MISSISSIPPIAN CHIEFDOMS: How Complex?

Charles R. Cobb

*Department of Anthropology, Binghamton University, State University of New York,
Binghamton, New York 13902-6000; email: ccobb@binghamton.edu*

Key Words   archaeology, North America, complexity, power, political economy

■ **Abstract**   During the Mississippian period (A.D. 1000–1500) the southeastern
United States witnessed a broadscale fluorescence of polities characterized by im-
pressive earthwork construction, rich mortuary offerings, and intensified agriculture.
Research on the nature of complexity in these so-called chiefdoms has been an endur-
ing issue in North American archaeology, even as this research has undergone several
paradigmatic shifts. This study focuses on the primary dimensions of the archaeo-
logical record used to describe and explain variation in Mississippian complexity—
polity scale, settlement and landscape, the organization of labor, mortuary ritual and
ideology, and tribute and feasting. Changing perspectives toward the organization
of complexity and power have become increasingly pronounced in each of these
categories.

INTRODUCTION

Chiefdoms of varying size and complexity emerged with somewhat startling ra-
pidity around A.D. 1000 across a substantial region of the southeastern and mid-
western United States (Figure 1). Over 500 years later, the Spaniards who waded
ashore encountered societies that showed a strong continuity with the archaeo-
logical complexes now subsumed under the rubric of "Mississippian." Given this
continuity, Mississippian archaeologists have drawn freely from both historical
documents and the archaeological record to address the emergence and variation
of complexity in the late prehistoric era. This development seems to have been
generated primarily by processes internal to the region, building on diverse Late
Woodland (A.D. 400–1000) societies typified by modest communities dependent
to varying degrees on small-scale horticulture (Emerson et al. 2000, Nassaney &
Cobb 1991). Although Mississippian archaeological complexes were originally
defined by such physical criteria as shell-tempered pottery, mound building, large
towns, and maize agriculture, researchers later used the ethnohistoric evidence
from the Southeast to characterize these sites as the remains of polities with pow-
erful leaders who held considerable sway over economic, political, and ritual do-
mains (Griffin 1985, Smith 1986, Steponaitis 1986). The reasons underlying the
widespread fluorescence in social complexity are still subject to considerable de-
bate. This issue is largely sidestepped here, in favor of developing a comparative
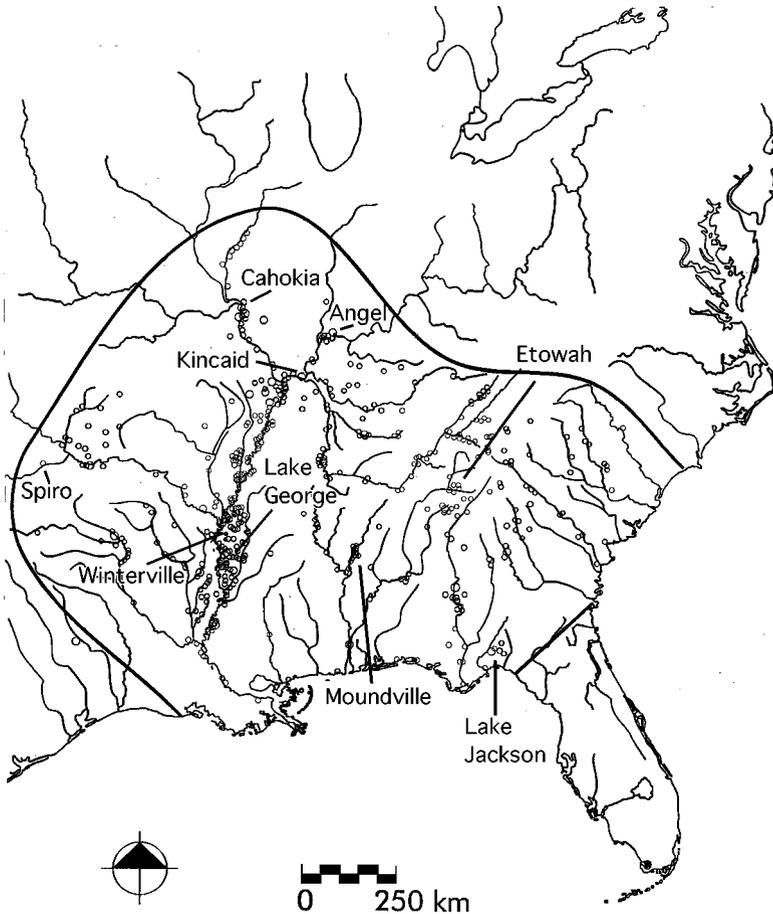
63

Figure 1 Distribution of significant Mississippian sites in the United States, with sites indicated that are discussed in text (adapted from Payne & Scarry 1998).

perspective on complexity between Mississippian polities in the belief that this approach will at the same time facilitate ongoing discussions on the origins of complexity.

The gross parallels in scale between Mississippian societies and ethnographically described chiefdoms in Polynesia and elsewhere have, to a large measure, made "chiefdom" the centerpiece of debates about Mississippian complexity. As Yoffee (1993) has observed, archaeologists from the University of Michigan in the 1970s and 1980s played a major role in revising the concept of chiefdom that had been forwarded by Service (1962). This group emphasized the political dimensions of chiefly rule, a perspective that strongly influenced Mississippian research from

the 1970s onward in part because it was a theoretically compelling view and in part because several of those archaeologists—as well as a subsequent generation of influential archaeologists from Michigan—work in the Mississippian Southeast. Today when archaeologists refer to Mississippian complexity, they usually refer to the political aspects of these chiefdoms.

Yet this is a tacit understanding, and, with few exceptions (e.g., Emerson & Pauketat 2002, Saitta 1994, Schroeder 2003), there has been little explicit discussion in Mississippian circles about the precise meaning of complexity. Variation in complexity is commonly described by subcategories of chiefdoms based on the relative degree of inferred political and economic power. To that end, the most commonly applied terms are "simple," "complex," and "paramount" chiefdoms. It would overstate the case, nevertheless, to argue that considerations of Mississippian complexity are merely exercises in pigeonholing. Lurking behind these categories there is a deeper, implicit interest in the exercise of power and authority. "Complexity" serves as a gloss for these types of relations. Hence, discussions about complexity now tend to be phrased in terms of the political economy, and political economy is commonly tied to the issue of power.

Using political economy as a point of departure, one can discern two trends in research on Mississippian complexity. First, the notion of political economy has expanded from a materialist basis to one that incorporates considerations of ideology, or what some refer to as political culture (Pauketat 1997, Rees 2002). Second, vertical conceptions of power focused on elites have broadened to consider both horizontal characteristics of the political economy (or heterarchy, following Crumley 1987) and the actions of commoners in terms of agency and resistance. These trends can be attributed to the realization that power is not solely a structural feature of chiefdoms that can be expressed as incremental forms of domination. Power also has an experiential quality; it is something that is acted out, reproduced, contested, and transformed in the daily interactions of actors.

It is not easy to parse advocates cleanly into one approach to power or another because there is considerable borrowing across the board. As a consequence, in the remainder of this chapter I use the archaeological record as a guide to examine variation in how practitioners themselves attempt to explain variation in complexity. I begin with a discussion of the scale of Mississippian chiefdoms, an area where there is perhaps the most agreement. Then I turn to settlement systems and landscape, followed by the organization of labor, mortuary ritual and ideology, and tribute and feasting. Finally, I consider diachronic aspects of complexity in Mississippian chiefdoms. Within each category, I present the evidence and reasoning traditionally used to describe and explain complexity and then move on to examine how criteria in that category have broadened in recent years to incorporate concerns with meaning, agency, worldview, and heterarchy. Research within these categories, in conjunction with advances in regional chronologies, has contributed to a growing appreciation of both the complexity of Mississippian chiefdoms at any one point in time and their dynamism through time.

