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# Monumentality in Eastern North America during the Mississippian Period

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The Mississippian period in eastern North America is dated to between ca. 1000 and 400 cal. BP in most sequences, encompassing the last few centuries before sustained European contact across much of the region. Exactly what Mississippian is as a cultural entity has been the subject of as much debate as its beginning and end points, and indeed, the two subjects are intertwined. Over the past century, Mississippian societies have been defined based on the presence of attributes taken individually or collectively that have included such things as the presence of intensive maize agriculture, the widespread use of shell-tempered pottery, the appearance of wall-trench architecture, aspects of iconography and religion, or adaptations to specific environments such as riverine floodplains or oxbow lakes (e.g., Griffin 1967, 189; 1985, 63; Knight 1986; Pauketat 2007, 82–87; Smith 1986, 486, 488). Most scholars would agree that monumental construction—specifically the building of mounds, earthworks, and enclosures and their placement adjacent to or around plazas, with sturdy fortifications at larger centers—is a particularly characteristic feature of Mississippian culture. While not all Mississippian sites are characterized by the construction of monuments, or monumentality, and indeed it is rare or nonexistent in hamlets or smaller communities, it does appear to have been an integral part of life in larger communities. In this chapter what is meant by monumentality during the Mississippian period is explored, with a particular emphasis on its origins and on the ways the subject is currently being examined by local archaeologists.

## Origins of Mississippian Culture and Monumentality

Mound and plaza arrangements have great time depth in eastern North America. The existence of an architectural grammar, or an appropriate way to design communities, has long been assumed to exist within Mississippian culture. To one group of scholars, its "main architectural elements include plazas, platform mounds and other earthworks, entryways, various



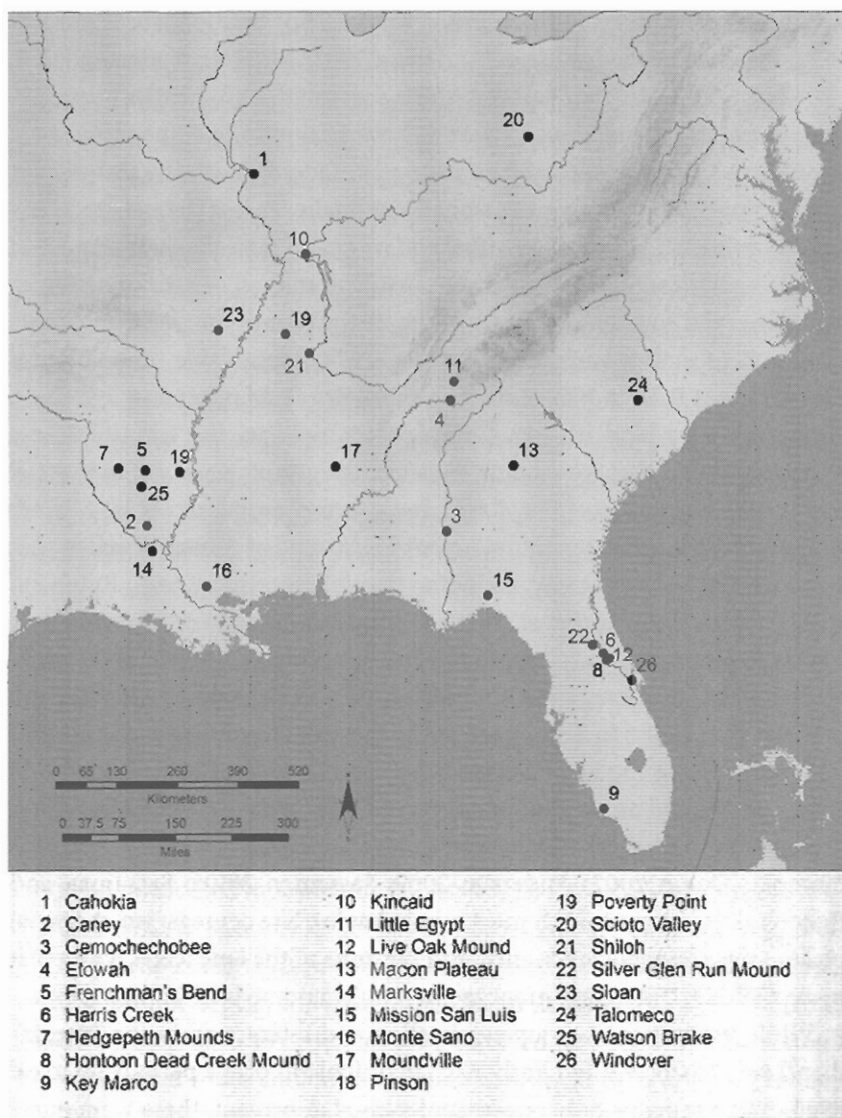| 1 Cahokia | 10 Kincaid | 19 Poverty Point |
| 2 Caney | 11 Little Egypt | 20 Scioto Valley |
| 3 Cemochechobee | 12 Live Oak Mound | 21 Shiloh |
| 4 Etowah | 13 Macon Plateau | 22 Silver Glen Run Mound |
| 5 Frenchman's Bend | 14 Marksville | 23 Sloan |
| 6 Harris Creek | 15 Mission San Luis | 24 Talomeco |
| 7 Hedgepeth Mounds | 16 Monte Sano | 25 Watson Brake |
| 8 Hontoon Dead Creek Mound | 17 Moundville | 26 Windover |
| 9 Key Marco | 18 Pinson | |

