Earle, Timothy K. (1991, ed.).
Chiefdoms: Power, Economy, and Ideology.
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9
Contrasting patterns of Mississippian development

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The Mississippian societies that existed in southeastern North America between A.D. 800 and 1700 are typically described as centralized "chiefdoms" whose economies were based on intensive maize agriculture (e.g., Peebles and Kus 1977; Smith 1978, 1986; Steponaitis 1986a). Although such normative descriptions are adequate for some purposes, they tend to mask the tremendous differences in scale and centralization that existed among these polities. At one extreme were highly stratified, complex chiefdoms, whose political influence extended over large territories with populations numbering in the tens of thousands (e.g., Fowler 1978; Hudson et al. 1985). At the other extreme were smaller, less hierarchical polities; some of these may have been simple chiefdoms, and others – insofar as one can judge from the archaeological record – may not have been chiefdoms at all (e.g., Dickens 1976; Peebles 1987b).

To date, this diversity among Mississippian political forms has not been given sufficient attention as a topic of study in itself. The reasons for this have been many, but two in particular stand out. The first has been a strong tendency over the past fifteen years to portray the origins of Mississippian culture as a unitary phenomenon – a subset of the more general problem of the origins of chiefdoms – thereby focusing

attention on the commonalities, rather than the differences, among Mississippian groups. The second has been a strong, almost dogmatic, preference for explaining Mississippian developments in purely local terms. This emphasis on local process was an understandable reaction against previous explanations that stressed migrations and diffusion, but it had the unfortunate side effect of causing each region to be viewed as a bounded isolate, within which political processes ran their (adaptive) course unhindered by historical events elsewhere. Studies of chiefdoms in other parts of the world suggest that such a view is unrealistic (e.g., Flannery 1968; Frankenstein and Rowlands 1978; Helms 1979; Renfrew and Cherry 1984; Earle 1987a: 296–7; Kristiansen, Chapter 2). Local success in chiefly politics may depend, in no small measure, on access to external knowledge, commodities, and alliances, all of which can be greatly affected by events outside the region of interest. Such external forces may play a pivotal role in either constraining or encouraging political centralization, and must be taken into account if the differences among Mississippian polities and their historical trajectories are to be adequately understood.

My goal in this paper is to compare the Mississippian polities that developed in two different places: the Moundville region of Alabama and the Pocahontas region of Mississippi. Although the two regions are environmentally similar and are known to have been connected by trade relations in late prehistoric times, their political trajectories were markedly different. In the former, an intensely hierarchical polity appeared at ca. A.D. 1200 in which the entire region was unified under the hegemony of a large paramount center (Moundville). In the latter, no paramount center emerged and the polities remained fragmented and relatively simple. Understanding these differences requires that we look not only at local processes, but also at how these regions were articulated in broader networks of alliance and exchange.

THE MOUNDVILLE REGION: A.D. 900–1650

The first region we shall consider is a 40-km-long segment of the Black Warrior River Valley centered on the site of Moundville in west-central Alabama. The valley, consisting of the active floodplain and adjacent terraces, varies between 5 and 10 km in width and is surrounded by gently rolling hills. During late prehistoric times, much of

the region was covered with hardwood forests (Scarry 1986). The terrace and upland plant communities were especially rich in edible nuts (such as acorn and hickory), while the bottomlands were a plentiful source of fruits, seeds, and tubers. Among the animals that could be hunted in the forests and fields were white-tailed deer, wild turkey, squirrel, racoon, and bear. The backswamps and oxbow lakes that dotted the river's floodplain were ideal habitats for fish, turtles, and waterfowl.

Not only did this region contain a bounty of wild foods, but also it provided an excellent setting for intensive maize agriculture. Arable soils on the river's floodplain and terraces were abundant and fertile; typical maize yields recorded in the early decades of this century (before mechanized farming and fertilizers were commonplace) ranged from 10 to 45 bushels per acre (Peebles 1978: 400–3). Periodic flooding replenished nutrients, making these soils virtually immune to degradation. Nor was farming especially risky: the growing season was comfortably long (averaging more than 200 days), the rainfall well timed and abundant (ca. 120 cm per year), and the water table high enough so that crops planted in floodplain soils were capable of surviving even the worst droughts. Rain shortages serious enough to cause major crop losses on the higher terrace soils were extremely rare events, occurring no more than once or twice a century (Scarry 1986: 119–30).

The Moundville site, after which the region is named, was by far the most important Mississippian settlement in the Black Warrior Valley. Situated on a terrace overlooking the river, the site is nowadays marked by twenty large pyramidal mounds. As is true of Mississippian mounds generally, these earthworks were built in stages and had flat summits that originally supported elite residences, mortuary temples, and other public buildings. Also present at Moundville are extensive midden deposits and archaeological traces of a bastioned palisade that once surrounded the site. All told, the archaeological remains cover more than 100 ha, making it one of the largest Mississippian sites ever built.

No doubt because of its impressive size, Moundville has attracted archaeological attention for well over a century (Steponaitis 1983b). Major excavations there took place from 1905 to 1906, and again from 1927 to 1941 (Moore 1905, 1907; Peebles 1979). These excavations yielded a tremendous corpus of archaeological material, including field records and artifacts from more than 3,000 burials, seventy-five

houses, and countless other proveniences (Peebles et al. 1981). Analyses of this material undertaken over the past twenty years have provided the basis for much of our current understanding of Moundville's society and economy (Peebles 1974; Peebles and Kus 1977; Peebles and Schoeninger 1981; Powell 1988; Welch 1986; Hardin 1981; van der Leeuw 1981; Steponaitis 1983a). Since 1978, additional smaller-scale excavations have produced valuable data on subsistence, craft production, and chronology (Michals 1981; Scarry 1986; Welch 1986; Steponaitis 1983a).

Considerable knowledge has been gained on other late prehistoric sites in the region as well. Surveys of varying intensity have been carried out since the turn of the century (Moore 1905; Nielsen, O'Hear, and Moorehead 1973; Walthall and Coblentz 1977; Peebles 1978; Bozeman 1982; Alexander 1982). A number of outlying sites have also been excavated (DeJarnette and Peebles 1970; Curren 1984; Welch 1986; Mistovich 1987, 1988). It can safely be said that the surveys have located most, if not all, of the Mississippian mound sites, as well as a sample of villages and farmsteads. As a result, we can now draw reasonable inferences concerning the spatial distribution of mound centers and the range of settlement types occupied during any given phase. But it must also be stressed that none of the surveys has been systematic or comprehensive enough to track demographic trends through time; in other words, we still lack data with which to compute reliable estimates of regional population, in either absolute or relative terms.

The late prehistoric chronology consists of five phases, all but the last of which can be subdivided into early and late subphases based on ceramic style (Jenkins and Nielsen 1974; O'Hear 1975; Steponaitis 1983a, 1986b; Curren 1984). From oldest to youngest, the phases and their approximate dates are as follows: West Jefferson, A.D. 900–1050; Moundville I, A.D. 1050–1250; Moundville II, A.D. 1250–1400; Moundville III, A.D. 1400–1550; and Moundville IV (formerly called Alabama River), A.D. 1550–1650. These phases constitute the framework within which the late prehistory of the Moundville region can now be sketched. Trends in settlement and political organization are presented first, followed by the evidence for changes in agriculture, craft production, warfare, and long-distance exchange.

Settlement, society, and mortuary ritual

Settlements of the West Jefferson phase sites were distributed throughout the Moundville region and varied considerably in size. The typical village covered 0.2–0.5 ha and may have been inhabited by 50–100 people (Welch 1985). In some parts of the valley, several such villages were spaced closely enough together to form large, almost continuous sherd scatters up to several hectares in extent; whether these large sites represent equally large aggregations of people or simply multiple reoccupations of favored locales is difficult to say (cf. Peebles 1987b: 5–6). Also present were small settlements marked by sherd scatters only 10–30 m in diameter. When excavated, they are typically found to contain one or two small, circular houses and some associated features (Jenkins and Nielsen 1974; Mistovich 1987). Although their role in the settlement system is still far from clear, these small sites may well have been seasonal occupations (O'Hear 1975; Scarry 1986; Welch 1981, 1985).