THE SCALE OF MISSISSIPPIAN POLITIES

Mississippian polities varied widely in scale, but discussions about their possible complexity naturally gravitate toward those on the upper end of the spectrum as defined by the physical size, geographic reach, and population of mound centers. The remains of the largest towns are still impressive today, consisting of grand plazas surrounded by mounds of varying sizes and shapes. The earthworks served a number of functions. The largest platform mounds typically were occupied by chiefly leaders, a phenomenon widely observed by European explorers. Conical mounds often contain cemeteries, whereas smaller platform mounds might have served as the bases for charnel houses, domestic structures, or other functions. Residential neighborhoods typically clustered around the periphery of the mound and plaza complexes. Frequently, towns were surrounded by wooden palisades, and even moats, for defense.

The size of these towns has often been used as an initial proxy for complexity. In other words, physical scale is commonly understood as a larger encompassing measure for a loosely conceived amalgamation of power: power to both govern and draw on the labor of a resident population, power to organize public work projects, and even power over life and death. Many researchers have adopted Steponaitis's (1978) distinction between simple (one level of superordinate political offices) and complex (two to three levels) chiefdoms to relate power and scale. Simple chiefdoms have a weakly developed hierarchy, whereas the complex ones have at least an incipient form of class structure. I note that site scale is an initial proxy for complexity because, as can be seen, observers traditionally have used settlement and mortuary data as reinforcing lines of evidence to assess chiefdom organization in a given locale.

Muller's (1997) comparative study of mound volumes from various sites (for which such data could be calculated) shows Cahokia containing 1,007,190 m^3 of mound volume, with the next four on his list—Moundville, Etowah, Winterville, Kincaid—ranging from about 153,000 m^3 down to 93,000 m^3 of fill. Based on the amount of effort vested in mound construction, no other sites are comparable to the enormous size of Cahokia. Likewise, the largest mound at Cahokia, Monk's mound (a huge earthen platform 30 m high and 6 ha at its base), is many magnitudes larger than any of the largest mounds from other sites. Nevertheless, sites like Moundville, Winterville, and Etowah (and many others) are impressive in their own right, consisting of numerous mounds and hundreds of domestic structures spread over scores of hectares. The largest Mississippian towns are presumed to be the seat of polities of considerable size and power commensurate with a complex chiefdom.

The geographic extent of Mississippian polities is commonly gauged by geophysical criteria (especially the borders of floodplain regions), combined with the spacing of mound sites and distribution of diagnostic artifact types. A central difficulty in equating complexity with the spatial dimension is discerning actual power from influence. In historical times, chiefs faced considerable difficulty in

retaining the allegiance of independent-minded leaders on the fringes of polities, whereas those closer to home were much easier to monitor. Hence, many of the polity boundaries based on archaeological signatures may more accurately portray threat zones rather than the limits of direct chiefly authority (Blitz 1993a). Many archaeologists now subscribe to Hally's (1993) careful reading of the historical and archaeological evidence for one region of the Southeast, which suggests that, on the average, Mississippian polities were about 40 km in length (typically following drainages). This figure coincides with archaeological data from other regions, such as the Lower Ohio Valley (Kincaid and Angel polities) (Muller 1997). At the higher end, Cahokia may have overseen a territory on the order of 100 km in extent (Scarry 1999). Spanish accounts of the Coosa chiefdom centered in eastern Tennessee and adjoining states describe a very large polity that may have extended 450 km along its longest axis (Hudson et al. 1985). Using Coosa as a model, the term paramount chiefdom (Hudson et al. 1985) has been added to the chiefdom lexicon to describe the largest of Mississippian-style polities, such as Cahokia. Paramount chiefdoms are best viewed as loose and unstable confederations owing to the uncertain power held by their leaders.

The population size of Mississippian towns and polities has elicited some of the strongest discord. Those who lean toward the more complex models of Mississippian organization not surprisingly favor the highest numbers, but all would concede that deriving population estimates from archaeological signatures is exceedingly difficult. There does seem to be a general scaling back in the estimates in recent years. Cahokia in particular has presented a moving target, ranging from an unlikely 40,000 inhabitants (Fowler 1975) to a very high 25,000 (Gregg 1975) to a conservative 1300 (Muller 1997). Holley's (1999) calculation of 3000 to 12,000 seems to be palatable to most archaeologists today. The population of Moundville, one of the largest mound centers aside from Cahokia, has been put as high as 3000 (Peebles 1987), but Steponaitis's (1998) reevaluation of ceramics, burials, and midden deposits suggests a considerably lower number of 1000. With such wildly varying estimates for the sizes of individual towns, estimating the population encompassed by an entire polity seems almost foolhardy. One of our more reliable estimates comes from the Apalachee region of west Florida, the location of what may be construed as a complex chiefdom at the time of European contact. There, considerable survey and excavation data, combined with figures tabulated by Spanish authorities, provide a number of about 30,000 people (Scarry 1999).

Despite disagreements over detail, archaeologists broadly agree that a limited number of impressive complex or paramount chiefdoms were represented during the Mississippian period at any one point in time. The towns at the core of these polities include, but are not limited to, Cahokia, Moundville, Etowah, Spiro, Lake George, Lake Jackson, Winterville, Kincaid, Angel, and one or more sites in the Nashville Basin. Many more simple chiefdoms dotted the landscape, and a large number of hamlets of uncertain affiliation were liberally sprinkled around the Southeast. But complexity involves more than scale, which is, at best, a linear measure. It also involves sets of relations among interest groups and/or individuals.

Mississippian-period research has begun to focus more and more on these relational aspects of complexity in a variety of domains.

SETTLEMENT AND LANDSCAPE

Probably no aspect of the archaeological record better encapsulates shifting theoretical attitudes toward Mississippian complexity than does the spatial dimension—the internal structure of sites and the arrangement of communities across the landscape. The notion of the settlement "system," which so well imparted the idea of a functionally integrated pattern of sites, has now given way to phenomenological views about the way the built environment and the landscape structure everyday life. Although not all Mississippian sites have mounds or other forms of earthworks (in fact, these are in the minority), mounds have become the key attribute for sorting the larger sites that are used to define the most complex regional systems.

The landmark *Mississippian Settlement Patterns* (Smith 1978) presented a series of regional system studies, with a particular eye toward site-size hierarchies. These analyses of both large- and moderate-scale regional systems demonstrated that larger Mississippian chiefdoms typically consisted of a primate, multi-mound center, surrounded by various strata of site types and sizes. The most complex systems appeared to be represented by three or four tiers of sites. A four-tiered system would include a very large multi-mound center, subsidiary centers with a single or only a few mounds, sizable villages without mounds but often with plazas, and a hodgepodge of smaller settlements consisting of as few as one to two structures. More often than not, there is an elegant fit between the relative degree of hierarchy manifest in the settlement system and the levels of status indicated by the associated mortuary assemblages (as described below).

As the number of regional studies surged following the publication of the 1978 volume, two important points became clear. First, only a few regions easily fit the uppermost category of a three- to four-site-size hierarchy, such as the American Bottom (Cahokia) and the Black Warrior Valley (Moundville). These became characterized as complex chiefdoms. Most Mississippian settlement patterns appear to reflect a somewhat ambiguous hierarchy consisting of "a clear top, a clear base, and something fuzzy going on in the middle" (Lewis & Stout 1998b, p. 233), exhibiting a broad range of variation even for the smaller-scale polities. A second concern with Mississippian settlement studies is that there are still very few regions that have been subjected to large-scale, systematic survey. The Black Bottom (Kincaid) in southeastern Illinois was, and remains, one of the most thoroughly surveyed regions—probably as near to 100% coverage as can feasibly be done (Muller 1978). Therefore, the abundance and range of variation of non-mound sites is still poorly known for many areas.

Not surprising, those researchers who have turned their attention to smaller site categories have discovered considerable diversity within categories such as "village" or "hamlet" (Alt 2001, Emerson 1997, Maxham 2000, Mehrer 1995, Thomas 2001). Some of these rural places conducted important communal

activities and feasts once thought to be primarily limited to the larger towns. Others appear to have hosted important ritual events. As research has honed in on the character of individual communities, it has become more difficult to accept them as interchangeable units within a site-size category. Further, it is now evident that the development of hinterland occupations did not occur in lock-step with the larger mound centers; residents at these outliers often appear to have simultaneously resisted imposition of a new order at the same time that they sought the advantages of affiliation (Alt 2001, Mehrer 1995).