Figure 4.1 Location of Archaic, Woodland, and Mississippian sites mentioned in the text.

means of segregating space and activities, defensive works, and natural terrain features" (Lewis, Stout, and Wesson 1998, 5). Indeed, some have argued that such a grammar was cosmologically grounded, ritually proscribed, and precisely determined and had great time depth in the region and perhaps across the Americas (Clark 2004; Lewis, Stout, and Wesson 1998; Sassaman 2010a, 2011, 203–206). Whether such consistency existed even during the Mississippian period, much less across the almost twelve millennia of human occupation across the region that came before it, has been debated, and while there is no consensus of opinion, some general themes are acknowledged (e.g., Anderson 2002, 268–269; Anderson 2004, 282–293; Milner 2004a; Pauketat 2007; Sassaman 2010a, 2011). In particular, dispersed populations appear to have periodically come together at specific and perhaps special (resource-rich, sacred) locations throughout much of prehistory, perhaps seasonally, annually, or less frequently, to engage in information exchange, ritual and ceremony, and the maintenance of populations through the regulation of kin and mating networks, activities that all served to promote group and cultural identity. Indeed, such patterns appear to date back to the earliest readily identifiable occupation of the region. At Paleoindian sites such as Bull Brook, Massachusetts; Debert, Nova Scotia; or Lindenmeier, Colorado, multiple artifact concentrations have been found that are thought to reflect the camping areas of individual bands and in some cases may have been contemporaneous. At Bull Brook it has been argued that multiple camps surrounded a central space that was used for public activity, including possible ceremony (e.g., Robinson and Ort 2011; Robinson et al. 2009). Thus, an arrangement of people and structures around a central space or plaza appears to date back to the earliest settlement of the region. Other forms of ritual behavior, such as the use of marked cemeteries, also characterize these earlier periods, as exemplified by burials at the late Paleoindian period Dalton culture Sloan site in Arkansas, located on a sand dune (Morse 1997), or the burials staked down in ponds in Florida, of which Windover is the best-known and -reported example (Doran 2002; Anderson 2009; Sassaman 2010a; Sassaman and Randall, this volume). Such mortuary behavior, like aggregation at special places, caused people to identify with portions of the landscape, a role that more visible architectural monuments would assume later in prehistory.

While the nature of group aggregation and interaction in the Paleoindian/Late Pleistocene and Early Archaic/initial Holocene periods up to ca. 8900 cal. BP remains only poorly understood at present, there is no question that true monumentality appears in a number of parts of eastern North

America during the latter part of the ensuing Mid-Holocene era, from ca. 8900 to 5700 cal. BP (Anderson and Sassaman 2004; Kidder and Sassaman 2009; Sassaman 2010a, 2011; Sassaman and Anderson 1996, 2004). Isolated earthen mounds and groups of mounds are present in the lower Mississippi Valley from ca. 6500 to 4700 cal. BP, at places such as Caney, Frenchman's Bend, Hedgepeth Mounds, Monte Sano, and Watson Brake (Russo 1994, 1996a; Saunders et al. 1997, 2005; Saunders 2010, this volume), while mounds of earth and shell appear about the same time or slightly earlier in coastal areas and along the St. Johns River in Florida at locations such as Harris Creek, Hontoon Dead Creek Mound, Live Oak Mound, and the Silver Glen Run Mound (Randall 2011; Russo 1996b, 2006; Sassaman 2010a; Sassaman and Randall this volume). The actual number of sites characterized by mounded deposits is far greater in these areas than these few examples, and accumulations of shell and earth have also been found along many interior waterways of the region, particularly in the Midsouth and along the Savannah and Ogeechee rivers of Georgia, with the earliest dating back to ca. 8000 cal. BP (e.g., Anderson, Russo, and Sassaman 2007; Claassen 1996, 2010; Dye 1996; Marquardt and Watson 2005; Sassaman 2005a, 2010a, 2010b, 2011; Thompson 2010).

As many of the essays in this volume make clear, monumentality and particularly mound building is often if not ubiquitously cosmologically grounded, tied with ideas of lower and upper worlds, and is frequently associated with mortuary behavior (Rosenswig and Burger this volume; Sassaman and Randall this volume) in some (but not all) cases (Saunders this volume). The monumental architecture that appears during the Mid-Holocene has links to earlier practices of group aggregation and dispersal, as seen in earlier Paleoindian sites, and to concepts of a watery or lower world, as seen in Florida with its submerged cemeteries and in later mounds built in or near wet areas, in some cases composed of materials from watery environments such as shellfish or back-swamp clays. Of course, appreciable debate attends whether accumulations of shell of whatever size or shape can be considered monuments (cf. Anderson 2010, 287–289, Claassen 2010, Russo 2010, Sanger 2010a; Sassaman 2005a, 2010a; Vento and Sanger 2010; Marquardt 2010a, 2010b; Milner 2004a; and Saunders 2004). Curiously, while no one argues the point when these accumulations are of earth or stone, when subsistence remains are involved (i.e., shellfish) the matter becomes much more contentious. Some investigators have even questioned whether very complex societies were present at all in the region during the Mid-Holocene, noting that evidence for status differentiation among

clearly identifiable social segments is fairly minimal at present, beyond that provided by the architecture itself (Milner 2004a, 2004b; Saunders 2004). These alternative "minimalist" and "exaggerationalist," or perhaps more accurately, "downsizing" and "upsizing," perspectives will likely be the focus of research and debate for some time to come.

