware are found in deposits north of Mound R. Clearly, by the late Moundville I phase, mobilization of foodstuffs as tribute, as modeled by Welch (1991:179–183), was already an integral part of Moundville's political economy.

As is evident in several contexts at Moundville, the acquisition of nonlocal goods and raw materials also intensified during this interval. One indication, from the analysis of domestic deposits in the northwest riverbank area (chap. 4), is that the relative abundance of nonlocal chert, greenstone, and mica increased from the early to the late Moundville I phase. A second indication comes from the analysis of grave goods from seriated burials from throughout the center, among which the per capita frequency of such exotic materials as copper and marine shell also peaked during the period under consideration (Peebles 1987a;

Steponaitis 1991). Finally, some information is becoming available for mound contexts. In deposits on the flanks of Mound Q, evidence for elite craft production has been found, increasing substantially during early Moundville II times. This evidence includes sandstone saws for the manufacture of stone palettes, greenstone adze blades, pottery trowels, and microblades made from imported chert. The materials being worked include sheet copper, galena, and pigments of various kinds (Knight 1992), probably used in nondomestic social settings and potentially incorporated into a prestige goods economy (see Welch 1991).

In summary, we interpret the available evidence for the period AD 1200–1300 as testimony that the entire region was consolidated at the outset into a single polity with a primary center at Moundville and several second-order administrative centers. At the primary center lived nobles who received tribute in the form of foodstuffs from the hinterlands. At this center both the elite and nonelite engaged, in different ways, in the production and exchange of crafts involving nonlocal raw materials, some of which, as exotic goods meant for display, were funneled into a prestige goods economy involving exchange relationships with other polities.

The arrangement of public architecture at the Moundville site suggests a sociogram, in which the placement of mounds around the plaza reflects ranked status relationships among kin groups (chap. 3). If so, a fixed rank ordering had been imposed on these kin groups by incorporating that order into a sacred landscape, an act that implies considerable power at the center. Such power, vested in the office of a paramount chief, would also have been necessary to enforce this undoubtedly contested view of social reality once it had been imposed. And the most revealing measure of the extent of this power is in the immense amount of labor that had to be mobilized to level the plaza, construct the earthworks, and build the palisade.

The Paramountcy Entrenched (AD 1300–1450)

Despite the strong indications of political consolidation in the previous period, we have only indirect traces of the presumed paramount chiefs and their close kin. It is only in the following period, which we characterize as an entrenched paramountcy, that a chiefly cult symbolism became elaborated and that we find certain burials decked out with luxury goods and costumery bearing this symbolism. A good case can be made that the paramounts themselves were buried in mounds C and D on the northern margin of the site. In our

ceramic chronology, this period encompasses the late Moundville II and early Moundville III phases.

Peebles, in his analysis of the social hierarchy of the Moundville site (Peebles 1974; Peebles and Kus 1977), defined a "superordinate dimension" among the burials at the site, which is to say the presumed nobility, marked by the inclusion of exotics as grave goods, most commonly marine shell beads, copper gorgets, copper ear spools, notched stone paint palettes, mineral-based pigments, and galena crystals. At the apex of the hierarchy, as Peebles reconstructs it, are burials that also possess copper-bladed axes, only seven of which are known from Moore's excavations in mounds C and D. One such burial, fancifully described by Newell Wardle (1906) as the "Great Chief of Mound C," contained bracelets and anklets of copper-covered beads, three sheet-copper gorgets, a pearl necklace, a sheet-copper hair ornament secured by a bison horn pin, and an amethyst pendant in the form of a human head, in addition to a copper-bladed axe. We now believe that most if not all of these lavish burials belong specifically to the period being discussed.

Just as Moundville's rulers began to distance themselves radically by symbolic means from their followers, most of Moundville's resident population vacated the center, presumably moving out onto dispersed farmsteads in the peripheral alluvial valley. Such a remarkable evacuation is witnessed by the scarcity of middens dating to this time, in stark contrast to the previous period (chap. 2). Supporting evidence is to be found in the domain of architectural style. The domestic architectural form characteristic of the post–AD 1300 era in this region, possessed of large-diameter wall posts, hipped roof construction with interior supports, and entrance trenches, is entirely missing among the numerous houses excavated at Moundville to date, which emphasize the earlier, flexed-pole, narrow wall trench form of construction. The palisade also ceased to be rebuilt at this time and was henceforth no longer present. Almost as rapidly as Moundville had become a town, it ceased to be one, leaving, we propose, only the elite and their retainers as permanent residents.