The shift in settlement perspectives has also moved inward to the mound centers themselves to consider how landscape and the built environment created a spatial crucible for the reproduction of social inequality. Ethnohistoric evidence reveals that the construction of mounds in successive stages evoked purification and renewal and simultaneously reconstituted authority for those individuals or lineages who occupied the top of a mound with each new addition of a mantle (Knight 1989). At a larger scale, mounds may have been arranged to mirror celestial phenomena (e.g., Demel & Hall 1998, Fowler 1996). Even if the evidence for this is problematic, it is likely that towns incorporated ritual dimensions into their planning. The famous woodhenges of Cahokia (circular arrays of large cedar posts) might have been used to mark and control the calendrical cycle (Smith 1992), or they might have been cosmograms that directed the energy of nature and the ascent of spirits (Demel & Hall 1998)—activities that would have strongly reinforced the sacred authority of elites.

The configuration of mound sites created a world where ideological authority was taken for granted among the populace (Cobb & Nassaney 2002, Lewis et al. 1998, Pauketat 1997, Wesson 1998). Grand vistas through plazas and the imposing heights of mounds imbued the built environment with a power of perspective controlled by the elites who supervised construction projects. The denial of perspective could prove powerful, as well. The growth of towns in the Lower Mississippi Valley was characterized by the incremental addition of mounds around plazas, reinforcing the visual and physical segregation of elite space as access to plazas became increasingly limited (Kidder 1998). Similarly, plazas elsewhere seem to have become central for the exercise of power, as elites assumed greater control over areas formerly devoted to public space (Cobb & Nassaney 2002, DeBoer 1993, Lewis et al. 1998). At many sites, large platform mounds simultaneously manifested overt and covert powers of display. On the one hand, they flaunted the symbolic authority of those who resided on their summits, and, on the other hand, mound-top palisades masked the activities of those very same elites.

Passage through a Mississippian mound center thus seems to have involved strategic concealment and revelation as representations of social and political organization. Drawing social distinction in space reflects the importance of ideological alienation in the reproduction of inequality in chiefdoms (Pauketat 1997, Wesson 1998). Power was experienced subjectively as individuals accepted spatial asymmetry as a concrete realization of the natural order. The question remains, however, as to how strongly ideological power carried economic freight. This question is

brought most into focus by debates over the organization of labor in Mississippian chiefdoms.

THE ORGANIZATION OF LABOR

Mississippian sites confront us at several scales with impressive residues of human effort, ranging from large earth-moving projects to finely crafted objects. Most obvious are the mounds representing innumerable basket-loads of soil. Lengthy defensive palisades composed of hundreds of sizable posts encircled many Mississippian sites (Cahokia's fortifications were on the order of 3000 m long, Moundville's 2000 m), often with evidence for multiple rebuildings. Many of the portable objects found with burials display a high level of craftsmanship that seem beyond the skill of the average farmer. All of these impressive remains have made the organization of labor a recurring target in debates about Mississippian complexity. These debates typically focus on two issues: What was the degree of elite intervention in production specialization, and in the organization of community projects?

Case studies in Illinois foregrounded the importance of production specialization and underlined the complexity of the methodological and theoretical issues at stake. Yerkes (1983) identified an example of shell-bead production in the American Bottom that he attributed to full-time craft specialization, presumably under the aegis of elites at Cahokia and related centers. This complemented another posited case of "cottage industries" of shell-bead manufacture in the American Bottom and elsewhere, which implied significant specialized production for market exchange at the household level (Prentice 1983). In rejoinder, Muller (1984) used his research on salt production in southern Illinois to make the broader argument that: (*a*) Most cases of presumed Mississippian specialization could be accounted for by models of part-time specialization organized at the household or community level, and (*b*) exchange was relatively unstructured.

Variability in production specialization and its link to elite control continue as one of the more contentious areas of disagreement related to Mississippian complexity. There are a number of notable instances of specialization in the extraction or rendering of regionally restricted resources [Muller's (1984) "regional specialization"], but the relations of production in those areas do not appear to have been strongly hierarchical. The production of hoes at the major chert source areas in Missouri, Illinois, and Tennessee represent part-time specialization embedded in a seasonal cycle of domestic activities (Cobb 2000, Muller 1997, Thomas 2001; cf., Gramly 1992), despite the fact that stone hoes were perhaps the most commonly traded item in the late prehistoric era (Brown et al. 1990, Winters 1981). Other instances for the procurement and/or rendering of geographically restricted, valued raw materials also indicate that Mississippian interest groups rarely monopolized source areas for distinctive economic and political gains [e.g., galena in Missouri (Walthall 1981)], although the procurement of marine shell from the Gulf Coast may represent an exception (Payne & Scarry 1998).

Production carried out under the shadow of mounds and those who occupied them may have been a different matter. There is considerable evidence that clusters

of manufacturing debris at Moundville represent workshops for greenstone display goods and shell-bead production (Welch 1991, Wilson 2001), while stylistic commonalities among copper plates at Spiro raise the possibility that they were manufactured in specialized workshops (Phillips & Brown 1978). Likewise, in addition to promoting shell-bead manufacture, elites at Cahokia may have sponsored specialized production of groundstone gaming disks (chunkey stones), megalithic axeheads, fireclay figurines, and copper ornaments (DeBoer 1993; Pauketat 1994, 1997). Mississippian chiefs also had preferred access to nondurable materials rarely recovered by archaeologists, such as high-quality textiles (Phillips & Brown 1978, Drooker 1992, Kuttruff 1993), although inferences about production in such cases must be gleaned from the quality of the final product. Nevertheless, production patterns at certain mound sites indicate elites evinced a keen interest in overseeing the manufacture of valued objects. It is still far from clear whether this represented outright control, patronage, or just preferred access by virtue of propinquity.

As with production specialization, it is not altogether clear whether large-scale endeavors represented by mounds, palisades, and moats required an inordinate degree of effort and coordination. Work estimates for the prominent mound center of Kincaid suggest that, if each household provided only one worker for several days per year, the earthworks for the entire site (93,000 m^3) could have been constructed in a century or less (Muller 1997). As with all production estimates, without knowing the timing and longevity of public-work efforts it is difficult to assess how much labor was mobilized at any one point in time. Because mounds were built in stages, labor efforts may have been punctuated and intensive rather than gradual. If the development of Cahokia was initiated with Pauketat's (1994, 1997) proposed "Big Bang," then many of the rapidly built public projects—ranging from mound construction to the wholesale erection of domestic structures—may have required considerable oversight. Still, Milner's (1998) tabulations for relative energy expenditures at Cahokia are more in line with Muller's estimates for Kincaid, underscoring the divergence of views on the mobilization of labor.

Gender and household studies have provided us with another window on the organization of labor (e.g., Hally & Kelly 1998, Rogers & Smith 1995, Thomas 2001). These still-developing perspectives go beyond issues of elite intervention in major production efforts and examine the organization of labor on a quotidian scale. One of the most important contributions of this research has been to identify considerable variability in production strategies even in fairly small communities, emphasizing the danger of relying on a unit of analysis such as the Mississippian farmstead that is founded on economic stereotypes. Thomas (2001), for instance, makes a well-founded argument that in southern Illinois males produced hoes for exchange, whereas women processed salt for exchange. Hence, one cannot assume that only males were involved in external exchange relations. These studies nicely complement the trend in settlement studies toward examining functional variation in small-scale sites.

Debates over the control of labor highlight one of the key questions pertaining to Mississippian complexity: In the more extreme cases (i.e., the complex or

paramount chiefdoms), were relations of production characterized by domination or dominance (Muller 1997)? The former implies an institutionalized form of control over labor, whereas the latter suggests a weak control over labor reliant more on manipulation rather than coercion. The emergence of domination that coincides with expanding control over the means of production is a defining characteristic of class-based societies—and many archaeologists are hesitant to view any Mississippian polities in this light (e.g., Milner 1998, Muller 1997, Saitta 1994). The fact remains, nonetheless, that certain individuals and interest groups were particularly adept at acquiring the physical and symbolic capital that constituted the cornerstone of chiefly authority. Nowhere is this more evident than in the impressive Mississippian mortuary assemblages.