Appreciable variability is evident in the location and scale of monumental architecture in the Mid-Holocene in eastern North America, a pattern that continues throughout the Late Holocene. After ca. 3200 cal. BP, during the Woodland and Mississippian periods locally, what are assumed to have been tribal and chiefdom-level societies were present in a number of areas. Monumental architecture occurred in many parts of the region, in the form of causeways, ditches and embankments, enclosures, fortifications, mounds, and plazas, with surviving evidence indicating that earth, earth and shell, and occasionally stone were commonly used (e.g., Mainfort and Sullivan 1998; Anderson and Mainfort 2002; Sassaman and Anderson 2004). Wood, of course, is known to have been used in the Mississippian and early historic periods to create massive structures such as earth lodges, council houses, marker posts, wood henges, and, during earlier times, log tombs and charnel houses/temples, although the full extent of its use in creating monumental architecture prehistorically is unknown (e.g., Knight 2010; Rodning 2010; Pauketat 2004, 2007, 2009). Perhaps the best descriptions of the potential of perishables such as wood, aside from discoveries at submerged sites such as Key Marco (Cushing 1897), are those of historic council houses like the one at Mission San Luis (Shapiro and McEwan 1992) or the description of the Temple of Talomeco encountered by DeSoto in AD 1540 in the province of Cofitachequi (Garcilaso de la Vega in Clayton, Knight, and Moore 1993, II:298–306). This temple, atop an earthen mound, was described as being large with a high and steeply pitched roof of reed and cane and covered with shells, giving it a striking appearance. Inside were carved human figures, numerous chests of human/ancestral bones, river pearls, and other valued objects. Around the main temple building were eight smaller structures filled with weapons, "apparently for its embellishment and service" (Clayton, Knight, and Moore 1993, II:303). While the description may be somewhat fanciful and overdrawn, it indicates that great care and crafting likely went into the perishable structures and other objects that were associated with the more imperishable monuments that survive.

During the Woodland and Mississippian periods, shell accumulations or middens continued to be created in coastal and riverine settings, and while

sometimes occurring in shapes suggesting monumental intent, these were typically nowhere near the size and complexity of sites of the preceding Archaic period (e.g., Anderson and Mainfort 2002; Claassen 2010; Peacock 2002; Stephenson, Bense, and Snow 2002). At the end of the Archaic, in the centuries around 3000 cal. BP, centers such as Poverty Point—one of the largest mound and earthwork complexes ever built in the Americas—were abandoned, as were large ring- and U-shaped shell middens in coastal areas, for reasons as of yet incompletely understood, although climate change and sociopolitical upheaval have both been suggested (Anderson 2001, 2010; Gibson 1996, 2000, 2004, 2010; Kidder 2006, 2010, 2011; Kidder and Sassaman 2009, 681–682; Sassaman 2005a, 2010a; Sanger 2010b). During the subsequent Woodland period, comparatively small earthen burial mounds and associated mortuary facilities began to be built in many areas, and collective mortuary ritual rather than public feasting and large-scale monumental construction may have come to serve better to bind people together (Anderson and Mainfort 2002; Clay 1998; Russo 2010, 171–172). From ca. 2200 to 1600 cal. BP, when Middle Woodland Hopewell culture was at its peak, massive mound and earthwork complexes were built in many parts of the Midwest and Southeast (Anderson and Mainfort 2002; Brose and Greber 1979; Smith 1986). Circular, square, and octagonal enclosures and linear causeways and in some cases elaborate variants and combinations thereof were built in several parts of the region, and the largest centers— at places such as Pinson, Tennessee, Marksville, Louisiana, and the Scioto Valley of Ohio—encompassed dozens and in some cases hundreds of acres (DeBoer 1997). Large-scale public ceremony is inferred, and in some cases this was likely associated with elaborate mortuary rituals, with individual or collective burials placed in log-lined tombs or structures within or under mounds (Brose and Greber 1979, Carr and Case 2005; Charles and Buikstra 2006). While the monumentality that occurred has been traditionally subsumed under an umbrella-like construct of Hopewellian interaction and ritual and has been assumed to be similar over large areas, appreciable local variation is evident, as was the case during earlier periods.

Individual status during the Woodland period appears to have been achieved and, as during the Archaic, linked to successful participation in warfare, long-distance exchange, or collective ceremony, including the building of monuments. How monuments were erected, however, has received far less attention than the contents of the structures or burials associated with them, although recent research at sites such as Shiloh and Poverty Point and at Cahokia indicates that their construction was often,

from an engineering perspective, a highly sophisticated endeavor, and at least on occasion a ritually highly charged activity (e.g., Kidder 2011; Kidder, Ortmann, and Arco 2008; Kidder et al. 2009; Pauketat 2007, 98–99; Pursell 2004; Sherwood 2006; Sherwood and Kidder 2011). Construction of monuments in all periods likely required appreciable technical as well as leadership skills, and how this was manifest is not well understood, especially in Archaic and Woodland societies where coercive authority was weak or absent. While at some sites and in some areas evidence for hereditary inequality is suggested during the Woodland period in eastern North America and is clearly present in the ensuing Mississippian period, social integration and organization in many areas was much like it was in the preceding Archaic period: fluid and uncomplicated much of the time and becoming more structured only when people came together in larger numbers, such as when they engaged in monumentality.