There are several possible explanations for this out-migration. For one, we find it conceivable that the dispersal involved a conscious decision by the elite to enhance the sanctity of the center by emptying it, by which action they would further distance themselves from the affairs of commoners. A second possibility is that it may have been a practical solution to soil depletion and the exhaustion of wood resources within Moundville's immediate catchment, caused by the unprecedented con-

centration of people during the preceding period (Scarry and Steponaitis 1992). A third alternative, bearing in mind that the act of amassing behind the walls of a fortified town bespeaks a desire for security, this subsequent dispersal may have been conditioned by a lessened threat of attack. It may, of course, have been a combination of such factors.

With this move, Moundville now became a necropolis, a center of mortuary ritual for the region as a whole. As residential spaces were vacated across the site, a series of cemeteries were established to fill the vacuum. At this time the resident population of the center was small, and most of those buried at Moundville had not actually lived there. This is most strikingly shown by the inverse relationship between chronologically diagnostic sherds from midden deposits and seriated burials (chap. 2). Diagnostic sherds, reflecting the accumulation of domestic refuse, drop precipitously in frequency after the Moundville I phase, stabilizing at about one-fourth of the previous level during Moundville II and III. The frequency of burials, in contrast, is relatively low during the Moundville I phase but increases greatly during Moundville II, peaking during the Moundville III phase. Essentially, after about AD 1300 there are far more burials at the site than would be predicted by the off-mound middens and architecture. Moreover, very few burials of this period are known from the outlying sites. The only known exception is the small cluster of burials at the Mill Creek site, a farmstead at the northernmost reach in the distribution of Moundville phase sites (cf. chap. 7).

Certainly by AD 1400, if not earlier, according to our sherd data (Knight 1989, 1994), many of the mounds at the primary center had been abandoned (fig. 1.3C). As our schematic map shows, the general tendency was for mounds on the southern margin of the plaza to be abandoned first. There was, additionally, a change in the way certain mounds were used. By AD 1400 the smaller mounds around the plaza periphery that had previously been used for mortuary purposes had virtually ceased in that function, as the focus of mortuary ritual, including that of the elite, shifted to off-mound cemeteries. Other mounds, in contrast (notably B, E, G, P, Q, and R), show evidence of vigorous occupation and continued construction throughout the period.

During this period long-distance exchange declined somewhat, although, as amply witnessed by the furnishings of elite burials, the prestige goods economy continued to function. Much of the iconographically rich material at Moundville traditionally attributed to the classic Southern Cult, largely from elite burials, probably dates to this time,

particularly, in our estimation, to the fourteenth century AD. We make this estimate with some trepidation, however. Very little of this material has been directly dated, and some of it may be somewhat earlier. Iconographically, images found in chiefly cult paraphernalia contain possible references to warfare, either literal or figurative, emphasizing trophy heads, scalp forms, and weapons. These are juxtaposed with cosmological images, including a variety of center symbols and supernatural creatures. At this time engraved pottery bearing representational art also makes its first appearance, a class of special artifacts showing a range of themes that is congruent with the chiefly cult symbolism displayed in other media. Pottery vessels engraved with this art are very abundant at the primary center, where they are by no means restricted to elite contexts, and they also occur in lesser frequency at the outlying sites. This conspicuous broadening of the social contexts in which this iconography appears may be called a communalization of the chiefly cult symbolism (Knight 1986:682). Such pottery was produced at the primary center until about the middle of the fifteenth century AD.

Beyond Moundville, additional secondary mound centers were established, while others continued to be occupied. Welch (chap. 7) lists seven second-order mound sites that were probably occupied during the late Moundville II phase, both north and south of the Moundville site, and an eighth that was added during early Moundville III. These additional centers must have been needed to serve and administer an increased rural population, expanded no doubt by the virtual emptying of the primary center. None of these were large sites, and indeed there is no sign of a nucleated settlement in the Black Warrior Valley. Presumably the majority of people continued to live in farmsteads.

In summary, the most fundamental signature of the period AD 1300–1450 is that the primary center was once again radically transformed, from a thriving town to a largely vacant ceremonial center, chiefly residence, and necropolis. The lavish burials found mostly in the northern part of the Moundville site, with their cult regalia, combine with the virtual emptying of the center to suggest that the nobility were now both symbolically and physically distancing themselves from others. Perhaps paradoxically, however, more people than before came to have access to, or at least contact with, the esoteric religious symbolism of chiefship via the designs engraved on common service pottery. The tributary economy was in full swing, as numerous second-order administrative centers mobilized the labor and the agricultural surplus of a farmstead-based population numbering perhaps 10,000 people.