MORTUARY RITUAL AND IDEOLOGY

The elaborate burials associated with many Mississippian sites, in conjunction with earthworks, have served as some of our richest sources of inspiration about the structure of complexity. Several Mississippian case studies published in an influential Society for American Archaeology memoir (Brown 1971a) fashioned a processual link between burial treatment and social complexity. Evidence for superordinate categories of individuals consistent with complex chiefdoms was identified at Etowah (Larson 1971), at Spiro (Brown 1971b), and at Moundville (Peebles 1971; also Peebles & Kus 1977), based on the number and nature of artifacts found with burials. These objects included engraved shell cups and gorgets, repousse copper plates, painted and effigy ceramics, and a host of other exotic artifact types that tend to cluster at Mississippian mound centers. It is important that many of these artifacts (or their raw materials) were imported from considerable distances, attesting to some relationship between elite status and preferred access to long-distance exchange networks.

Numerous case studies followed on the heels of the 1971 publication, all demonstrating more or less the same point: Most Mississippian sites of any size contained cemeteries with individuals who had preferred access (at least at the time of burial) to imported exotic materials and/or finely crafted objects (e.g., Goldstein 1980, Milner 1984, Rothschild 1979). Furthermore, many of the mortuary studies revealed a distinct stratification in the abundance and types of goods, such that two or three (or more) groups could be delineated. Individuals in these groups were usually interred within restricted areas, typically within or around mounds. In certain instances, burials that appeared to represent the apex of the social hierarchy had objects that were unique to those burials, such as copper axes at Moundville (Peebles & Kus 1977), or were placed in special contexts, such as litter interments in the Craig Mound at Spiro (Brown 1971b).

The assumption that abundance and quality of burial goods equate with status still guides much Mississippian mortuary research today. A variation on this theme occurred with the application of the prestige-goods model (Cobb 1989, Brown et al. 1990, Dye 1995, Peregrine 1992). Under this approach, individuals did not

merely amass exotic goods throughout their lifetime to have them deposited at death. Instead, valuables first were acquired by elites from distant and ideologically charged places, which endowed the goods with ritual significance. These objects were then distributed among followers to attract their loyalty, labor, and surplus production because nonstratified societies present numerous obstacles through kinship ties and other means that prevent elites from directly accessing the means of production. One could then expect that prestige items would also appear in lower-status burials. Accordingly, although the relative abundance of funerary items could still be viewed as a proxy for status, this could be only a very rough measure given the dynamic circulation of the system.

The classic approach toward prestige-goods economies has been critiqued for Cahokia and the surrounding American Bottom region. There, elites apparently controlled goods that were locally produced (and stamped with symbology more readily comprehended) rather than acquired as finished items from afar (Pauketat 1994). Suffice it to say that the mechanisms and rationale for the movement of prestige goods were varied (including tribute through warfare) and that further attention to these variables is strongly warranted (Dye 1995, King & Freer 1995).

Cahokia continues to elicit some of the strongest divides over the degree of power wielded by elites (Schroeder 2003). At the far extreme are models positing the development of urbanism at Cahokia or far-flung economic control emanating out of the American Bottom (Dincauze & Hasenstab 1989, O'Brien 1989, Peregine 1992). Then there is the view that Cahokian elites were extremely powerful in some instances, but this power could be attributed more to ideological rather than materialist factors (Emerson 1997; Pauketat 1994, 1997). Finally, there is the possibility that the impressive size differences between Cahokia and other sites could still be accounted for by incremental—rather than true qualitative—differences in power (Milner 1998, Milner & Schroeder 1999, Muller 1997). The Mound 72 mortuary assemblage at Cahokia has become a common referent for these debates (Fowler 1975). Several group burials in this unusually shaped, ridgetop mound contained large amounts of exotic or highly crafted artifacts, including caches of projectile points and groundstone gaming disks, thousands of shell beads, piles of mica, and a large copper tube. Some of the group burials appear to represent sacrifices. An even greater abundance of wealth objects was uncovered from the so-called Great Mortuary at the Craig Mound in Spiro, which held huge deposits of shell beads, engraved shell cups, and copper plates, in addition to an astonishing assortment of other exotics (Brown 1996, Phillips & Brown 1978). No one who is party to the debates over Mississippian complexity denies the spectacular nature of the Mound 72 or Great Mortuary burial complexes. However, a wide variety of power relations can be invoked to account for such assemblages.

One cannot touch on mortuary ritual without mentioning the Southeastern Ceremonial Complex (SECC). The SECC is a recurring set of themes, motifs, and iconography (Figure 2) rendered from a wide range of materials, including copper plates, various forms of worked shell (cups, gorgets), ceramics, and even stone (Brown 1976, Galloway 1989, Howard 1968, Knight 1986). These objects are
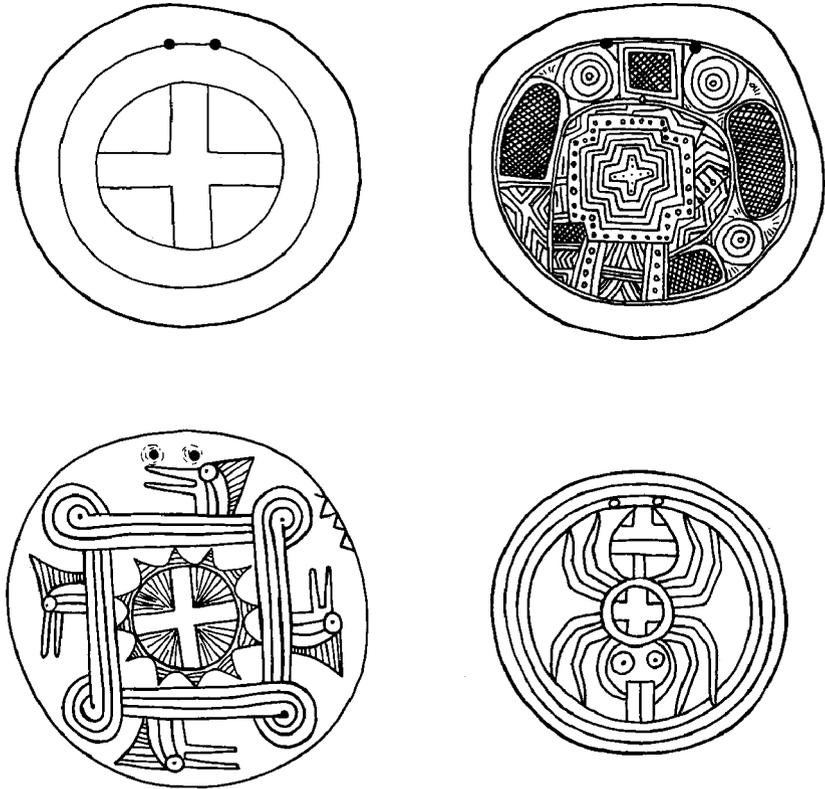
Figure 2   Renderings of shell gorgets displaying icongraphy associated with the Southeastern Ceremonial Complex [from Figure 1 in Howard (1968). Reprinted with permission of the Missouri Archaeological Society].

most commonly, though not exclusively, found in mortuary contexts. The skewed distribution of SECC goods among burials is often taken as a marker of social complexity, but archaeologists differ over the meaning that can be attributed to what was originally characterized as a "cult" (Waring & Holder 1945). The variability displayed in objects and motifs associated with the SECC argues against it representing a unified belief system (Muller 1989), although there are recurring themes that may be indicative of a core of ideas that are predominately "otherworldly" in nature (Knight 1986, Knight et al. 2001). Even without universal agreement on what the SECC represents, it is central to discussions about Mississippian complexity because researchers have long relied upon it to consider how elites may have wielded power. The association between leaders and powerful symbols was likely viewed as a manifestation of their control over esoteric knowledge and their pivotal position in maintaining harmony between social and natural worlds.