The centuries prior to the emergence of Mississippian culture, the Late Woodland period from ca. 1600 to 1000 cal. BP, were characterized by a marked decline in monumental construction in most parts of the east save in the Gulf Coast region and the central and lower Mississippi River Valley, where impressive monumentality was ongoing in the Weeden Island and Coles Creek cultures (Anderson 2008; I. Brown 2004; Kidder 2004a; Pauketat 2007, 70–77; Pluckhahn 2003; Rolingson 2002). The construction included platform mounds, which had appeared earlier at a number of Middle Woodland period sites (Anderson 1998; Dickens 1975; Knight 1991, 2001; Lindauer and Blitz 1997), rendering moot assumptions that these mound types were unique to Mississippian culture and monumentality. During the later Woodland the bow and arrow spread rapidly over the region and, concurrently, evidence for fortifications, a form of monumental architecture, increases dramatically. Intensive maize agriculture appears after ca. 1100 cal. BP, and becomes increasingly important in some areas and appears to contribute to an observed growth in regional population (Milner 2004b). About the same time, chiefdoms characterized by hereditary inequality emerged in portions of the central and lower Mississippi valley and spread rapidly over the region, albeit with appreciable local variation and within a span of three to four centuries were found across much of the southeast and lower Midwest (Anderson 1999, 225–227; J. Brown 2004; Pauketat 2007; Smith 1990). The origin and spread of *chiefdom organization* is not, however, the same thing as that of *Mississippian culture*, especially Mississippian ideology, iconography, and religion, including aspects of monumentality such as the construction of sub-pyramidal mounds as

platforms for temples and elite residences. There is some evidence that Mississippian culture did not exist until after the emergence of Cahokia as a regional center around AD 1050 (Anderson 1997, 1999; J. Brown 2004; Pauketat and Emerson 1997; Pauketat 2004, 2007). The fact that the most impressive Mississippian society in terms of size and complexity, Cahokia, was also the earliest, meant it would have had a tremendous influence through example (if not outright force) on the behavior of contemporaneous societies. Once formed, the ideas represented and made form at Cahokia would have spread, probably through competitive emulation but also possibly through warfare or the threat if not the actual use of force (i.e., Carneiro 1970, 1981). While the emergence of Cahokia has been called the "Big Bang" by Pauketat for its seemingly sudden and dramatic emergence, in recent years it has been recognized that early Cahokia resulted from a coalescence of peoples from across the surrounding region, with the resulting Mississippian culture and society that emerged different from its constituent parts (Alt 2002, 2006; Pauketat 2004, 2007, 2009).

## Approaches to the Study of Mississippian Monumentality

Mounds in Eastern North America have captured the attention of investigators both professional and otherwise for generations, and thousands have been examined over the past two centuries, since Jefferson's day. Indeed, the occurrence of truncated pyramidal or platform mounds about plazas is perhaps the most visible symbol of Mississippian culture to many archaeologists, even though we now know that such platforms appeared far earlier in prehistory in the region. A first step at any site with monumental architecture, accordingly, should be dating the individual features (i.e., mounds, plazas, earthworks, fortifications) and their constituent stages or major construction episodes. This is especially critical in areas in the lower Southeast, where monumental construction dates back thousands of years. Just because a site or mound looks to be later Archaic, Woodland, or Mississippian in age and has artifacts on top of or around it dating to this period doesn't mean that it dates to that time or that earlier components aren't present, buried by subsequent construction or alluvial or other depositional activity (e.g., Arco et al. 2006; Arco and Ortmann 2010; Morse 1986).

Likewise, wherever possible, centers need to be studied as complexes and not in a piecemeal fashion. This is easier said than done, of course, given the high costs of survey and excavation. Nonetheless, any work should consider how the area examined fits into the totality of occupation

and use. One way to do this is to conduct careful and comprehensive mapping and remote sensing of as much of a site's extent as possible as a first step in a long-term investigation, as has been done recently at sites such as Etowah, Kincaid, Poverty Point, and Shiloh (e.g., Anderson, Cornelison, and Sherwood 2012; Kidder 2002; Kidder, Ortmann, and Arco 2008; Kidder et al. 2009; King et al. 2011; Lydick 2008). Such information can guide subsequent excavation and interpretation. The arrangement of monuments at large centers, for example, are thought to have represented sociograms, depictions of the social order, spatial representations of kin groups or other subsets of society. Knight has argued that at Moundville, for example, the arrangement of paired mounds about the central plaza represented the residence and mortuary/burial areas of ranked clans (Knight 1998, 2010, 360–364; Steponaitis and Knight 2004, 168). The size and position of specific mounds or other monuments at prehistoric sites, furthermore, may reflect the status or power of the groups building and using them, according to arguments based on social space and space syntax theory (e.g., Grøn 1991; Hillier and Hanson 1984; Hillier 1999; Russo 2004). Such linkages between the built environment—specifically the size and spacing of structures, monuments, and settlements—and social organization may well reflect cultural practices dating back to the earliest mound building in the region during the Mid-Holocene (e.g., Anderson 2002, 2004; Randall 2011; Russo 2004, 2010; Saunders, Allen, and Saucier 1994; Saunders et al. 1997, 2005; Saunders 2004, 2010, this volume; Saunders 1994; Sassaman 2005b, 2010a, 2010b, 2011; Sassaman and Randall this volume).