Another key to understanding this period is the beginning abandonment of certain mounds at the primary center, particularly in the southern half of the site. If we have correctly interpreted the situation, it is evident that the fixed rank order of social groups imposed on the landscape in the initial layout of the site, some two centuries earlier, was not immune to disagreement. Those that had the least to gain from such a fixed arrangement were the lower-ranked groups, assigned spaces on the opposite side of the plaza from the shrines and residences of the ruling elites. As these ruling elites consolidated their power, engaging in ritual activity and continued enlargement of mounds on the north end of the site, others simply stopped contributing. It is, perhaps, the first sign of troubles that were to come.

Collapse and Reorganization (AD 1450–1650)

The latter part of the fifteenth century in the Black Warrior Valley is marked by further signs of stress within the chiefdom. Several additional mounds at the primary center were abandoned during this period (fig. 1.3D), leaving only mounds P, B, and E on the northern side of the site with any signs of continuing construction or occupation. In the off-mound areas only a small tract southwest of Mound G is known to have been occupied. During these waning years the Moundville site was still being used for mortuary ritual, but on a much smaller scale. Mortuary mounds were no longer receiving the tombs of the elite, and substantially fewer burials were being placed in the off-mound cemeteries (Steponaitis 1983a: fig. 36).

Many of the outlying mound centers, in contrast, continued to see further occupation and episodes of mound construction extending into the sixteenth century. The largest of the outlying mounds, Snows Bend, reached a height of 3.5 meters. At the White site, where we have more plentiful data, there is considerable evidence for the provisioning of the local elite at this late date (Welch 1991). At the same time, cemeteries began to be established at some of the outlying secondary mound centers. Such cemeteries are well documented for the Snows Bend and White sites (DeJarnette and Peebles 1970; Welch 1991). Also, nucleated village-sized settlements began to reappear for the first time in the Black Warrior Valley since West Jefferson times (discounting the special case of Moundville), both in conjunction with secondary mound sites, as in the case of White, and separately, as in the case of the Powers site (chap. 7). All of these phenomena point to an increasing independence and self-suf-

ficiency among the outlying communities during AD 1450–1550, at the expense of the center.

Most, if not all, of the secondary mound sites, however, were abandoned by approximately the middle of the sixteenth century. Here, on the threshold of the historic era, stirrings of activity at the primary center can still be detected on the summits of mounds P, B, and E, although earthen additions to these mounds had probably ceased entirely. Among these three mounds we have the best information for Mound E. Mound E appears to have had a relatively small occupation of a portion of its summit during the middle to late sixteenth century, with no additional earth construction. Our available evidence suggests that all of the mounds at Moundville were abandoned by the end of this century.

The late sixteenth century in the Black Warrior Valley heralds the Moundville IV phase. It has long been recognized that this time of urn burials was one of radical reorganization and change (Sheldon 1974). By this time most of the people in the valley were living in a few moundless, nucleated villages. No longer was there any inkling of an organizational level above that of the village, and the trappings of Mississippian hierarchy disappeared. Dependence on maize dropped significantly in favor of wild foods, perhaps as a result of soil exhaustion (chap. 6). Whereas earlier Moundville populations were reasonably healthy (Powell 1988), human skeletal remains of this period show elevated occurrences of cribra orbitalia and porotic hyperostosis (Hill-Clark 1981). Schoeninger and Schurr (chap. 6) attribute these conditions to a high pathogen load exacerbated by malnutrition. The Moundville IV phase villages continued to be occupied until about AD 1650, at which time the valley was finally depopulated due to the external pressures of broad-scale conflict. The Black Warrior had become Potagahatchie, the "river at the boundary," a buffer zone between warring proto-Creeks to the east and Choctaws to the west (Knight 1982a).

To reiterate, at the beginning of the period AD 1450–1650, the Moundville site already had become a specter of itself, the greater part of it abandoned. Nonetheless it is without doubt significant that a few of the most important mounds at the center, Mound B in particular, were still being occupied during the middle to late sixteenth century. This may well signal the existence of a nominal chief and some degree of political unity, although there are few signs of the strongly hierarchical social and political system of previous centuries. The political situation at this time, we believe, may have been similar to that of the Chickasaw at the beginning of the eighteenth century, according to the account of

Thomas Nairne (Nairne 1988). In which case, a hereditary paramount was recognized among the town chiefs, who was perhaps the personification of unity among the towns, although, like the present monarchs of England, he had no real political power.