Power in Mississippian societies was not vested solely in males nor was it only hierarchical in nature. There is strong evidence from both the archaeological and

ethnohistoric records that women could hold power in the traditional sense attributed to chiefs (Trocolli 2002). The notion of heterarchy has gained particular favor as a way of emphasizing horizontal relations of overlapping power embedded in gender, age, and lineage, as opposed to the primarily vertical relations of hierarchy (Crumley 1987). As one example, mortuary patterns in the southern Appalachian polities suggest that women's power may have been vested in kin groups (emphasis on burial in domestic structures), whereas men's power may have been linked more to the larger town itself (emphasis on burials in community buildings) (Sullivan & Rodning 2001). The descendents of Mississippian groups were often divided into moities that split powers related to warfare, trade, and civic organization, a pattern that may be seen in the archaelogical record (Dye 1995, Knight 1990). In addition to gender and lineage, other social dimensions of mortuary practices gaining increasing attention include ethnicity and identity (Emerson & Hargrave 2000, Hally & Kelly 1998).

Recent mortuary research—combined with data on settlements, landscape and labor—has begun to paint complexity as a multidimensional phenomenon. Individuals and interest groups often did hold superordinate positions that were hierarchical, and the reproduction of hierarchy involved both material and ideological dimensions. Yet people also assumed multiple identities that extended to gender, clan, and age-group affiliations. These social roles provided alternative frameworks for the negotiation of power relationships acted out daily on stages within the household and other venues. Such arenas did not necessarily involve the direct intervention of chiefs or similar positions that we traditionally link to status and institutionalized power. Whether involving elites or not, power is not an abstract essence; it is made manifest through relations that may be codified by institutions or rationalized through kinship and other means. Research on Mississippian tribute and feasting has highlighted some of the key ways in which individuals and interest groups negotiated relations of power.

TRIBUTE AND FEASTING

The idea that chiefdoms were characterized in large part by redistribution (Service 1962) was laid to rest largely by Earle's (1977) research on Hawaiian chiefdoms, which portrayed leaders as much more interested in mobilizing surplus for self-aggrandizement than for feeding the masses. With a rich ethnohistoric record at their disposal, Mississippian scholars rapidly picked up the theme of elites marshalling surplus and power through various forms of tribute (Peebles & Kus 1977, Steponaitis 1978). Further, it did not go unnoticed that the location of major centers on large drainages provided a particularly strategic location for the accumulation and dispersal of goods (Brain 1978, Kelly 1991). Although there is abundant documentary and archaeological evidence to support the idea that Mississippian chiefs were the recipients of surpluses, it is nonetheless problematic as to what mechanisms were used. Were these willing or coercive? Were they sustained or intermittent? In some cases the argument has been made that chiefs commanded

tribute outright. The de Soto accounts relate a number of instances where native chiefs exacted large amounts of goods as gifts and ransom payments for the Spaniards (Clayton et al. 1993). Warfare seems to have played an important role in setting up tributary relationships with vassal chiefs (Dye 1995, Rees 1997). In other cases, family groups typically tithed, surrendering some portion of the season's harvest to lineage heads or chiefs. This does not appear to be the sort of coerced tax associated with highly stratified societies because the surplus seems to have been willingly handed over (Muller 1997).

Archaeological studies of tribute have tended to focus on agricultural surplus and animal products. There are numerous instances in the archaeological record indicating that elites had privileged access to comestibles. Skeletal studies suggest that elites were often (though not always) better fed than the remainder of the population (e.g., Blakely 1995, Hatch et al. 1983). Mounds or mound centers are frequently associated with activities that resulted in accumulations of faunal remains that reflect preferred cuts of meat, such as deer hindquarters (Jackson & Scott 1995a,b; Kelly 1997; Michals 1981; Rudolph 1984). Some small, satellite communities have skewed faunal assemblages compared to those surrounding mounds, suggesting the processing of meat before its movement to the large towns as tribute (Jackson & Scott 1995a). Similar patterns of processing have been described for botanical assemblages, where the remains of maize processing (cobs, cupules) may cluster at outlier sites while the edible portions occur in larger abundance at the mound centers (Pauketat 1994, Welch & Scarry 1995).

The aesthetics of food and animal products also played a strong role in Mississippian political ideology. European chroniclers observed that garments such as bear robes and feather cloaks were often limited to chiefs, and the ostentatious display of large maize granaries under the supervision of elites was a visible reminder of a chief's role in the physical and ritual health of the community (Jackson & Scott 1995b, Rees 1997). The symbolic importance of certain comestibles such as fish may also have conferred them status as prestige goods (Rees 1997, 2002). Tribute thus surrounded chiefs with an aura of economic and ritual privilege tied to consumption.

Mississippian chiefs apparently used their tribute—however gained—to organize feasts for recycling food and gifts to followers in a context of conviviality that further served to bolster personal prestige (Blitz 1993b, Dye 1995, Muller 1997, Rees 1997, Smith & Williams 1994). There is certainly abundant ethnohistorical evidence that attests to the importance of feasts (Muller 1997). The faunal remains surrounding mounds (as described above) have been taken as evidence for feasting behavior, as has the association between mounds and large numbers of serving vessels (Blitz 1993b). A large pit at Cahokia has yielded a variety of ritual-related remains (e.g., tobacco seeds, red cedar) that indicate much more than eating was involved in the feasts (Pauketat et al. 2002). Beneath the revelry, however, there must have been a cynicism reminiscent of the potlatch. Whatever gifts one took home presumably had to be reciprocated at a later date, often multiplied several times over. In this sense, feasting was often elevated to a competitive level of "fighting

with property" (Rees 2002), a symbolic form of the warfare that seems to have permeated Mississippian society and relations of power. Notably, studies on feasting bring us back full circle to the issues raised by mortuary studies in connection with elite control over exchange. If certain individuals were in a position to manipulate tribute and exchange, then feasting represents one avenue for redistributing valued objects and food to foster a network of indebtedness and obligations.

POLITICAL AND ECONOMIC CHANGE

It has become increasingly difficult to compare the relative complexity of Mississippian polities owing to the growing recognition that they went through considerable political and economic change, and these changes were not experienced in the same way in all areas (King 2001, Rees 1997, Scarry 1996b, Steponaitis 1991, Sullivan 1995). An earlier tendency to view settlement and mortuary patterns as snapshots of complexity has now been replaced by the appreciation that these patterns are the cumulative effects of transformations in complexity combined with other cultural and natural processes. What appears as a four-site hierarchy to an archaeologist may have been the result of the accumulation of remains of a series of sequential, simple chiefdoms. The discovery that the spectacular mortuary assemblages at Spiro resulted in part from elites curating goods from earlier burials cast further uncertainty on the practice of inferring status primarily from the abundance of burial objects (Brown 1996). Ironically, as archaeologists we had done a poor job of controlling chronology in our models of Mississippian complexity.

Anderson's (1994) research on the trajectory of Mississippian chiefdoms along the Savannah River drainage in Georgia and South Carolina spurred a renewed concern with the development of complexity through time. He demonstrated what he termed "cycling" behavior in chiefdoms, where, instead of following a simple trajectory of increasing complexity, Mississippian chiefdoms continually rose and fell because of their inherent political instability, exacerbated by factors such as warfare and ecological change (see also Blitz 1999, Clay 1997). The relevance of history and the tempo of development to the stochastic nature of chiefdom cycling should not be underestimated. In the rich bottomlands of southeastern Missouri a number of substantial mound centers arose early in the Mississippian period, yet their broadly coeval development may have hampered the emergence of a single, dominant center (although the chronology of the region is still problematic). Etowah's relatively slow development in northwest Georgia suggests a similar pattern of strong competition from other chiefdoms, yet it ultimately became one of the larger Mississippian centers (King 2001). In contrast, the early establishment of powerful elites at Moundville may have hampered the ability of late-bloomers in adjoining polities to compete for access to prestige goods, leading to the development of only simple chiefdoms in those localities (Steponaitis 1991). Yet chiefly primogeniture could not guarantee sustained success; even the most impressive chiefdoms apparently lasted in the range of only 50 to 150 years, whereupon the central towns were either abandoned or lost much of their

population (Anderson 1999, Brain 1978, Hally 1996). At a broader scale, there is evidence that wholesale regions may have been largely, if not completely, depopulated at various times in the Mississippian sequence (Anderson 1994, Cobb & Butler 2002, Williams 1990).