Focused geoarchaeological research on how site features were constructed is a third direction recent research has taken. The effort that went into the construction of Mississippian site complexes was far greater than the constraints of excavating and moving earth (Pauketat 2007, 98–99; Sherwood 2006; Sherwood and Kidder 2011). As Sherwood and Kidder (2011) have documented, based on careful geoarchaeological analyses at settings such as Shiloh's Mound A, Monks Mound at Cahokia, and the main or "bird" mound at Poverty Point, the labor required to build mounds was often appreciable, involving the careful selection, processing, and placement of special sediments. As such, traditional estimates of the labor required to build such monuments are likely understated in some and perhaps many cases (e.g., Blitz and Livingood 2004; Milner 1998, 144–150; Muller 1997, 273–275; Steponaitis 1978, 446–449). Statements such as "the most important factor influencing the costs of digging and moving earth was the distance over which soil was carried" (Milner 1998, 15) or that "even

given differences in tools and enthusiasm, the costs of construction . . . were probably close to 1 person-day per 1.25 m$^3$" (Muller 1997, 273–274) must be reconsidered, and construction estimates must be derived on a case-by-case or stage-by-stage or even fill-by-fill basis. That is, while ethnohistoric research has shown that the amount of fill that can be excavated using hand labor may be impressive (e.g., Erasmus 1965; Kaplin 1963; Rosenswig and Masson 2002, 224–229; Trigger 1990), these estimates can be considered viable only in certain cases. Where monumentality involved more than simply digging and moving fill—that is, if the processing, mixing, or careful placement of fill was involved—then much more time, effort, and ceremony may have been involved. In the construction of earthen monuments, particularly in the Mississippian period where the use of colored fills is widely documented (e.g., Pursell 2004), sometimes all of these circumstances may have applied. As Tim Pauketat (2007, 98) has observed, "Building an earthen pyramid was about much more than digging, carrying, and dumping dirt" (see also Sherwood and Kidder 2011). Actualistic experiments—that is, time-task studies of the effort involved to acquire fill or construct a segment of a ditch or palisade—may help yield more accurate estimates for construction (e.g., Blitz 1993, 121–123; Coles 1973).

But the effort involved in the construction of earthen mounds from one site to the next cannot be assumed to be a fixed relationship between time and manpower in the absence of excavations to document construction practices. At Shiloh, for example, as Sherwood's (2006) careful and exquisitely documented geoarchaeological research at Mound A has demonstrated, while great care went into the selection of fills used in some of the mound stages, in other stages it is clear that general midden from nearby areas was used (Sherwood 2006; Sherwood and Kidder 2011; the excavations at Mound A are fully documented in Anderson, Cornelison, and Sherwood 2012). A small mound elaborately constructed, such as the Stage III mound at Shiloh with its carefully selected, processed, and layered colored fills, likely took far more labor to erect than a much larger mound of nearby midden such as large portions of the upper two stages of Mound A Shiloh (Anderson, Cornelison, and Sherwood 2011; Sherwood 2006). Focused geoarchaeological research can also reveal details of fill preparation and construction, such as the removal of organic matter or the mixing of differing sediments, the use of sod blocks or embankments to contain fills, or how thin colored fills or veneers were laid down (Sherwood 2006; Sherwood and Kidder 2012). Examinations of the weathering or lack thereof of mound fill, particularly exposed surface sediments, can, furthermore,
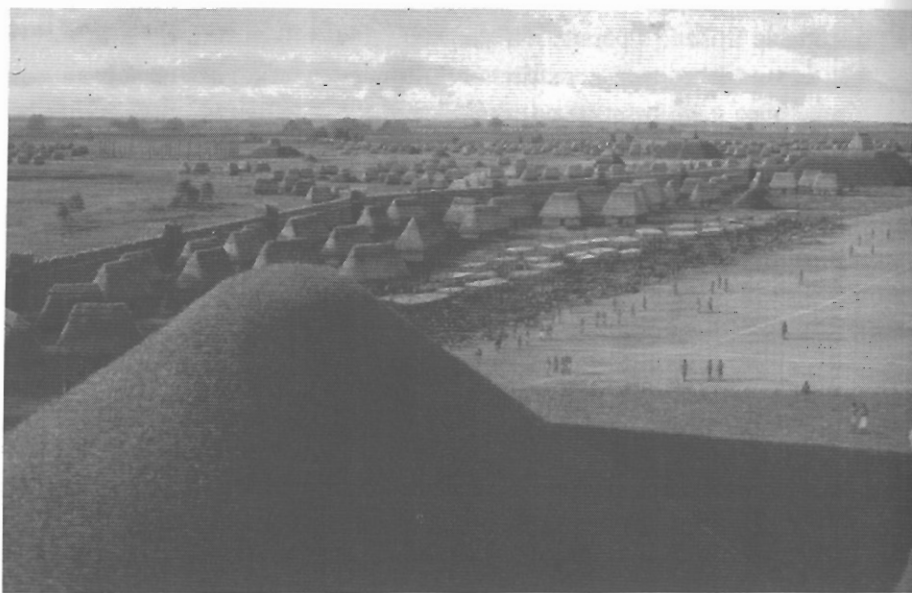
Figure 4.2. Traditional interpretation of mounds as green and covered with cropped grass, as seen at Cahokia. (Painting by L. K. Townsend, courtesy Cahokia Mounds State Historic Site.)

give an idea of how long the construction process may have taken. At Poverty Point, for example, such evidence has been used to argue for a rapid construction of portions of the primary mound (Kidder 2011; Kidder, Ortmann, and Arco 2008; Kidder et al. 2009). The maintenance of mounds, particularly to deal with weathering and erosion, were likely as major a concern and perhaps required as much effort as the initial construction (Pauketat 2007, 98–99; Sherwood and Kidder 2011).