The evidence for political differentiation among West Jefferson communities is nil. None of the sites exhibit mounds, and none are known to contain elaborate burials. Of course, the latter statement must be tempered by the observation that only a handful of West Jefferson burials have ever been found. The best glimpse of contemporary mortuary patterns comes from the Tombigbee Valley, 50 km to the west, where a number of cemeteries have been excavated. Burials in these cemeteries were typically arranged in loose clusters of ten to twenty individuals, suggestive of kin groups or factions. Differentiation among burials was generally not great; most burials contained no grave goods, and the few that did usually contained shell beads, which in most cases had been sewn onto garments (Welch 1985). The overall situation seems to have been one of autonomous villages and a relatively egalitarian society.

During the Moundville I phase, beginning at ca. A.D. 1050, the social landscape changed dramatically. Single pyramidal mounds were constructed at four of the former villages; these mounds were topped by structures, almost certainly elite residences. None of the mounds was initially very big, but they grew over time as stages of fill were added. The mound at 1Tu50, for example, eventually reached a height of 3 m (Steponaitis 1986b). At least some of these mounds had cemeteries nearby, in which the more elaborate burials were accompanied not

only by shell beads, but also by artifacts of copper and other nonlocal materials (Peebles 1983: 188–9, 1987a: 27–9; Steponaitis 1983a). At about the same time these mounds were built, the bulk of the population in the valley abandoned the nucleated villages and began living in dispersed farmsteads. Presumably, each of the mound sites served as the political, economic, and ritual focus for the populace in the surrounding district.

So far as we know, the four local centers that existed early in the Moundville I phase were roughly equivalent in terms of the size and number of their earthworks. The civic-ceremonial center at Moundville, however, differed significantly from the others, in that it had an unusually high number of people living in its immediate vicinity. Recent analyses of sherd collections indicates that most midden deposition at Moundville occurred during the Moundville I phase (Steponaitis 1986b). Although the full extent and distribution of these middens is still unclear (and will remain so until more detailed studies of the pre-1941 excavations are undertaken), they seem to occur in many discrete patches scattered across the terrace on which the site is located, suggesting that an unusually high density of dispersed farmsteads once dotted this area. Based on the surveys that have been done to date, no other district appears to have had as high a concentration of Moundville I phase settlement. It should be stressed that Moundville had no special advantage over the other centers in the fertility or abundance of nearby soils (cf. Peebles 1978: 400–10). Thus, the causes of this centripetal tendency must have been social and political, rather than purely environmental.

Late in the Moundville I phase, at about A.D. 1200–1250, a second major transformation occurred, as Moundville grew to become the dominant political center in the region. What had formerly been a dense residential zone surrounding a small local center was now turned into an enormous civic-ceremonial precinct. The large, rectangular space was laid out, and mound construction commenced along its edges. During the Moundville II phase (A.D. 1250–1400) early stages of at least five mounds, and probably no fewer than ten, were already in use. During the Moundville III phase (A.D. 1400–1550) construction continued until all twenty mounds reached their final form.

Given the regularity of the site's plan, there can be no doubt that the positioning of the mounds had social and religious meaning (Fig. 9.1).

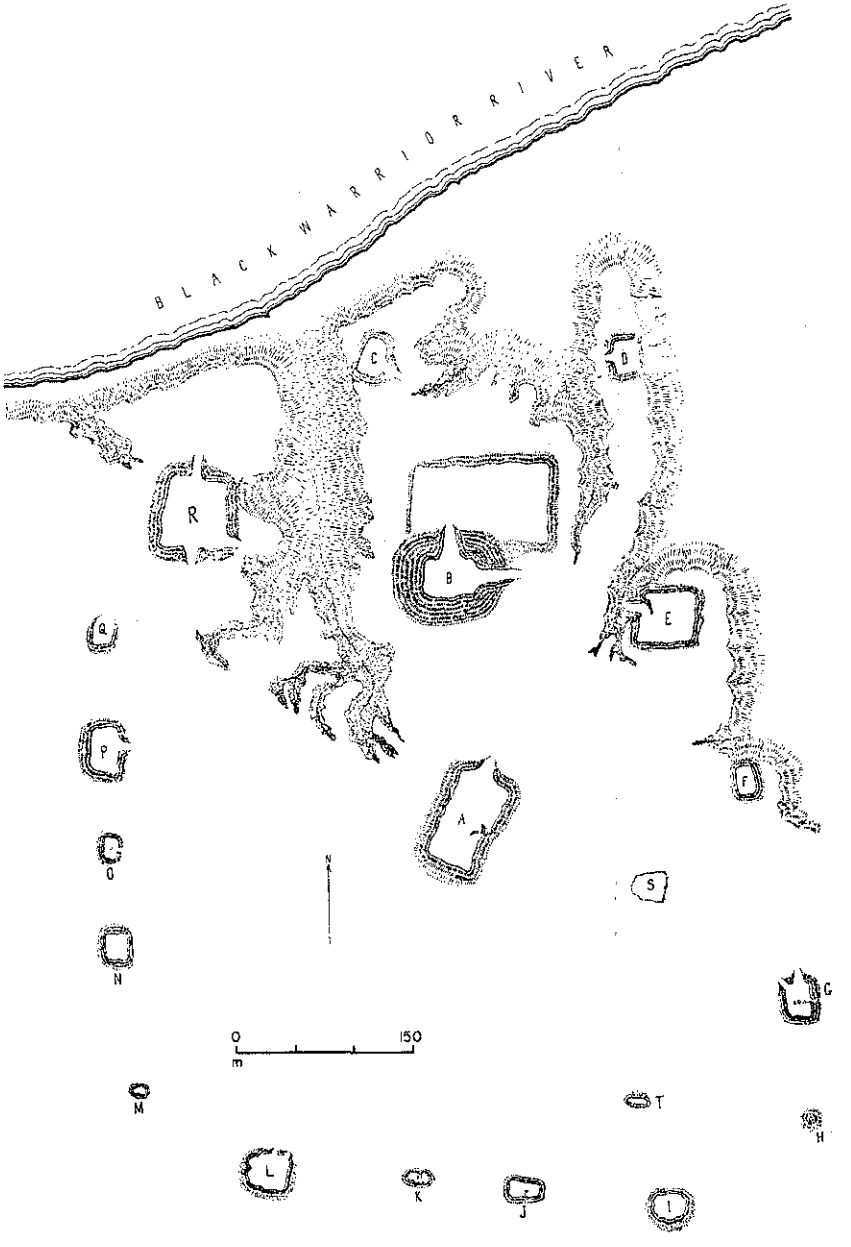

Fig. 9.1 The Moundville site (after Moore 1905)

The two largest mounds were located within the plaza along the site's central, north–south axis. Eighteen additional mounds were located along the plaza's periphery. Two kinds of symmetry are evident in the arrangement of these peripheral mounds (Peebles 1971: 82–3). One is a clear-cut, if slightly imperfect, bilateral symmetry around the central axis. The other is a consistent pairing of large and small mounds, especially evident along the plaza's eastern and western flanks. The small mounds typically contain burials, while the large mounds do not. Based on ethnohistoric parallels, Vernon Knight (personal communication, 1988) has suggested that each pair comprised the mortuary temple and elite residence of a particular clan (also see Knight 1989). He has further suggested that the bilateral symmetry represents the division of Moundville's clans into moieties, a highly plausible model given that moieties were a dominant organizing principle in southeastern Indian societies at the time of European contact (also see Peebles 1983: 190, 1987a: 27).

Moundville's resident population during the Moundville II and III phases was considerably smaller than it had been during the Moundville I phase, prior to its emergence as a paramount center. This drop in population is evidenced by the overall paucity of sheet midden deposits dating to these phases (Steponaitis 1986b) and can best be illustrated by examining the chronological distribution of excavated sherds. The largest and most comprehensive sherd sample ($n = 95,742$) comes from the Depression-era "Roadway" excavation, which followed a long, sinuous transect that cut across the central plaza as well as areas to the east, west, and south of the mounds (Wimberly 1956). Based on the relative abundance of diagnostic types, it has been estimated that roughly seventy-three percent of the recovered sherds date to the Moundville I phase alone; only about twenty-five percent date to Moundville II and III combined.[1] Taking into account the differing spans of the phases in question, these numbers suggest that a fourfold decrease in the rate of sherd deposition occurred after A.D. 1250 (Fig. 9.2). It is reasonable to assume that the remaining inhabitants comprised the pinnacle of the region's social, political, and religious elite, together with relatives, retainers, and assorted functionaries. This elite group was provisioned by tribute, evidence of which has been found in differential distributions of deer body-parts in elite versus nonelite middens (Welch 1986: 74–100). The elite were also capable of