The rise and fall of chiefly centers in some localities was attended by changes in site function. As some mound sites (e.g., Moundville, Cahokia) were slowly abandoned by a residential population they became mortuary and ceremonial centers inhabited primarily by caretaker elites (Pauketat 1997, Steponaitis 1998). In an extreme example, Etowah was completely abandoned to be later reoccupied for ceremonial purposes (Hally 1996, King 2001). Other broad shifts in the Mississippian period include the decline of mound-building and the waning of the SECC (particularly from the 1300s onward). Rather than representing a reversal of complexity, however, the argument can be made that these patterns were part of a reorganization related to the increasing importance of secular power focused on individuals, as opposed to corporate or communal forms of authority practiced earlier (Anderson 1999, Trubitt 2000). The broader trends outlined here do present some contradictions, however. Although diminished earthwork construction may indicate that elites no longer needed the security of ostentatious examples of power based on communal labor, the rise of the ritual importance of a number of centers does not seem to square with the simultaneous decline of the ritual complex embodied in the SECC. Such contradictions may dissolve if we decrease the scale and increase the resolution of perspectives on Mississippian complexity, and move to complement comparative studies more rigorously with historical ones. Only then can we hope to achieve an understanding of the reproduction of social inequality in the everyday lives of Mississippian peoples.

CONCLUSION

Approaches to Mississippian complexity underscore the difficulty with materialist, neo-evolutionary models. For the Mississippian case there is not necessarily a continuum from benign redistribution to kin demands on surplus, to some control over the means of production, that neatly correlates with a transition from simple to paramount chiefdoms. Mississippian polities apparently engaged in a variety of hegemonic practices where people willingly reproduced the conditions of their own exploitation. In this sense, even exploitation may be a misnomer if producers were willing to provision elites because those leaders were viewed as essential to the stability of the natural order by virtue of their esoteric knowledge and authority. Perhaps such esteem could not be equated to Louis XIV's "I am the State" because it was a qualitatively different form of power. More likely, a Mississippian chief could proclaim, "I am the Cosmos." Even then, it seems unlikely that such authority was unimpeachable. Nevertheless, it now seems apparent that knowledge-based political economies (McIntosh 1999) that use ritual authority to overcome constraints on political-economic growth are an important facet of chiefdoms in the Mississippian southeast and elsewhere.

If there is a historical trend in studies of Mississippian complexity it is one that first emphasized hierarchy. This was followed by a consideration of the horizontal power links, the heterarchical structure, between segments of society. Finally, some researchers have moved to a practice-based approach that emphasizes agency and relations more than system or structure. Yet the changes in perspective represent more of a Doppler shift than a complete reorientation—scholars may represent different areas on the spectrum, but they do not seem to have lost sight of the importance of the larger spectrum itself. One can see, for example, concerns with Mississippian beliefs, worldview, and social structure in the heyday of adaptation and social systems (Brown 1976, Phillips & Brown 1978) and an interest in inequality and tribute at a time when stasis and redistribution were popular buzzwords (Peebles & Kus 1977, Steponaitis 1978). At the height of the processual era when history was denigrated as too particularistic, Southeastern researchers happily continued combing the ethnohistorical records to animate their perspectives on Mississippian life—a trend that continues today. Many Mississippian archaeologists seem to implicitly adopt Trigger's (1989) view that some broad, empirical generalizations can be drawn from comparative research, which provide lessons for conducting historical studies. In return, historically informed research provides the building blocks of comparative approaches. As we achieve greater success by playing off the particular with the general, we further broaden our capabilities to ask questions about Mississippian political, social, and economic organization, thereby moving from how complex to why complex.

ACKNOWLEDGMENTS

The *Annual Review of Anthropology* is online at http://anthro.annualreviews.org

LITERATURE CITED

Alt S. 2001. Cahokian change and the authority of tradition. See Pauketat 2001, pp. 141–56

Anderson DG. 1994. *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast.* Tuscaloosa: Univ. Ala. Press

Anderson DG. 1999. Examining chiefdoms in the southeast: an application of multiscalar analysis. See Neitzel 1999, pp. 95–107

Blakely RL. 1995. Social organization at Etowah: a reconsideration of paleodemographic and paleonutritional evidence. *S. Archaeol.* 14:46–59

Blitz JH 1993a. *Ancient Chiefdoms of the Tombigbee.* Tuscaloosa: Univ. Ala. Press

Blitz JH. 1993b. Big pots for big shots: feasting and storage in a Mississippian community. *Am. Antiq.* 58:80–96

Blitz JH. 1999. Mississippian chiefdoms and the fission-fusion process. *Am. Antiq.* 64:577–92

Brain JP. 1978. Late prehistoric settlement patterning in the Yazoo Basin and Natchez

Bluffs regions of the Lower Mississippi Valley. See Smith 1978, pp. 331–68

Brown JA, ed. 1971a. *Approaches to the Social Dimensions of Mortuary Practices.* Mem. No. 25. Washington, DC: Soc. Am. Archaeol.

Brown JA. 1971b. The dimensions of status in the burials at Spiro. See Brown 1971a, pp. 91–112

Brown JA. 1976. The southern cult reconsidered. *Midcont. J. Archaeol.* 1:115–35

Brown JA. 1996. *The Spiro Ceremonial Center.* Mem. Mus. Anthropol. No. 29. Ann Arbor: Univ. Mich. Press

Brown JA, Kerber RA, Winters HD. 1990. Trade and the evolution of exchange relations at the beginning of the Mississippian period. In *The Mississippian Emergence*, ed. BD Smith, pp. 251–80. Washington, DC: Smith. Inst. Press

Clay RB. 1997. The Mississippian succession on the lower Ohio. *S. Archaeol.* 16:16–32

Clayton LA, Knight VJ Jr, Moore EC, eds. 1993. *The De Soto Chronicles: the Expedition of Hernando de Soto to North America in 1539–1543.* Tuscaloosa: Univ. Ala. Press

Cobb CR. 1989. An appraisal of the role of Mill Creek chert hoes in Mississippian exchange systems. *S. Archaeol.* 8:79–92

Cobb CR. 2000. *From Quarry to Cornfield: the Political Economy of Mississippian Hoe Production.* Tuscaloosa: Univ. Ala. Press

Cobb CR, Butler BM. 2002. The vacant quarter revisited: late Mississippian abandonment of the Lower Ohio Valley. *Am. Antiq.* 67:625–41

Cobb CR, Nassaney MS. 2002. Domesticating self and society in the Woodland southeast. In *The Woodland Southeast*, ed. DG Anderson, RC Mainfort Jr, pp. 525–39. Tuscaloosa: Univ. Ala. Press

Crumley CL. 1987. A dialectical critique of hierarchy. In *Power Relations and State Formation*, ed. TC Patterson, CW Gailey, pp. 155–59. Washington, DC: Am. Anthropol. Assoc.