This is particularly likely given recent indications that our traditional perspective on the appearance of Mississippian mounds, and indeed of many earthen monuments, at least those that were used regularly, is likely incorrect. As John Cornelison and I noted in our 2002 report on the fieldwork on the main mound at Shiloh:

> Perhaps the most important finding from our fieldwork is that Mound A was dramatically different in appearance when it was in use than it looks at present, and that even when in use its appearance changed somewhat from stage to stage. During the Mississippian era, a series of large buildings were located at the base of the mound, that probably represent associated ceremonial structures, storage areas, temples,
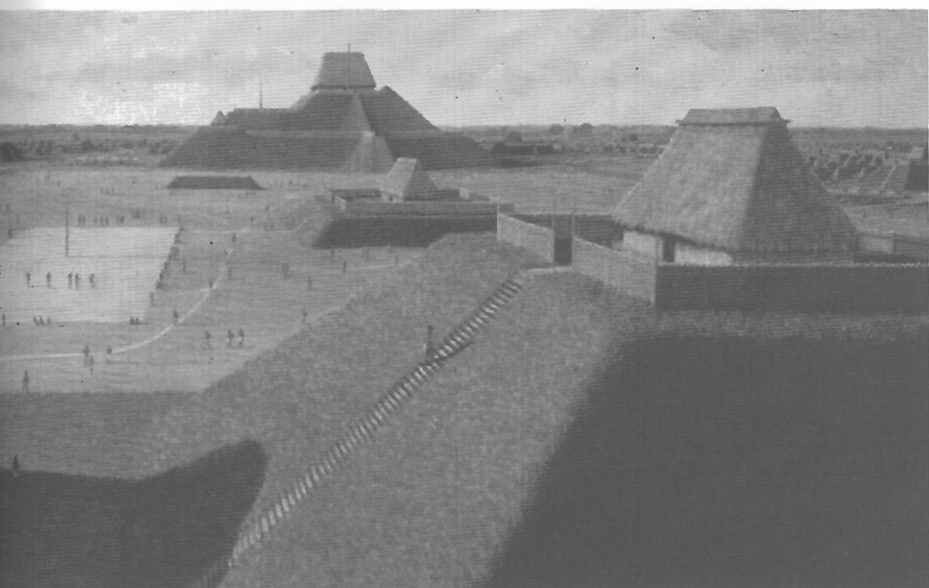
and possibly the residences of lesser elites. The mound itself was colored with red, gray, white, and yellowish orange surfaces and possibly bands, and interior filling episodes made use of similar bright colors. Large and elaborate structures were apparently built on the summit, and a raised platform with a bright red surface was present atop one stage, like a smaller mound atop a larger one. There is some evidence to suggest large areas of the summit were fired, perhaps to help stabilize the surface or accentuate the firing colors. Structures atop the mound were likely elaborately decorated, based on descriptions of what they looked like from early historic accounts (e.g., Garcilaso de la Vega in Clayton, Knight, and Moore 1993, 298–304). The mound would have been a dramatic feature when viewed by visitors, or from a distance, as from the river below.

The traditional way Mound A at Shiloh, and indeed perhaps many Mississippian mounds are interpreted in park exhibits, paintings, and archaeological writings, as green, cropped grass covered earthen masses, with simple thatched buildings on top, and few if any structures near the base is probably dead wrong. Mississippian ceremonial centers were instead, we believe, appreciably more dramatic and impressive cultural landscapes than we have given them credit for

and portrayed to date. While we shouldn't accept such a perspective uncritically, we need to think about it, and test its possibility at the sites we explore (Anderson and Cornelison 2002, 51–52).

When I read essentially these same paragraphs at the 2002 meeting of the Southeastern Archaeological Conference, they were accompanied by two images, the first showing L. K. Townsend's classic painting of the Cahokia mounds as green and covered with cropped grass (Figure 4.2), and the second showing the same painting with the caption "The way the mounds may have actually looked" showing them colored either all red or banded red, gray, and white (see http://anderson.pidba.org/figures.html). I will never forget the audible gasp throughout the hall when the second image went up. Paul Welch (2006), who at the time had worked for several years synthesizing earlier work at the site with my assistant Emily Yates, helped produce versions of the images depicting the colored mounds, and he and I helped guide interpretive paintings subsequently produced for the site. We know that pyramids in Mesoamerica were often elaborately colored, so that the same should be true in the Southeast, at least on occasion, is not altogether surprising. Likewise, while stone sickles could have kept vegetation down on the sides and tops of mounds, clay surfaces would have likely been equally if not more resistant to both vegetation and erosion. Besides being more colorful if carefully maintained, they would have been difficult to climb, especially when wet, when they were slippery and treacherous, as anyone working at Shiloh from 2001 to 2004 can attest from personal experience. Since weed whackers and lawnmowers, the tools park personnel across the region use to maintain these sites, were unknown to Mississippian and earlier peoples, most traditional depictions of them as covered in short green grass are in need of rethinking (Pauketat 2007, 98–99). Recent paintings of life at Shiloh correct this deficiency, it should be noted, although how accurate they are will require far more fieldwork.