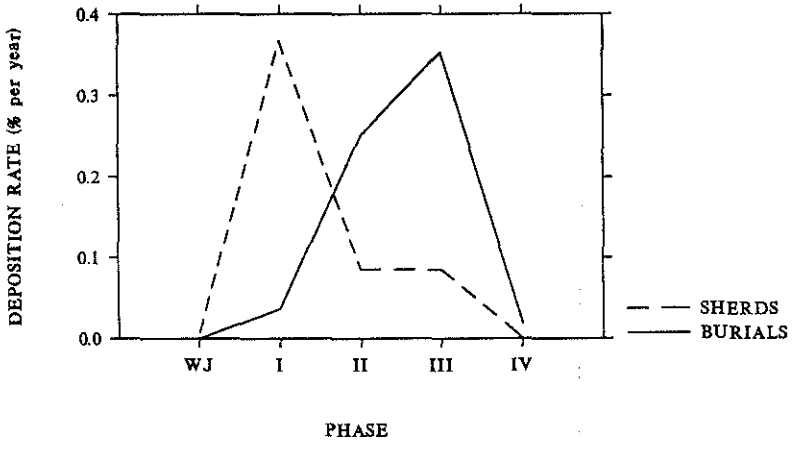

Fig. 9.2 The deposition rates of sherds and burials at Moundville. These rates were calculated as the percentage of items assigned to a given phase, divided by the length of the phase in years. The burial percentages are based on Table 9.1. The sherd percentages are based on the published counts from the Roadway excavation, partitioned into phases using the method of Kohler and Blinman (1987; see note 1). Key to phase abbreviations: WJ, West Jefferson; I, Moundville I; II, Moundville II; III, Moundville III; IV, Moundville IV

mobilizing considerable labor, as best indicated by the massive public architecture at Moundville itself.

While Moundville's resident population grew smaller, its *burial* population grew larger (Fig. 9.2). Of the graves that can be securely assigned to a single phase, only eight percent date to Moundville I, and ninety-two percent date to Moundville II and III. These figures strongly suggest that most of the people buried at the paramount center after A.D. 1250 did not actually live there. Clearly, Moundville was not only the political capital, but also an important center of ritual for the region as a whole.

Analysis of the Moundville burials suggests that social differentiation during the Moundville II and III phases was pronounced. Approximately five percent of the burials fall into a group that Peebles has called the "superordinate" segment. These burials were generally interred in or near mounds, and were accompanied by elaborate arti-

facts that served as symbols of high rank or political office (Peebles 1974, 1986: 28; Peebles and Kus 1977). Status-related distinctions were evident not only in mortuary ritual, but also in diet and health. Trace elements in human bone indicate that elite males may have consumed more meat than commoners (Peebles and Schoeninger 1981). Although the health (insofar as one can determine from skeletal evidence) of the population in general was quite good, elites showed the lowest incidence of iron-deficiency anemia (Powell 1988: 148). The likelihood of traumatic injury also differed according to social class. Elite males had proportionally fewer broken, cut, and pierced bones than nonelite males, while elite females showed no traces of such injuries at all (Powell 1988: 144–5).

Even while Moundville was at its peak, a number of single-mound centers continued to be occupied. These were presumably used by local chiefs who, though subordinate to the paramount at Moundville, continued to have jurisdiction over their immediate districts. As before, most of the region's inhabitants continued to live in dispersed farmsteads.

Some time after A.D. 1500, the chiefly superstructure that had existed for the previous three centuries began to come apart (Peebles 1986). Initial signs of this crisis were subtle, but unmistakeable in the archaeological record:

(*a*) a progressive diminution, during late Moundville III, in the number of burials interred at Moundville, together with the appearance of cemeteries at outlying centers (such as 1Ha7 and 1Tu2; see DeJarnette and Peebles 1970; Welch 1986);
(*b*) a burst of late mound construction at these same outlying centers, the largest earthworks being built at the centers farthest away from Moundville (Bozeman 1982; Steponaitis 1978); and
(*c*) the reappearance, in late Moundville III, of nucleated villages (Bozeman 1982: 307), presumably for reasons of defense.

Whatever its causes, the dissolution was rapid. By the beginning of the Moundville IV phase in the mid-sixteenth century, Moundville and all the remaining single-mound centers had fallen out of use. The valley's population aggregated in large villages, 1–2 ha in extent (Sheldon 1974; Curren 1984). All evidence of social ranking disap-

peared from burials. Health, too, deteriorated significantly; a severe form of iron-deficiency anemia afflicted twenty-four percent of the burials at one Moundville IV village, and sixty-two percent at another (Powell, 1988: 191). By the mid-seventeenth century, the Black Warrior Valley had become part of a buffer zone between major political alliances to the east (Creek) and to the west (Choctaw), and the region was largely abandoned (Knight 1982).

In sum, the late prehistoric sequence in the Moundville region was marked by several major transformations in political organization. Beginning with relatively egalitarian, autonomous villages at A.D. 900, the region saw the development of small-scale, local centers at about A.D. 1050, followed by the emergence of a paramount center at about A.D. 1200. In the sixteenth century, the chiefly organization collapsed, and the societies in the region once again reverted to a more egalitarian form. Let us now examine some important processes that played a critical role in these developments, beginning with the intensification of food production.

Food production

At the start of the West Jefferson phase, ca. A.D. 900, the region's inhabitants relied for their subsistence on a mixture of hunting, fishing, gathering, and gardening. White-tailed deer was the major source of meat, supplemented by a variety of small mammals, birds, turtles, and fish (Michals 1987). The staple plant foods were nuts – mostly hickory and acorn – that could be gathered in nearby forests. Also eaten were wild fruits (e.g., persimmon, grape, sumac, cherry/plum) and seeds from a variety of starchy-seeded plants (e.g., maygrass, chenopod, knotweed) that were probably cultivated. Maize, a definite cultigen, was present, but only in small amounts (Scarry 1986). Early West Jefferson peoples clearly practiced gardening, but used it only as a minor element in a diversified economy that was based largely on wild foods.

Subsequent centuries saw dramatic changes in the economy as small-scale gardening gave way to intensive agriculture. The process of intensification was remarkably rapid and focused predominantly on maize. Although the percentages of species in paleobotanical assemblages cannot be taken as direct measures of dietary importance, the trend in the archaeological record is clear: the abundance of maize (by

weight) among plant-food remains grew from less than one percent in the early West Jefferson phase, to more than fifty percent in the Moundville I phase (Scarry 1981). Scarry's (1986) exhaustive study of plant remains from finely dated contexts has shown that the intensification of maize production was well underway by late West Jefferson times, and had leveled off by late Moundville I; in other words, the shift from small-scale gardening to intensive farming took place over a span of less than 200 years, perhaps even less than a century. The same trend in maize production, with virtually identical timing, has been documented in the nearby Tombigbee Valley as well (Caddell 1981, 1983).

Studies of wood charcoal suggest that forest clearance progressed in the immediate vicinity of the Moundville site throughout the Moundville I phase, as more and more fields were brought into production (Scarry 1986: 247). Since importance of maize – and presumably the intensity of agriculture – had already increased substantially prior to this time, the additional clearance may well be due to localized population growth (which is known to have occurred at Moundville) or shifting-field cultivation, rather than a further intensification of farming.

Whatever the case, once the fields were cleared and the new economic regime was established, farmers continually manipulated their crops to increase harvests. Two distinct varieties of maize were grown during each phase, yet the phenotypic diversity of cobs steadily decreased through time (Scarry 1986: 360–407). According to Scarry (1986: 405),

> both effects could be produced by careful seed selection and diligent field maintenance. Within a cultivar, desirable characteristics can be encouraged and genetic variability can be reduced by saving ears that meet specific standards for seed. Also within a cultivar, phenotypic diversity can be reduced by weeding and other field activities that decrease stress on the growing plants. At the same time, separate cultivars can be maintained by planting the seed for each type in well separated fields so that cross pollination is minimized. Such crop strategies are labor intensive and are generally practiced when maize is produced for high yields.

In short, a dramatic intensification of maize production occurred at about A.D. 1000, just prior to the first obvious signs of political centralization in the region. As time went on and political complexity increased, farmers consistently pushed, or perhaps *were* pushed, to produce even more food from their fields.

Craft production

Let us now turn to the production of socially valued craft items, the so-called "prestige goods," "primitive valuables," or "wealth objects," that invariably play a role in chiefly politics. Such items were generally made of nonlocal or unusual raw materials, and archaeological evidence of their production may consist of

(*a*) items broken in the process of manufacture,
(*b*) caches or discarded scraps of raw material, or
(*c*) specialized tools that can be identified as having been used to make a certain product.