DeBoer WR. 1993. Like a rolling stone: the chunkey game and political organization in eastern North America. *S. Archaeol.* 12:83–92

Demel SJ, Hall RL. 1998. The Mississippian town plan and cultural landscape of Cahokia, Illinois. See Lewis & Stout 1998a, pp. 200–26

Dincauze DF, Hasenstab R. 1989. Explaining the Iroquois: tribalization on a prehistoric periphery. In *Centre and Periphery: Comparative Studies in Archeology*, ed. TC Champion, pp. 67–87. London: Unwin Hyman

Drooker PB. 1992. *Mississippian Village Textiles at Wickliffe.* Tuscaloosa: Univ. Ala. Press

Dye DH. 1995. Feasting with the enemy: Mississippian warfare and prestige-goods circulation. See Nassaney & Sassaman 1995, pp. 289–316

Earle TK. 1977. A reappraisal of redistribution: complex Hawaiian chiefdoms. In *Exchange Systems in Prehistory*, ed. TK Earle, JE Ericson, pp. 231–59. New York: Academic

Emerson TE. 1997. *Cahokia and the Archaeology of Power.* Tuscaloosa: Univ. Ala. Press

Emerson TE, Hargrave E. 2000. Strangers in paradise? Recognizing ethnic mortuary diversity on the fringes of Cahokia. *S. Archaeol.* 19:1–23

Emerson TE, McElrath DL, Fortier AC, eds. 2000. *Late Woodland Societies: Tradition and Transformation Across the Midcontinent.* Lincoln: Univ. Neb. Press

Emerson TE, Pauketat TR. 2002. Embodying power and resistance at Cahokia. See O'Donovan 2002, pp. 101–25

Fowler ML. 1975. Pre-Columbian urban center on the Mississippi. *Science* 233:92–101

Fowler ML, ed. 1996. The ancient skies and sky watchers of Cahokia: woodhenges, eclipses, and Cahokian cosmology. *Wisc. Archaeol.* 77:1–158

Galloway P, ed. 1989. *The Southeastern Ceremonial Complex: Artifacts and Analysis.* Lincoln: Univ. Neb. Press

Goldstein LG. 1980. *Mississippian Mortuary Practices: a Case Study of Two Cemeteries in the Lower Illinois Valley.* Sci. Pap.

4. Evanston, IL: Northwestern Univ. Arch. Prog.

Gramly RM. 1992. *Prehistoric Lithic Industry at Dover, Tennessee.* Buffalo, NY: Persimmon Press

Gregg ML. 1975. A population estimate for Cahokia. In *Perspectives in Cahokia Archaeology*, ed. JA Brown, pp. 126–36. Bull. No. 10. Urbana: Ill. Archaeol. Surv.

Griffin JB. 1985. Changing concepts of the prehistoric Mississippian cultures of the eastern United States. In *Alabama and the Borderlands: From Prehistory to Statehood*, ed. R Badger, L Clayton, pp. 40–63. Tuscaloosa: Univ. Ala. Press

Hally DJ. 1993. The territorial size of Mississippian chiefdoms. In *Archaeology of Eastern North America: Papers in Honor of Stephen Williams*, ed. J. Stoltman, pp. 143–68. Jackson: Miss. Dep. Arch. Hist.

Hally DJ. 1996. Platform mound construction and the instability of Mississippian chiefdoms. See Scarry 1996a, pp. 92–127

Hally DJ, Kelly H. 1998. The nature of Mississippian towns in Georgia: the King site example. See Lewis & Stout 1998a, pp. 49–63

Hatch JW, Willey PS, Hunt EE Jr. 1983. Indicators of status-related stress in Dallas society: transverse lines and cortical thickness in long bones. *Midcont. J. Archaeol.* 8:49–71

Holley GR. 1999. Late prehistoric towns in the southeast. See Neitzel 1999, pp. 23–38

Howard JH. 1968. *The Southeastern Ceremonial Complex and its Interpretation.* Mem. 6. Columbia: Missouri Archaeol. Soc.

Hudson C, Smith M, Hally D, Polhemus R, DePratter C. 1985. Coosa: a chiefdom in the sixteenth-century southeastern United States. *Am. Antiq.* 50:723–37

Jackson HE, Scott SL. 1995a. Mississippian homestead and village subsistence organization: contrasts in large-mammal remains from two sites in the Tombigbee Valley. See Rogers & Smith 1995, pp. 181–200

Jackson HE, Scott SL. 1995b. The faunal record of the southeastern elite: the implications of economy, social relations and ideology. *S. Archaeol.* 14:103–19

Kelly JE. 1991. Cahokia and its role as a gateway center in interregional exchange. In *Cahokia and the Hinterlands: Middle Mississippian Cultures of the Midwest*, ed. TE Emerson, RB Lewis, pp. 61–80. Urbana: Univ. Ill. Press

Kelly LS. 1997. Patterns of faunal exploitation at Cahokia. See Pauketat & Emerson 1997, pp. 69–88

Kidder TR. 1998. Mississippian period mound groups and communities in the Lower Mississippi Valley. See Lewis & Stout 1998a, pp. 123–50

King A. 2001. Long-term histories of Mississippian centers: the developmental sequence of Etowah and its comparison to Moundville and Cahokia. *S. Archaeol.* 20:1–17

King A, Freer J. 1995. The Mississippian southeast: a world-systems perspective. See Nassaney & Sassaman 1995, pp. 266–88

Knight VJ Jr. 1986. The institutional organization of Mississippian religion. *Am. Antiq.* 51:675–87

Knight VJ Jr. 1989. Symbolism of Mississippian mounds. In *Powhatan's Mantle*, ed. P Wood, G Waselkov, T Hatley, pp. 279–91. Lincoln: Univ. Neb. Press

Knight VJ Jr. 1990. Social organization and the evolution of hierarchy in southeastern chiefdoms. *J. Anthropol. Res.* 46:1–23

Knight VJ Jr, Brown JA, Lankford GE. 2001. On the subject matter of Southeastern ceremonial complex art. *S. Archaeol.* 20:129–41

Kuttruff JT. 1993. Mississippian period status differentiation through textile analysis: a Caddoan example. *Am. Antiq.* 58:125–45

Larson LH Jr. 1971. Archaeological implications of social stratification at the Etowah site, Georgia. See Brown 1971a, pp. 58–67

Lewis RB, Stout C, eds. 1998a. *Mississippian Towns and Sacred Places.* Tuscaloosa: Univ. Ala. Press

Lewis RB, Stout C. 1998b. The town as metaphor. See Lewis & Stout 1998a, pp. 227–41

Lewis RB, Stout C, Wesson CB. 1998. The design of Mississippian towns. See Lewis & Stout 1998a, pp. 1–21

Maxham M. 2000. Rural communities in the Black Warrior Valley, Alabama: the role of commoners in the creation of the Moundville I landscape. *Am. Antiq.* 65:337–54

McIntosh SK. 1999. Pathways to complexity: an African perspective. In *Beyond Chiefdoms: Pathways to Complexity in Africa*, ed. SK McIntosh, pp. 1–30. Cambridge, UK: Cambridge Univ. Press

Mehrer MW. 1995. *Cahokia's Countryside: Household Archaeology, Settlement Patterns, and Social Power*. DeKalb: North. Ill. Univ. Press

Michals L. 1981. The exploitation of fauna during the Moundville 1 phase at Moundville. *S. Archaeol. Conf. Bull.* 24:91–93

Milner GR. 1984. Social and temporal implications of variation among American Bottom Mississippian cemeteries. *Am. Antiq.* 49:468–88

Milner GR. 1998. *The Cahokia Chiefdom: the Archaeology of a Mississippian Society*. Washington, DC: Smith. Instit. Press

Milner GR, Schroeder S. 1999. Mississippian sociopolitical systems. See Neitzel 1999, pp. 189–210

Muller J. 1978. The Kincaid system: Mississippian settlement in the environs of a large site. See Smith 1978, pp. 269–92

Muller J. 1984. Mississippian specialization and salt. *Am. Antiq.* 49:489–507

Muller J. 1989. The southern cult. See Galloway 1989, pp. 11–26

Muller J. 1997. *Mississippian Political Economy*. New York: Plenum

Nassaney MS, Cobb CR, eds. 1991. *The Late Woodland Southeast: Stability, Transformation, and Variation.* New York: Plenum

Nassaney MS, Sassaman KE, eds. 1995. *Native American Interactions: Multiscalar Analyses and Interpretations in the Eastern Woodlands.* Knoxville: Univ. Tenn. Press

Neitzel JE, ed. 1999. *Great Towns and Regional Polities in the Prehistoric American Southwest and Southeast.* Albuquerque: Univ. New Mex. Press

O'Brien PJ. 1989. Cahokia: the political capital of the "Ramey" state? *N. Am. Archaeol.* 10:275–92

O'Donovan MA, ed. 2002. *The Dynamics of Power.* Occ. Pap. No. 30. Carbondale: S. Ill. Univ., Cent. Archaeol. Invest.