Cosmological considerations as well as the perhaps more mundane aspects of life, such as the maintenance of cultural identity, can also be considered when examining monuments. Knight (1986, 678) has argued that southeastern Mississippian mounds were receptacles of the sacred that had

deeply rooted and expressive symbolic significance, related to the ubiquity of multi-stage episodes of destruction and construction. . . . Periodic rebuilding of the mound surfaces by the addition of a new blanket mantle of earth, the special characteristic of these mounds, demands to be seen as a purely expressive act . . . arguably an act of

burial, a mortuary rite for the mound itself rather than for any individual, sometimes complete with funereal furnishings placed upon the old surface (Schnell, Knight, and Schnell 1981, 133–134). . . . The symbolism of the earthen platform is that of an icon representative of earth, manipulated by periodic burial as a temporary means of achieving purification in the context of a communal rite of intensification.

Knight (1986, 678–679) further argued that linguistic and ethnohistoric evidence, specifically terminology used among Muskogean and Choctaw peoples to describe mounds as well the rituals associated with their construction and use, indicated that their symbolic importance was tied as much to their building and maintenance as to their finished appearance. The truncated pyramid shape of platform mounds in particular, Knight suggested, was related to the quartering of the cosmos, reflected in some cases by mound orientations aligned to cardinal directions (Knight 1986, 679). A similar pattern is widespread in Mississippian art and iconography (e.g., Lankford 2004). The regular gathering together of people in the collective ceremony and ritual associated with mound construction was thus, at least to some southeastern peoples, deeply important activity, as much about reinforcing belief systems and the creation and maintenance of cosmological principles and individual and group identity as it was about the production of a final monument. Likewise, the fact that monumentality occurred so widely and in societies of such varying levels complexity suggests that it was not primarily or exclusively about maintaining power relationships, although these may well have been a consideration in labor mobilization, given evidence for the suppression of monumentality at outlying sites in some cases (i.e., Steponaitis 1978; Blitz 1993, 50, 58). Given that monumentalization continued at many Mississippian sites, no "final" product was likely envisioned. Because of this, greater effort should be directed to how monuments were built than to the objects found in or on them.

When considering the process of monumentalization, it is as important to emphasize open and empty areas within sites, particularly plazas, as well as the features that demarcate them and the community as a whole, such as embankments or ditch and palisade lines. At many sites in eastern North America, as exemplified by fieldwork at Cahokia, Poverty Point, and Shiloh, great labor apparently went into construction of the plazas, with appreciable cutting and filling to create the surface appearance and characteristics desired, sometimes covering over substantial features created by earlier occupants (Anderson, Cornelison, and Sherwood 2012; Holley, Dalan, and

Smith 1993; Kidder 2001, 2004b; Pauketat et al. 2002; Pauketat 2007, 93–96; Stout and Lewis 1998, 235). As Pauketat (2007, 93) has argued, "The central plazas, not the encircling mounds, were the anchoring features of these central built landscapes" (Dalan et al. 2003; Holley 1999, 24). Likewise, palisades at such sites, while not traditionally thought of in this fashion, required great labor investment, comparable to that put into mounds and plazas themselves. In addition to serving as defensive works, they served to delimit monumental compounds (e.g., Milner 1998, 147–148; Pauketat 2007, 99–101). Within Mississippian centers there may be features related to monumentality, such as borrow pits, whose extent and contents should be determined. Sometimes the exploration of these features can yield unexpected results. At Shiloh, for example, a roughly 9,000-year pollen record, with particularly fine-grained temporal resolution during the period the center was occupied, was found in a pond just off the plaza a few meters from a small mound (Meeks 2006). Assumed to be a water-filled borrow pit, it instead turned out to have been a permanent water source within the palisaded center. Its sediments provided a record of climax forest clearance and reemergence, signaling the initial occupation, use, and abandonment of the center over the interval from ca. AD 900 to 1350.

It is likely that both cultural and environmental factors shaped the extent of Mississippian monumentality, and consideration of the latter is important, especially for societies dependent upon the production of agricultural surpluses for their continued well-being. The emergence of Mississippian culture occurs during the Medieval Warm Period from ca. AD 800 to 1300, a period thought to have been highly favorable to agricultural food production in the southeast (Anderson 2001, 166; Broecker 2001; Crowley 2000; DeMenocal et al. 2000; Hughes and Diaz 1994). When the climate was favorable for surplus mobilization or redistribution, monumentality was likely more feasible; indeed, the very existence of social complexity, including among Mississippian societies, was apparently tied, at least in part, to climatic conditions, as demonstrated in several areas in the Southeast and lower Midwest, such as at Cahokia and along the Chattahoochee, Tennessee, and Savannah Rivers (e.g., Anderson 1994, 274–289, 2001, 165–166; Anderson, Stahle, and Cleaveland 1995; Benson, Pauketat, and Cook 2009; Blitz and Lorenz 2006, 131–135; Nolan and Cook 2010). Indeed, during the first three centuries of the Mississippian era, from AD 1000 to 1300, far more monumental architecture appears to have been created across the region than during the centuries that followed (e.g., Anderson 1994, 136–137; Payne 1994), although the effects of contact after 1500 likely played a major

role, through disease-related depopulation. After AD 1100 and particularly a century or two later, following the onset of the Little Ice Age, there is evidence for increased warfare and fortification, particularly in the northern part of the region, together with greater settlement nucleation in some areas or dispersal away from major transportation arteries in others and a decrease in long-distance exchange and monumental construction (Anderson 1994, 136–137; Fagan 2000; Griffin 1961, 711–713; Milner 1999, 123–126). While fortifications appear to occur with roughly similar incidence throughout the Mississippian area (Milner 1999, 123), they increase in the northern part of eastern North America after ca. AD 1300, when agriculture would have been more difficult.