Owing to the vicissitudes of preservation and sampling, such evidence is often difficult to find, and, even when found, its significance often goes unrecognized. Fortunately, in the present instance, production locales have been identified for a number of different craft items, including shell beads, nonlocal-chert bifaces, greenstone celts, mica ornaments, and red-slate gorgets. Although the evidence is uneven, it suggests that craft production changed through time.

West Jefferson phase assemblages typically contain numerous "microdrills" or bit-tools made on small blades or flakes. Wear-pattern studies (Pope 1989) have demonstrated that the vast majority of these tools were used to drill shell beads; a lesser number were used to perforate hide, quite possibly garments onto which these beads were sewn. Such tools are ubiquitous on West Jefferson sites, suggesting that the manufacture of beads and beaded garments was a widespread household activity at this time. The virtual disappearance of these tools in later contexts may indicate either that local bead production declined, or that it became less widespread and therefore less visible in the archaeological record. Whatever the case, it is interesting to note that the tenth and eleventh centuries A.D. represent a peak in the evidence for bead-making not only in the Moundville region, but across much of the southeast as well (Steponaitis 1986a: 392).

The clearest indications of craft production during the Moundville I phase come from local centers, rather than domestic sites. At Moundville, excavations in an elite residential zone yielded an assemblage in which seventy-five percent of the debitage consisted of nonlocal materials, principally Ft. Payne and Bangor cherts (Scarry 1986: 138–74; Welch 1986: 146–71). Significantly, the nature of the non-

local debitage implies that biface manufacture, not just resharpening, took place there. The same midden also contained numerous fragments of greenstone, together with some scraps of mica, copper, and graphite; greenstone was commonly made into celts, mica and copper were used in elite regalia, and graphite was probably employed as a pigment. This unusual concentration of nonlocal materials, some of which may have been manufacturing debris, prompted the excavator to suggest that at least some of Moundville's early residents were "part-time craft specialists" (Scarry 1986: 155).

Relatively few contexts dating to the Moundville II and III phases have been excavated or properly analyzed with questions of craft production in mind. The only detailed information comes from 1Ha7, a local center that dates to the Moundville III phase, at which no direct evidence for production of socially valued artifacts was found, despite a concerted search (Welch 1986). The only known traces of craft activity during these later phases come from Moundville itself, which at this time was the paramount center. These include

(*a*) a red-slate gorget broken in the process of manufacture (Steponaitis 1983b) and
(*b*) a cache pit filled with raw mica sheets (Scarry 1986: 163–8).

The dating of these traces is highly uncertain, and the present assignment can only be regarded as a best guess. While the information available for the Moundville II and III phases may be sparse, data pertaining to craft activities during the Moundville IV phase are completely nonexistent.

All in all, present data suggest that the range of sites within which craft activity occurred became ever more restricted with time. From A.D. 900 to roughly A.D. 1050, just prior to the appearance of the first mound sites, the manufacture of shell beads and beaded garments was carried on in virtually every village in the region. From A.D. 1050 to 1250, bead manufacture seemingly declined, and the crafting of artifacts from nonlocal materials – predominantly stone tools and items of regalia – largely occurred at local centers. After A.D. 1250, such craft activity seems to have been restricted primarily to the paramount center (Welch 1986). So far as we know, this pattern persisted until the paramount center declined in the sixteenth century, after which there is simply no information on which to base any inferences.

Warfare

The intensity of warfare in the region at any given time was best reflected by the dominant pattern of settlement. As I have argued elsewhere (Steponaitis 1983a: 172), dispersed settlements could exist only in times of relative peace, or in a situation where hostilities could be reliably anticipated, thereby giving people a chance to retreat to safer surroundings; nucleated settlements, on the other hand, were a response to warfare that was relatively intense or unpredictable. By this measure, the threat of conflict was high during the West Jefferson phase, lessened from Moundville I through early Moundville III, then rose again in late Moundville III and Moundville IV.

Of course, warfare was never totally absent, even in the middle part of the sequence, since weapons and war trophies were prominently depicted in the iconography of chiefship, and Moundville itself was surrounded by a palisade for at least part of that time. But, at the very least, the existence of political centralization seems to have made warfare more controlled, more predictable. This probably stemmed from the ability of chiefs to forge alliances, to adjudicate disputes, and to "rein in" those who would perpetrate unwanted violence against neighboring polities. It also may have stemmed from a fundamental change in the way warfare was waged. Two types of warfare were documented in the southeast by the earliest European explorers (DePratter 1983: 44–67). One was a kind of low-level, "guerrilla" warfare carried on by small raiding parties that would ambush an enemy, kill or capture a few people, then flee. This was the dominant mode of fighting in areas where political centralization was absent, and was often motivated by blood-feuds or other disputes among localized kin groups. The second kind of warfare involved scores and sometimes hundreds of warriors who marched in formation and fought pitched battles under the direct control of a chief. This larger-scale, organized warfare was only waged by centralized polities, and was invariably geared toward political ends, such as the enforcement of tribute demands or the elimination of threats to chiefly power (e.g., Hudson 1988). There can be no doubt that both kinds of warfare occurred prehistorically as well, but, as in historic times, which kind was dominant probably depended on political circumstances. In the Moundville region, I suspect that small-scale raiding took place throughout the sequence, but that large-scale, politically motivated

warfare was confined only to the phases from Moundville I to Moundville III.

It is interesting to note that, in the neighboring Tombigbee Valley, the frequency of skeletal injuries due to human violence was unusually high around A.D. 900–1000, and declined immediately thereafter (Cole, Hill, and Ensor 1982; Welch 1985). Up to thirteen percent of the people in cemeteries contemporary with the early West Jefferson phase showed signs of imbedded projectile points, "parry" fractures, and the like. Only five percent of the population in cemeteries contemporary with Moundville I had similar injuries. At Moundville itself, where most of the burials date to Moundville II and III, less than four percent showed signs of such traumas (Powell 1988: 144–6). Thus, the skeletal evidence from Moundville and surrounding regions is consistent with the interpretation based on settlement patterns, that intercommunity violence peaked in the centuries just prior to the emergence of political centralization.

Long-distance exchange

Patterns of long-distance exchange in the region can best be examined by monitoring the abundance of nonlocal goods in burials. Such goods often took the form of regalia, ornaments, pigments, and "ceremonial" implements, that is, items whose value was principally social and symbolic. While it is not always known where these items were manufactured, the raw materials came from distant sources: marine shell from the Gulf of Mexico; native copper from the Appalachians and Great Lakes (Goad 1978); greenstone, mica, diorite, and other rocks from the "crystalline province" of eastern Alabama (Jones 1939); and galena from Missouri and Wisconsin (Walthall 1981). These sources range from 150 km to well over 1,500 km away.

Nonlocal pottery was also present in the region and often was included in burials. Vessels can be identified on stylistic grounds to have originated in places as far south as the Gulf Coast, as far west as Texas, and as far north as Kentucky (Steponaitis 1983a). Interestingly, almost no pottery entered the region from the east, suggesting that political or household alliances generally did not extend in that direction (Peebles 1987a: 33).[2]

As noted previously, the best information on burials contemporary with the West Jefferson phase comes from the neighboring Tombigbee

Valley. There, the only nonlocal materials that occurred in graves at this time were marine shell and greenstone. The abundance of both materials was relatively small, but seems to have increased significantly between A.D. 900 and 1050 (Welch 1985). For example, the proportion of shell beads made from marine species jumped from only six percent in cemeteries at the early end of this range, to fifty-eight percent in cemeteries at the later end. Similarly, greenstone celts occurred only in the later cemeteries, despite the fact that the number of burials in early and late cemeteries was almost identical.

The incidence of nonlocal materials after A.D. 1050 can best be illustrated with burial data from Moundville itself (Table 9.1; Fig. 9.3). During the Moundville I phase, the intensity of long-distance exchange continued to increase. Marine shell now comprised virtually all the beads found in burials, greenstone celts continued to be present, and a variety of new exotic materials appeared, such as copper, mica, and galena. The total frequency of trade materials peaked around the Moundville I–II transition, then dropped somewhat; in Moundville III, the abundance of most materials was about the same as it had been during Moundville I. By the onset of Moundville IV, exotics had virtually disappeared; none occurred in the small sample burials at Moundville, and only a very few marine shell and greenstone objects have been found in more than a hundred burials excavated at other sites (Sheldon 1974; Curren 1984).