Pauketat TR. 1994. *The Ascent of Chiefs: Cahokia and Mississippian Politics in Native North America.* Tuscaloosa: Univ. Ala. Press

Pauketat TR. 1997. Mississippian political economy. See Pauketat & Emerson 1997, pp. 30–51

Pauketat TR. 2001. *The Archaeology of Traditions: Agency and History Before and After Columbus.* Tallahassee: Univ. Fla. Press

Pauketat TR, Emerson TE. 1997. *Cahokia: Domination and Ideology in the Mississippian World.* Lincoln: Univ. Neb. Press

Pauketat TR, Kelly LS, Fritz GJ, Lopinot NH, Elias S, Hargrave E. 2002. The residues of feasting and public ritual at early Cahokia. *Am. Antiq.* 67:257–79

Payne C, Scarry JF. 1998. Town structure at the edge of the Mississippian world. See Lewis & Stout 1998a, pp. 22–48

Peebles CS. 1971. Moundville and surrounding sites: some structural considerations of mortuary practices II. See Brown 1971a, pp. 68–91

Peebles CS. 1987. Moundville from 1000 to 1500 AD as seen from 1849 to 1985 AD. In *Chiefdoms in the Americas*, ed. RD Drennan, CA Uribe, pp. 21–41. Lanham, MD: Univ. Press Am.

Peebles CS, Kus S. 1977. Some archaeological correlates of ranked societies. *Am. Antiq.* 42:421–48

Peregrine PN. 1992. *Mississippian Evolution: a World-System Perspective.* Monog. World Preh. No. 9. Madison: Prehistory Press

Phillips P, Brown JA. 1978. *Pre-Columbian Shell Engravings from the Craig Mound at Spiro, Oklahoma*, (Part 1). Cambridge, MA: Harvard Univ. Press, Peabody Mus. Archaeol. Ethnol.

Prentice G. 1983. Cottage industries: concepts and implications. *Midcont. J. Archaeol.* 8:17–48

Rees MA. 1997. Coercion, tribute and chiefly

authority: the regional development of Mississippian political culture. *S. Archaeol.* 16:113–33

Rees MA. 2002. Subsistence economy and political culture in the protohistoric Central Mississippi Valley. In *Between Contacts and Colonies: Archaeological Perspectives on the Protohistoric Southeast*, ed. CB Wesson, MA Rees, pp. 170–97. Tuscaloosa: Univ. Ala. Press

Rogers JD, Smith BD, eds. 1995. *Mississippian Communities and Households.* Tuscaloosa: Univ. Ala. Press

Rothschild NA. 1979. Mortuary behavior and social organization at Indian Knoll and Dickson Mounds. *Am. Antiq.* 44:658–75

Rudolph JL. 1984. Earthlodges and platform mounds: changing public architecture in the southeastern United States. *S. Archaeol.* 3:33–45

Saitta DJ. 1994. Agency, class, and archaeological interpretation. *J. Anthropol. Archaeol.* 13:201–27

Scarry JF, ed. 1996a. *Political Structure and Change in the Prehistoric Southeastern United States*. Gainesville: Univ. Fla. Press

Scarry JF. 1996b. Stability and change in the Apalachee chiefdom. See Scarry 1996a, pp. 192–227

Scarry JF. 1999. How great were the southeastern polities? See Neitzel 1999, pp. 59–74

Schroeder S. 2003. Mississippian political organization: economy versus ideology. *The Rev. Archaeol.* 23:6–13

Service ER. 1962. *Primitive Social Organization: an Evolutionary Perspective.* New York: Random House

Smith BD, ed. 1978. *Mississippian Settlement Patterns.* New York: Academic

Smith BD. 1986. The archaeology of the eastern United States: from Dalton to de Soto, 10,500–500 B.P. In *Advances in World Archaeology, Volume 5*, ed. F Wendorf, AE Close, pp. 1–92. Orlando, FL: Academic

Smith BD. 1992. Mississippian elites and solar alignments: a reflection of managerial necessity, or levers of social inequality? In *Lords of the Southeast: Social Inequality and the Native Elites of Southeastern North America*, ed. AW Barker, TR Pauketat, pp. 11–30. Archeol. Pap. 3. Washington, DC: Am. Anthropol. Assoc.

Smith MT, Williams M. 1994. Mississippian mound refuse disposal patterns and implications for archaeological research. *S. Archaeol.* 13:27–35

Steponaitis VP. 1978. Location theory and complex chiefdoms: a Mississippian example. See Smith 1978, pp. 417–53

Steponaitis VP. 1986. Prehistoric archaeology in the southeastern United States, 1970–1985. *Annu. Rev. Anthropol.* 15:363–404

Steponaitis VP. 1991. Contrasting patterns of Mississippian development. In *Chiefdoms: Power, Economy, and Ideology*, ed. TK Earle, pp. 193–228. Cambridge, UK: Cambridge Univ. Press

Steponaitis VP. 1998. Population trends at Moundville. In *Archaeology of the Moundville Chiefdom*, ed. VJ Knight Jr, VP Steponaitis, pp. 26–43. Washington, DC: Smith. Instit. Press

Sullivan LP. 1995. Mississippian household and community organization in eastern Tennessee. In *Mississippian Households and Communities*, ed. JD Rogers, BD Smith, pp. 99–123. Tuscaloosa: Univ. Ala. Press

Sullivan LP, Rodning CB. 2001. Gender, tradition, and the negotiation of power in southern Appalachian chiefdoms. See Pauketat 2001, pp. 107–20

Thomas L. 2001. The gender division of labor in Mississippian households. In *Archaeological Studies of Gender in the Southeastern United States*, ed. JM Eastman, CB Rodning, pp. 29–56. Gainesville: Univ. Fla. Press

Trigger BG. 1989. *A History of Archaeological Thought*. Cambridge, UK: Cambridge Univ. Press

Trocolli R. 2002. Mississippian chiefs: women and men of power. See O'Donovan 2002, pp. 168–87

Trubitt MBD. 2000. Mound building and prestige goods exchange: changing strategies in the Cahokia chiefdom. *Am. Antiq.* 65:669–90

Walthall JA. 1981. *Galena and Aboriginal*

Trade in Eastern North America. Sci. Pap. 17. Springfield: Ill. State Mus.

Waring AJ, Holder P. 1945. A prehistoric ceremonial complex in the southeastern United States. *Am. Anthropol.* 47:1–34

Welch PD. 1991. *Moundville's Economy.* Tuscaloosa: Univ. Ala. Press

Welch PD, Scarry CM. 1995. Status-related variation in foodways in the Moundville chiefdom. *Am. Antiq.* 60:397–420

Wesson C. 1998. Mississippian sacred landscapes: the view from Alabama. See Lewis & Stout 1998a, pp. 93–122

Williams S. 1990. The vacant quarter and other late events in the Lower Valley. In *Towns and Temples Along the Mississippi*, ed. DH Dye, CA Cox, pp. 170–80. Tuscaloosa: Univ. Ala. Press

Wilson GD. 2001. Crafting control and the control of crafts: rethinking the Moundville greenstone industry. *S. Archaeol.* 30:118–28

Winters HD. 1981. Excavating in museums: notes on Mississippian hoes and Middle Woodland copper gouges and celts. In *The Research Potential of Anthropological Museum Collections*, ed. AE Cantwell, JB Griffin, NA Rothschild, pp. 17–34. Annals 376. New York: New York Acad. Sci.

Yerkes RW. 1983. Microwear, microdrills, and Mississippian craft specialization. *Am. Antiq.* 48:499–518

Yoffee N. 1993. Too many chiefs? (or Safe texts for the '90s). In *Archaeological Theory: Who Sets the Agenda*, ed. N Yoffee, A Sherratt, pp. 60–78. Cambridge, UK: Cambridge Univ. Press

Contents

ERRATA

An online log of corrections to *Annual Review of Anthropology* chapters (if any, 1997 to the present) may be found at http://anthro.annualreviews.org/errata.shtml