Finally, it is critical to examine how often or regular the practices of monumentality were that occurred at centers. Just as mound-building traditions varied over time and over space in eastern North America (e.g., Sassaman 2010b), so too did the tempo of mound building and use change, with "very different timing or rhythms of creation" in differing areas (Thompson 2010, 219). Examination of the number and duration of stages in Mississippian mounds has received appreciable attention in recent years (e.g., Anderson 1994, 126–129; Blitz and Livingood 2004; Hally 1993, 145; Hally 1995). Major episodes of stage construction appear to have occurred about every 25 to 50 years (e.g., Blitz and Livingood 2004, 296–297; Hally 1995, 112), and while variously inferred to reflect instances of chiefly succession or alternatively or concurrently purification and earth fertility/renewal ceremonies (e.g., Anderson 1994, 126–129; Knight 1986), they clearly were not common events. Instead, their infrequency meant that when they occurred, they were likely the focus of appreciable societal energy. These same studies, furthermore, indicate that most Mississippian societies characterized by mound building lasted from less than a century to perhaps twice this duration (Hally 1995, 124; Blitz and Livingood 2004, 296) and that "rules" about mound construction, inferred from relationships between mound volume, duration, and number of construction stages, while similar for most sites, were decidedly different at the largest centers. At the largest centers these relationship were much less direct, in part because mound volumes were so much larger and the number of stages was typically greater (Blitz and Livingood 2004, 298–299).

Monumentality thus played out somewhat differently in individual Mississippian societies, and while some commonalities may have existed, each case must be examined separately. Inspection of Mississippian site plans indicate that no ideal size or layout existed, however often certain elements

appeared (e.g., Holley 1999; Lewis, Stout, and Wesson 1998; Pauketat 2007, 87–106). In areas where there has been more fieldwork, estimates of site hierarchies and polity duration based on the number and size or volume of mounds or other monuments are likely to be much more accurate than such estimates in areas where less work has occurred. Political geography, the location of centers on the landscape, and the relationship of centers to each other, accordingly, must also be considered. Some major polities appear to have deliberately suppressed the construction efforts and hence presumably the religious and political behavior of their smaller neighbors. At the centers around Moundville, mounds were reduced in size and number, and fortifications may not have been tolerated, although mound size does appear to have increased with distance from the center (Blitz 1993; Steponaitis 1978, 444–449). Even when abandoned or depopulated, as for example when centers of power moved elsewhere, some sites likely maintained an "aura of grandeur and power long after they ceased to function as administrative centers" (Hally 1995, 119). The site of Moundville, for example, went from a densely populated center around ca. AD 1200 to 1300 to a nearly deserted "vacant" ceremonial center/necropolis during the period ca. 1300 to AD 1400 (Knight and Steponaitis 1998; Knight 2010, 361–363). The site of Etowah was still occupied centuries after mound building ceased and political power had moved north to the Little Egypt site, the presumed capital of the Coosa paramountcy (Smith 2000, 32) The later population at Etowah was only a fraction of that formerly present, living literally in the shadow of and not atop the massive mounds (King 2003, 81–83). Macon Plateau and Shiloh were vibrant centers that were abandoned after ca. AD 1150 and 1300, respectively, and were not used again for centuries in the case of the former or ever again in the case of Shiloh, save perhaps for occasional visits by historic Indian war or hunting parties in the latter case (Hally 1995, 119–120; Welch 2006, 263). The decline or abandonment history of Mississippian centers, as numerous examples from across the region indicate, was highly varied. The fact that centers once abandoned were not inevitably or invariably reoccupied suggests that the production of the monuments was closely tied to the people who made them and that once the people left, such locations no longer held their former importance and were perhaps considered places as much to be avoided as reused. The lack of evidence for the regular or routine co-optation of former places of power by subsequent elites, in fact, suggests that group identify was closely linked to home communities and that finished architecture by itself did not

symbolize that identity. The process of monumentalization, and not just the finished monument, was what was important.

## Conclusions

While common themes are evident, particularly an arrangement of people, dwellings, or monuments around open areas or plazas, it is clear that variation characterizes the long tradition of monumentality in eastern North America. While no constant and exacting architectural grammar existed over the course of prehistory that dictated precisely the forms that were created, there is also no doubt that later inhabitants were well aware of the constructions of those who came before them, which occurred widely and obviously upon the landscape. Mississippian monumentality is not, I would thus argue, "clearly distinguishable from that of societies in other times and places" (Lewis, Stout, and Wesson 1998, 5). It is neither unique nor appreciably different in scale from much of what came before it, even if the peoples engaged in it used differently designed or tempered pottery or favored earth instead of shell, used different iconography, or were ranked instead of more egalitarian in nature. Instead, peoples in many areas continued to follow a pattern established thousands of years previously during the Archaic, if not earlier: the periodic and typically brief aggregation of people who in many cases were dispersed over the landscape much of the time in small household or village groupings (Anderson 2002, 268–269; Blitz 1993, 123–125). When they came together, these peoples engaged in a range of activities that varied from society to society but likely included such things as communal ceremony, ritual, and monumental construction; elaborate mortuary behavior; promotion or differentiation of group identities; buffering of subsistence or other resource uncertainties; and aggrandizing behavior on the part of certain individuals or groups. In their monumentality these people were writing their history on the landscape and continually creating and reaffirming their identity, and while the monuments that remain may be the most archaeologically visible aspect of their existence, it was only a part of a much larger picture.

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