It is interesting to note that nonlocal pottery reached its maximum frequency during Moundville I times, slightly earlier than the other nonlocal categories (Fig. 9.3). This may indicate that nonlocal vessels (or the long-distance contacts they reflected) had greater social value early in the sequence than later, when copper, shell, and other materials became more exclusive tokens of wealth and prestige.

All in all, the observed fluctuations in long-distance exchange correlate strongly with the political developments described previously. Several points bear emphasis in this regard: first, a sudden jump in the importation of marine shell beads and greenstone seems to have occurred at about A.D. 1000, just prior to the construction of the first single-mound centers. Second, foreign materials continued to increase until about A.D. 1200, when Moundville became the paramount center. Third, the century or so immediately following Moundville's emergence to regional dominance saw exotics reach their maximum frequencies in burials. And fourth, a drastic curtailment in

Table 9.1. *Chronological distribution of nonlocal artifacts in dated burials at Moundville*[a]

	Phase[b]						
	I	I/II	II	II/III	III	III/IV	IV
Copper:							
Copper earspool	0	5	7	10	5	0	0
Copper gorget/pendant	1	0	2	4	3	0	0
Copper cutouts[c]	0	1	1	1	0	0	0
Copper ornament (misc.)	0	3	5	4	4	0	0
Copper axe	0	0	1	0	1	0	0
Copper fish hook	0	3	0	0	0	0	0
Total	1	12	16	19	13	0	0
Shell:							
Shell ear plug	0	0	0	1	4	0	0
Shell gorget/pendant	0	2	3	6	3	0	0
Shell beads[c]	2	3	4	23	13	0	0
Shell ornament (misc.)	0	4	1	7	4	0	0
Shell cup	0	0	1	0	0	0	0
Total	2	9	9	37	24	0	0

Other nonlocal stone:							
Metamorphic rock celt	1	1	2	7	4	0	0
Greenstone, worked	0	4	0	0	0	0	0
Mica ornament	0	0	0	2	1	0	0
Limestone effigy pipe	0	0	0	0	1	0	0
Diorite effigy bowl	0	0	0	0	1	0	0
Galena mass	0	1	1	1	3	0	0
Total	1	6	3	10	10	0	0
Total (excluding pottery)	4	27	28	66	47	0	0
Nonlocal pottery vessels	3	5	4	26	10	0	0
Dated burials	17	41	59	222	149	15	2

[a]This table includes data from all burials that can be dated to a span of one or two phases by direct association with diagnostic ceramics; individuals within multiple interments are counted separately. The present figures differ from those presented earlier by Peebles (1987a: Table 2.1) because they are based on a larger sample of burials, including many that could not be dated at the time of Peebles's analysis.

[b]Key: I, Moundville I; I/II, Moundville I or II; II, Moundville II; II/III, Moundville II or III; III, Moundville III; III/IV, Moundville III or IV; IV, Moundville IV (formerly Alabama River).

[c]Multiple items found with the same burial are regarded as a set and counted as a single occurrence.

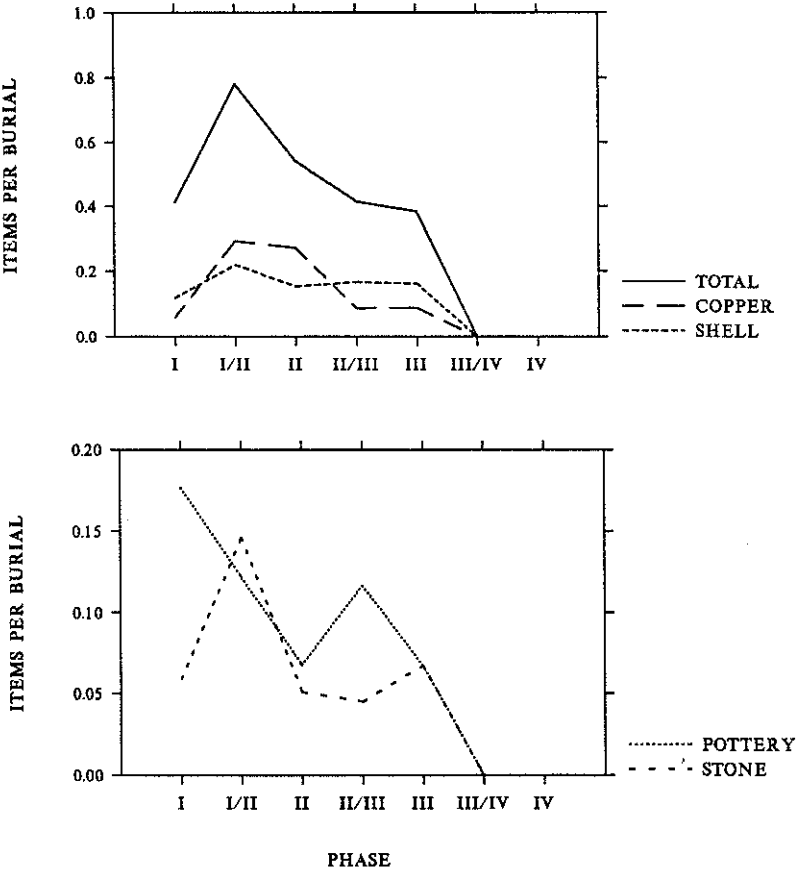

Fig. 9.3 The relative abundance of exotics in Moundville burials. The vertical axis represents the ratio between the number of exotic items and the number of burials that date to each phase, based on Table 9.1. Key to phase abbreviations: I, Moundville I; I/II, Moundville I or II; II, Moundville II; II/III, Moundville II or III; III, Moundville III; III/IV, Moundville III or IV; IV, Moundville IV.

long-distance exchange after A.D. 1500 coincided with the region-wide collapse of political centralization. As we shall see, there are good reasons to believe that these correlations were not simply fortuitous, but rather stemmed from the important role that nonlocal goods played in creating and maintaining hierarchical relations.

Discussion

Now that the various lines of evidence have been set out, it remains to draw them together into a historical model that accounts for some of the changes observed. Previous explanations for the appearance of chiefdoms in this region have stressed the functional advantages of political centralization, especially in mitigating the risk of crop failure (e.g., Peebles and Kus 1977; Steponaitis 1983a). Such reasoning, however, has been effectively undermined by Scarry (1986), who has demonstrated that the risk of large-scale crop failure – the kind that might require chiefly intervention – was virtually nil. This case simply highlights the broader realization that managerial and functional explanations of chiefship are generally inadequate, since they take no account of the actual mechanisms by which chiefship was established and maintained (Earle 1987a). Constructing more plausible explanations requires that we focus not on the benefits of chiefship, but rather on the political strategies of emergent elites and the material conditions that helped those strategies to succeed.

The West Jefferson phase appears to have been a time of considerable conflict and competition. Although communities were still basically egalitarian, kin groups and individual leaders vied among themselves for power and prestige. In this context, households throughout the region were led to intensify production. Local manufacture of craft items such as beads and beaded garments greatly increased. I have argued elsewhere that

> beads, beaded garments, and other valued craft items probably served as tokens in social transactions. Displayed as possessions, these tokens enhanced personal prestige; presented as gifts, they could be used to build alliances and inflict social debts. Exchanges of such items, especially among budding elites, were instruments of political strategy as much as, if not more than, purely economic activities. (STEPONAITIS 1986a: 392)

Equally important was the sudden shift to maize agriculture that began during this phase. Whether this shift was precipitated by population growth or political demands is difficult to say; some evidence exists for both (cf. Steponaitis 1986a: 389; Scarry 1986: 415–22). Either way, the consequences of this change were profound. The hunting, gathering, and gardening economy of early West Jefferson times probably placed severe constraints on the amount of surplus that could be deployed for political ends.[3] As more fields were cleared and planted in

maize, however, these constraints were lifted and a new range of political developments became possible.

The prestige-building transactions fueled by this intensified production were ultimately successful. Around the beginning of the Moundville I phase, social differentiation reached a point at which the elite symbolically split themselves off from the commoners by placing their residences atop mounds. There can be little doubt that Mississippian platform mounds were sacred structures; although the full nexus of meanings originally associated with these earthworks will never be known, linguistic evidence suggests that they were in part metaphors for the earth (Knight 1981). Prototypes of such mounds had been used during the first millennium A.D. across the southeast to delimit sacred areas used in funerary rituals (Steponaitis 1986a: 386). By placing their residences on top of such mounds, elites effectively appropriated this symbol and used it to legitimize their new-found authority. Other ideological manipulations, nowadays invisible, undoubtedly took place as well.