There is no sidestepping another matter: De Soto's incursion into this region in the autumn of AD 1540. According to our chronological alignments, this event falls near the end of the Moundville III phase. Peebles (1986:33, 1987b:24) has forcefully argued that Moundville's decline as a hierarchical system antedates the expeditionary age and was in no sense a product of it, and with this position we are in general agreement. There is still room for debate, however, on the precise state of affairs described by the chroniclers of the De Soto expedition, particularly in view of the fact that Hudson and his colleagues (Hudson et al. 1990:183–191) chart the course of De Soto's expedition through the very heart of our area of concern, visiting the late Moundville III phase mound sites at White, Grays Landing, Wiggins, Burnette, Snows Bend, and even Moundville itself. They interpret the documents as describing a somewhat unstable but still unified polity little different from other diminutive polities along their route. This chiefdom was called Apafalaya, and it had a chief of the same name. Several other placenames of the region are mentioned in the chronicles, leaving little doubt that Apafalaya's inhabitants spoke a Western Muskogean dialect.

Hudson and company do not suggest that De Soto's army encountered a Moundville chiefdom anywhere near its height, which arguably makes it irrelevant that the chronicles do not mention a large ceremonial center having 29 mounds. They suggest that the decline undergone by the Moundville polity prior to the entrada was the product of the common internal instability of Mississippian political systems, whereas, in contrast, the postcontact Moundville IV phase, with its reorganization and evidence of nutritional stress, exhibits "fundamental structural changes" very likely attributable to the European contact (Hudson et al. 1990:188–191).

At issue here is not whether the Moundville political system went into decline from internal causes prior to the sixteenth century. All concerned agree that it did. The question, rather, is whether the former Moundville chiefdom was totally decentralized in AD 1540 as Peebles sees it, or whether it was still a minimally functioning chiefdom unifying a district of several towns, as Hudson would have it.

We have offered our own account above, grounded on current archaeological knowledge, of the conditions prevailing during the late

Moundville III phase, which we suggest is the appropriate unit for a calendar date of AD 1540. This was indeed a time of decline, during which there is evidence of increasing independence among the scattered communities of the Black Warrior Valley. But we are impressed by the evidence, only recently recognized and previously unsuspected, of De Soto-era occupation on the summits of some of the major earthworks at Moundville, which we think bespeaks a lingering importance attached to the all but defunct ceremonial center. Thus we have suggested the hereditary head-chiefship among the early eighteenth century Chickasaw towns as an analogy appropriate to these conditions. In regard to the chronicles of De Soto and their accounts of the province of Apafalaya, conceding that they are not as clear as one would like, they do seem, by our reading, to be describing at least a nominally centralized political situation not out of line with our impressions of the late Moundville III phase. In this respect our position is close to that of Hudson and his colleagues. Having said this, we take no position on the many specific correlations proposed by those researchers between named towns in the De Soto accounts and specific late Moundville III phase archaeological sites.

CONCLUSION

For more than 25 years, beginning with the work of Christopher Peebles (e.g., 1971, 1983; Peebles and Kus 1977), the Moundville system has played a prominent role in discussions of Native sociopolitical complexity in North America. At first, discussions centered on defining aspects of hierarchy in Moundville's spatial organization, settlement pattern, and burial population. An empirical basis was thus established for claims about the Moundville phenomenon in relation to a neoevolutionary theoretical framework. By the end of the 1970s a robust internal chronology for Moundville had been achieved, based on changes in pottery (Steponaitis 1980a, 1980b). This achievement, along with the acquisition of new subsistence and site survey data in the Black Warrior Valley, allowed discussion of an expanded range of topics having a distinctly historical dimension. It now became possible, for example, to engage Moundville data in theoretical discussions of the rise and decline of hierarchical societies and to track the internal development of the system's political economy (e.g., Welch 1986; Peebles 1986, 1987b; Steponaitis 1991).

In the last decade, research on several fronts by several researchers has reached the point where additional issues can be addressed and others recast, resulting in a total picture of Moundville's historical development that is a significant refinement, we believe, over previous constructions of the recent past. Those previous models portrayed Moundville's development as a steady climb to a Moundville III phase climax, followed by a relatively abrupt collapse. We have now, in essence, inverted that schema. We now see the peak occupation of the center as being early in its history during the late Moundville I phase, coinciding with the initial political consolidation of the region, followed by a protracted decline.

Although we have not trumpeted our theoretical views in this summary, it should be obvious that our sympathies are consistent—at least in a very general sense—with the partisans of practice theory as expressed by Bourdieu, Giddens, and others. This direction, currently in vogue, is provoking questions of how elites actively work to win and consolidate power over followers, including the deliberate manipulation of architectural space. This brand of social theory also points to issues of factionalism and resistance to authority, and the effect of these, along with material factors, in the decline and collapse of hierarchical societies. We look forward to the role that our currently burgeoning knowledge of the Moundville system and its sociopolitical history will ultimately play in such discussions.

Archaeology of the Moundville Chiefdom

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