Per capita maize production continued to increase early in the Moundville I phase, but soon reached a plateau. The major economic changes during this phase were in the realm of craft production and exchange, and again seem to have been motivated by political concerns. The manufacture of socially valued, durable goods became ever more restricted to local mound centers, and presumably came more under the control of local chiefs. Indeed, at least some of this craft production took place in the elite households themselves. At the same time, elites expanded their participation in networks of long-distance exchange. The exotic items thereby obtained – copper, marine shell, galena, and the like – were used to further enhance the power and influence of local chiefs. On one hand, differential access to these valued materials served to demonstrate the efficacy of the elite and to mark their special status. On the other, limited redistribution of such items could be used to secure the loyalty of allies and to increase the size of dependent factions. As Peebles (1986, 1987a, 1987b) and Welch (1986) have both cogently argued, by the end of the Moundville I phase, local politics had clearly acquired the characteristics of a "prestige goods economy" (*sensu* Frankenstein and Rowlands 1978), in which "possession and manipulation of the exotic, the rare, and the valuable served to legitimize the role of the elite and their place in the social order" (Peebles 1987b: 15). The latter set of strategies resulted in

further centralization and culminated in the establishment of a paramount center at Moundville.

Of course, none of these political strategies would have succeeded had not certain material conditions been present. Intensification of farming was greatly facilitated by the abundance of fertile land and the ideal climate for growing maize. Similarly, participation in long-distance exchange was made possible by the availability of local surpluses and proximity to trade routes. Yet perhaps the most important factor in all of these strategies was access to labor (Lightfoot 1984; Drennan 1987; Feinman and Nicholas 1987a; Earle, Chapter 4 above). Such access usually entailed maintaining a certain "critical mass" of people close to where the labor was needed. It is not surprising, therefore, that the Moundville I centers all arose in localities that had previously supported dense, West Jefferson phase villages; or that the Moundville II–III paramount center was built on the terrace that had supported the greatest known concentration of Moundville I occupations. The intensity of warfare in West Jefferson times produced a kind of social circumscription (Carneiro 1981) that favored nucleated settlements and limited emigration; such circumscription would have made access to labor relatively easy, even in the absence of political centralization. By Moundville I times, however, warfare had decreased to the point where settlements were mostly small and dispersed. Thus, the concentration of people around the local center at Moundville was probably the result of a conscious attempt by the elites to counteract this centrifugal tendency. One can only guess at how this concentration was achieved, but access to ritual or to nonlocal goods may well have been important incentives (Feinman, Chapter 10 below).

Once it was achieved, the region-wide centralization at Moundville lasted about 300 years; sometime during the first half of the sixteenth century, the Moundville chiefdom collapsed. There are currently two schools of thought concerning why this collapse occurred. Some argue it was brought about, directly or indirectly, by the coming of the Europeans (Curren 1984; Hudson, Smith, and DePratter 1987). These scenarios emphasize the depopulations that were caused by European diseases, which sometimes spread ahead of the Europeans themselves, as well as the cultural and political disruption caused by European presence. Others argue that the collapse was the result of indigenous processes, such as the inability of local farmers to sustain the requisite levels of surplus production, or the severing of long-

distance exchange relationships on which the maintenance of inequality depended (Peebles 1983, 1986, 1987a, 1987b). While we still lack the evidence with which to decide conclusively among these models, it is worth noting that Moundville's decline seems to have begun in the late Moundville III phase, prior to the earliest European incursions in the region. It is also worth noting that when the first Spaniards did arrive, in 1541, they made no specific mention of a large paramount center in the region, suggesting that Moundville had already diminished in importance or been abandoned (cf. Hudson, Smith, and DePratter 1987). Hence, if the Europeans had any effect at all, it may only have been to hasten a process of political fragmentation that was already well underway.

THE POCAHONTAS REGION: A.D. 1000–1500

The Pocahontas region, named after its largest mound site, is located in the state of Mississippi, about 260 km west of Moundville. The region comprises the area in which the drainage of the Big Black River cross-cuts a physiographic zone called the Jackson Prairie. This portion of the drainage (between the modern towns of Edwards and Canton) is about 60 km long and 35–40 km wide. The river and its larger tributaries are flanked by broad floodplains and terraces, which in turn are surrounded by gently rolling uplands. In late prehistoric times, the region was dominated by hardwood (oak-hickory) forests interspersed with scattered patches of prairie vegetation (Lowe 1919: 219, 238–40). The range and abundance of wild foods would have been virtually identical to those present in the Moundville region. Equally rich was the Pocahontas region's agricultural potential. Early in the twentieth century, it was widely noted that "some of the most desirable lands in the State occur in this area" (Lowe 1919: 241). In terms of soil abundance, fertility, growing season, and rainfall, the conditions for growing maize were essentially the same as, and perhaps even marginally better than, those found at Moundville (see Lowe 1919: 217, 241ff.; Kocher and Goodman 1918; Tharp, Smies, and Musgrave 1920).

The first major archaeological work in the Pocahontas region started in 1927 and lasted through 1929. During those years, James A. Ford and Moreau B. Chambers, a pair of young archaeologists working for

the Mississippi Department of Archives and History, criss-crossed the region recording sites and excavating mounds. Except for a brief summary of some of their excavations (Ford 1936: 115–28), the bulk of this work was never published. Luckily, the fieldwork was of high quality for its time, and recent studies of their notes and collections have provided a wealth of data on late prehistoric chronology and mortuary practices (Shaffer and Steponaitis 1982, 1983). The only modern excavations in the region worth noting took place in 1974, and focused on the peripheries of the platform mound at Pocahontas (Rucker 1976). Although the mound itself was not explored, a large sample of materials was obtained from closely associated middens, which yielded valuable information on the dates and duration of the mound's occupation. Considerable information on settlements in the region also resides in the state's site files (e.g., Neitzel 1968).

The late prehistoric chronology is based on a seriation of ceramic assemblages (consisting of whole vessels) from the burial mounds excavated by Ford and Chambers, and on cross-ties with the well-established ceramic sequence in the Lower Yazoo Basin (Williams and Brain 1983), with which this region shares many stylistic similarities. Three phases have been recognized so far, each named after the site at which it is most clearly represented: the Dupree phase, ca. A.D. 1000–1200; the Chapman phase, ca. A.D. 1200–1350; and the Smith phase, A.D. 1350–1500. In absolute dates, these approximate the Moundville I, Moundville II, and Moundville III phases, respectively. It is interesting to note that the Pocahontas region seems to lack settlements that date between A.D. 700 and 1000, or that postdate A.D. 1500. Whether these gaps in occupation represent accidents of sampling or real abandonments is difficult at this stage of investigations to say.

By comparison with the Moundville region, which has been one of the most intensively studied in North America, the Pocahontas region still remains all-too-poorly known. Studies of faunal remains have been few (Rucker 1976), and studies of plant remains nonexistent. In other words, we lack direct evidence with which to reconstruct subsistence practices and how they changed through time. Given that maize agriculture was intensified virtually everywhere across the interior southeast between A.D. 800 and 1000 (Johannessen 1984; Yarnell and Black 1985; Lynott et al. 1986; Steponaitis 1986a; B. Smith 1986; Scarry 1988), it is safe to assume that the late pre-

historic inhabitants of this region were farmers, but little else can be said. Similarly, no data exist on local patterns of craft production or the intensity of warfare. Hence, the sections that follow will focus principally on settlement, mortuary ritual, and long-distance exchange. Despite the many gaps in our understanding, these lines of evidence make it quite clear that the historical trajectory in this region was different than that at Moundville.

Settlement, society, and mortuary ritual

Late prehistoric sites in the region were of three types: platform-mound centers, burial-mound centers, and hamlets. Platform-mound centers were typically marked by a single, flat-topped earthwork. The best-known example is the Pocahontas site, which is located near the modern town of the same name along the upper reaches of Limekiln Creek, a tributary of the Big Black River. The one platform mound at this site, the largest in the region, stands 6 m high and some 53 m square at the base (Rucker 1976: 7). Judging from the debris that was excavated on its flanks, it was once surmounted by an inhabited structure, presumably an elite residence. Sherd distributions suggest that other residences were scattered in the vicinity of the mound as well. A burial mound is located some 400 m south of the platform mound, but whether these two earthworks were used at the same time is unknown.

The burial mounds were circular, dome-shaped tumuli that served as repositories for the dead. Examples range from 20 to 30 m in diameter and from 1 to 4 m in height. Most often burial mounds occur singly on the landscape; rarely they are found in loosely clustered groups of two or three. Excavations have shown that these mounds were accretional, with burials placed either in shallow pits or directly on the surface then covered with fill. As one might expect in such a case, the number of burials in a mound generally correlates with the mound's overall size; a small mound might contain only a dozen interments, a large one more than fifty. Judging from the inclusive ceramics as well as from the number of burials, it is unlikely that any of these mounds was used for more than a generation or two.

There are no large, dense midden accumulations near any of these mounds or anywhere in the region that would signify the presence of nucleated villages. Rather, it seems that the bulk of the population

during all three phases was dispersed in small hamlets or farmsteads, ranging from 0.1 to 0.8 ha in size (e.g., Lorenz 1986).

At least two dozen mound sites are known to exist in the region; many more earthworks, especially at the smaller end of the size range, probably still remain to be found. Of the known sites, only one platform mound and six burial mounds have thus far yielded excavated collections that can be dated. The platform mound at Pocahontas was first constructed during the Dupree phase, and continued to be occupied well into the Chapman phase (cf. Rucker 1976). The burial mounds sort chronologically as follows: two (Dupree and Sycamore) can be confidently assigned to the Dupree phase; one (Chapman) confidently to the Chapman phase; two (Smith and Gross) confidently and one (Woodbine) tentatively to the Smith phase. Despite the many undated mounds and other uncertainties, three things are abundantly clear: first, platform-mound centers were occupied in all phases except possibly the last; second, burial-mound centers were constructed and used throughout the sequence; and third, no paramount center even remotely approaching the size and complexity of Moundville ever emerged. The largest mound centers were of about the same scale as the subsidiary "local centers" in the Moundville regional system.

Additional insights can be gained from the mortuary ritual manifested in the burial mounds. These mounds contained a diversity of burial types, ranging from primary inhumations to disarticulated bundles of longbones and isolated skulls. The positioning of interments showed little patterning; burials were scattered in seemingly random fashion throughout the fill, and were placed in a wide variety of orientations. The same can be said for the artifacts that accompanied the burials. Typical grave goods included ceramic vessels, greenstone celts, chipped stone tools, pipes, pigments, and ornaments of shell and copper. Many items, by virtue of their placement, did not seem to be associated with any particular burial; it is as though they were placed in the mound as collective rather than individual offerings. Apart from distinctions in burial type, the mounds show little internal differentiation or structure.

An interesting pattern does become apparent, however, when contemporary mounds are compared (Table 9.2). This pattern involves consistent differences in burials and artifacts, and is most clearly evident among the three latest mounds, which date to the Smith

Table 9.2. *Distribution of selected artifacts and burial types among burial mounds in the Pocahontas region*[a]

	Dupree phase		Chapman phase	Smith phase		
	Dupree	Sycamore	Chapman	Woodbine	Gross	Smith
Total "find" count[b]	94	11	11	18	47	46
Total burial count	42	12	15	30	57	22
Selected artifact counts:						
Copper (misc.)	7	0	0	2	1	0
Ritual bundles[c]	2	0	0	2	4	0
Carapace fragments	0	0	0	1	1	0
Pots	70	5	8	15	38	40
Pot-to-burial ratio	1.67	0.42	0.53	0.50	0.67	1.82
Burial counts:						
Primary	3	6	2	11	13	12
Isolated skull	17	2	6	13	31	0
Disarticulated	1	3	4	2	11	8
Unknown type	21	1	3	1	2	2
Burial proportions:						
Primary	0.07	0.50	0.14	0.36	0.23	0.55
Isolated skull	0.40	0.17	0.40	0.43	0.54	0.00
Disarticulated	0.02	0.25	0.27	0.07	0.19	0.36
Unknown type	0.50	0.08	0.20	0.13	0.04	0.09

[a]Compiled from Shaffer and Steponaitis (1982).
[b]Each "find" is a discrete cluster containing one or more artifacts, as recorded by the excavators in the field.
[c]Each "bundle" comprises a group of small artifacts that were found tightly clumped, as though they originally had been wrapped in a perishable container. Such bundles may contain the following artifacts in varying combinations: clay pipes, quartz crystals, small greenstone celts, flakes, blades, bifaces, bivalve shells, carapace fragments, discoidals, plummets, and sandstone abraders.

phase. These mounds are of two distinct kinds. One kind, represented by Gross and Woodbine, is marked by a predominance of isolated skulls, with primary and bundle burials less common; the consistent presence of copper, ritual bundles, and terrapin carapaces (probably rattles); and about half as many pots as burials. The other kind, represented by the Smith mound, contains mainly primary burials and no isolated skulls; no copper, ritual bundles, or carapace fragments; and about twice as many pots as burials. These distinctions are not simply the result of sampling error: Gross and Smith are radically different despite having similar samples (forty-seven vs. forty-six finds); at the same time, Gross and Woodbine are generally similar despite having different samples (forty-seven vs. eighteen finds). Nor can we attribute these distinctions to geographical variation, since Gross and Smith (dissimilar in content) are only 4 km apart, while Gross and Woodbine (similar in content) are 11 km apart. Analogous contrasts, although not quite so dramatic, can be seen among the earlier mounds as well. Dupree and Sycamore show essentially the same distinctions as the late mounds, except that the pot-to-burial ratios are reversed and carapace fragments are totally absent. Chapman, the only mound that dates to the middle phase in the sequence, has an intermediate pattern, with an artifact assemblage like Sycamore's and a burial assemblage like Dupree's; since no other mounds of this phase have been excavated, how (or if) Chapman differed from them is unknown.

The existence of contemporary yet contrasting mound types may signify the segmentary organization that was common in the southeast at the time of European contact. Ethnographically, different moieties and clans carried different sets of ritual responsibilities, which in this case may be expressed by consistent distinctions in artifacts. The fact that some mounds contain copper, medicine bundles, and rattles while others do not might mean that some social segments had greater rank or preferential access to titles and offices. Even so, the overall pattern in these mounds seems far more expressive of "horizontal" than "vertical" differentiation. Were it not for the (presumably) elite residence atop the platform mound at Pocahontas, there would be little evidence of hierarchy at all.

Thus, in both settlement and mortuary ritual, the dominant pattern in this region is one of stability from A.D. 1000 to 1500. While relatively simple chiefdoms may have existed throughout this span, no paramount centers or pronounced hierarchies ever appeared. In order

to understand the reasons for this trajectory, so different from Moundville, we must first look at patterns of long-distance exchange.

Long-distance exchange

The nonlocal materials found in the burial mounds were similar to those at Moundville, but their relative frequencies were different (Table 9.3). The most common exotics were greenstone celts, followed by marine shell ornaments, copper ornaments, galena, and crystals of quartz (the last from sources in the Appalachian Mountains). Foreign pottery was also present, most notably a distinctive terraced vessel of a style that could only have come from Moundville (Ford 1936: fig. 23h). In short, the evidence suggests not only that the two regions were linked into similar exchange networks, but also that these networks overlapped.

When the ratio of exotics to burials in these mounds is plotted through time, an interesting pattern emerges (Fig. 9.4). The two earliest mounds, which date to the Dupree phase, have significantly greater quantities of nonlocal materials than any of the later mounds, which date to the Chapman and Smith phases. Clearly, exotic goods became far less available after A.D. 1200. This, of course, is precisely when the abundance of such commodities at Moundville reached a peak. As we shall see presently, this coincidence may not be spurious, and may help explain certain aspects of the political trajectory just described.

Discussion

Nothing is known of the historical trajectory that led to the emergence of the earliest mound centers in the Pocahontas region at ca. A.D. 1000. But once the mounds appeared, both settlement and mortuary ritual remained remarkably stable for half a millennium, until about A.D. 1500. Earthworks were modest and burials showed little evidence of social ranking. Apparently, late prehistoric chiefdoms in this region stayed relatively simple, and, unlike at Moundville, never coalesced into a strongly centralized regional polity.

The one major change that did take place was a precipitous drop in the abundance of objects made from exotic materials after A.D. 1200. I suggest that it is impossible to understand this change by looking at

Table 9.3. *Chronological distribution of nonlocal artifacts in burial mounds from the Pocahontas region*[a]

	Burial mound[b]					
	Dupree	Sycamore	Chapman	Woodbine	Smith	Gross
Copper:						
Copper earspool	4	0	0	2	0	1
Copper ornament (misc.)	3	0	0	0	0	0
Total	7	0	0	2	0	1
Shell:						
Shell beads[c]	7	2	0	1	1	1
Shell ornament (misc.)	3	0	0	0	0	2
Total	10	2	0	1	1	3
Other nonlocal stone:						
Greenstone celt	18	3	2	2	3	5
Quartz crystal	0	0	0	1	0	1
Galena mass	7	0	0	0	0	0
Total	25	3	2	3	3	6
Total (excluding pottery)	42	5	2	6	4	10
Nonlocal pottery vessels	0	0	0	0	1	0
Total burials	42	12	15	30	22	57

[a]Compiled from Shaffer and Steponaitis (1982).
[b]Arranged from left to right in approximate chronological order. Dupree and Chapman date to the Dupree phase (ca. A.D. 1000–1200); Chapman dates to the Chapman phase (ca. A.D. 1200–1350); Woodbine, Smith, and Gross date to the Smith phase (ca. A.D. 1350–1500).
[c]Multiple items from the same burial or "find" are regarded as a set and counted as a single occurrence.

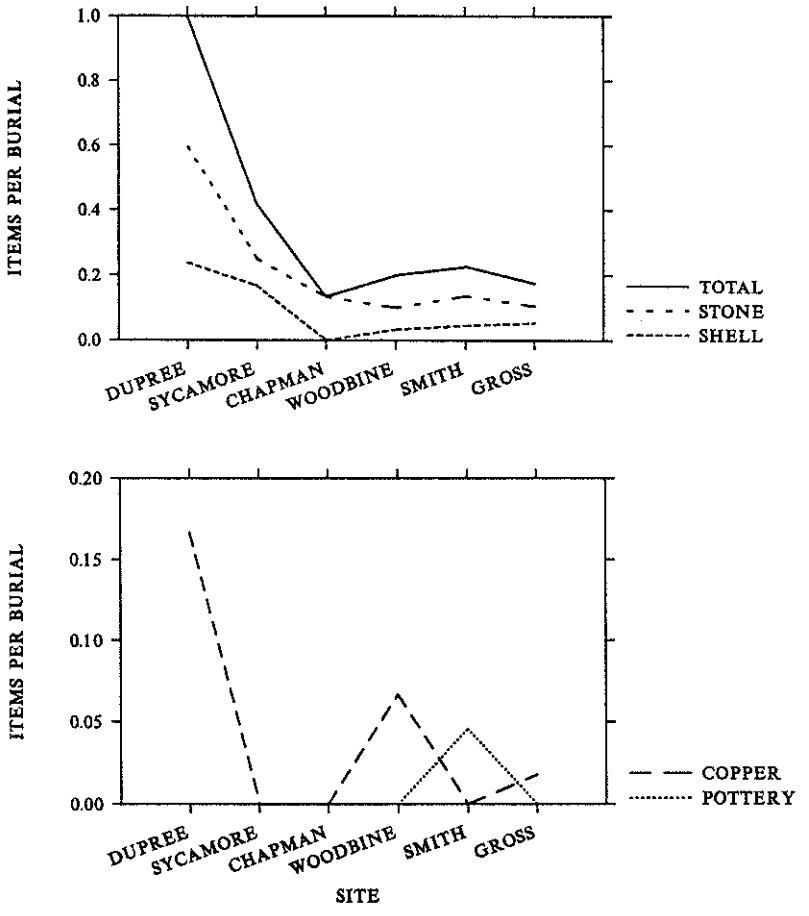

Fig. 9.4 The relative abundance of exotics in burial mounds of the Pocahontas region. The vertical axis represents the ratio between the number of exotic items and the number of burials that date to each phase, based on Table 9.3. The sites are arranged in approximate chronological order from left to right. Dupree and Sycamore date to ca. A.D. 1000–1200; Chapman to ca. A.D. 1200–1350; and Woodbine, Smith, and Gross to ca. A.D. 1350–1500

events and processes in the Pocahontas region alone. Rather, we must take a broader perspective and consider contemporary political developments in neighboring regions.

Between A.D. 1000 and 1200, most groups in the interior Southeast

(from eastern Louisiana to central Alabama) were organized at a similar level of complexity. The dominant pattern was one of relatively small centers and localized settlement hierarchies, presumably indicative of small-scale chiefdoms. At roughly A.D. 1200–1250, however, major political "takeoffs" occurred in a number of places. As we have already discussed, Moundville emerged as a paramount center in the Black Warrior Valley to the east. At the same time, large, multimound centers, such as Lake George and Anna, appeared in the lower Mississippi Valley to the west (Brain 1978; Williams and Brain 1983). In short, A.D. 1200 represents a threshold at which considerably more complex chiefdoms appeared both east and west of the Pocahontas region, but *not* in the Pocahontas region itself.

How would such political developments have affected the local availability of exotics? Prior to A.D. 1200, most polities were similar in scale and centralization; hence, their leaders could mobilize and deploy similar amounts of wealth in the social transactions by which prestige goods were acquired. Potentially, all groups could participate in these exchange transactions on a more-or-less equal footing. With the emergence in some regions of larger and more centralized polities, however, the potential for equal participation no longer held true. The elites in complex chiefdoms could mobilize considerably more wealth than their counterparts in the simpler societies nearby, putting the latter at an economic (and social) disadvantage. Under these circumstances, competition among elites may have caused the "costs" of certain prestige goods to inflate; these costs eventually reached a point at which elites in the less centralized and smaller polities could no longer obtain these items as frequently or consistently as they had once been able. Ultimately, this process might even have led to the appearance of stratified exchange networks, wherein each tier comprised the elites capable of engaging in social transactions involving a certain degree of wealth and prestige. The elites of less centralized groups may have been excluded from transactions at the highest levels, simply because they could not raise the wealth to participate (see Friedman 1975b).

Of course, it is also possible that the Pocahontas region at some point was brought directly under political hegemony of an outside paramount chief. Lake George, one of the largest mound centers in the lower Mississippi Valley, was only 50 km to the northwest, well within the distance from which the most powerful Mississippian chiefs

were capable of drawing tribute (Hudson et al. 1985). Such tribute demands, if they occurred, might well have further depressed the wealth that local chiefs could deploy for their own political purposes. While a paramount chief may have distributed prestige goods to local elites in order to help insure their loyalty, the inherent inequality of such tributary relations would have also insured that the local elites never had access to the same range or amount of goods as the paramount (cf. Welch 1986).

No matter which process (or combination of processes) was operating in this case, the effect was the same. Local elites lost much of their access to socially valued nonlocal goods. And, if one accepts the argument made previously that such goods played a key role in the social transactions by which paramount chiefdoms were established, then the prior emergence of paramount centers in neighboring regions may have actively *precluded* the emergence of similar centers in the Pocahontas region, by diminishing the availability of the very tokens that were needed by local leaders to enhance their power and prestige. To put the matter more simply, once Moundville and the lower Mississippi Valley centers "took off," the large-scale political and economic consequences were such that groups in the Pocahontas region could never catch up, at least not while the other centers were still operating. This, more than any other single factor, may account for the "flat" political trajectory that characterized this region's late prehistory.

CONCLUSION

The two regions just examined experienced vastly different political trajectories despite their overall similarity in natural environment. In the Moundville region, a series of small, simple chiefdoms appeared around A.D. 1050; these were consolidated into a single, paramount chiefdom by A.D. 1250. The initial step in this process seems to have been fueled by intensified local production; subsequent centralization was fostered by the development of a "prestige goods economy," which depended on the acquisition and social deployment of craft items made from nonlocal materials. In the Pocahontas region, simple chiefdoms also appeared shortly after A.D. 1000, but no further centralization occurred. I have argued that such centralization was precluded by the prior development of paramount chiefdoms in

neighboring regions to the east and west, chiefdoms whose existence made access to prestige goods more difficult and thereby denied local elites the means by which their own political standing could be enhanced.

Of course, one might wonder why the paramount chiefdom appeared at Moundville first. Natural environment is clearly not the answer, so we are left with several possibilities.

First, a key element in the success of chiefly political strategies is the availability of labor. Other things being equal, a chief with greater access to labor can mobilize larger surpluses that can be deployed for political ends. The Moundville region's population may have been larger, denser, or distributed over the landscape in a way that made it easier to control by emerging elites. Evaluating this possibility will require additional surveys in both regions.

Second, Moundville may have had more direct or easier access to the routes by which prestige goods circulated. Such routes, although somewhat constrained by physical geography, were in no sense determined by it. Rather, their configuration would have depended on the relative locations of, and relations between, inhabited communities. It is also worth noting that socially valued craft items may have been manufactured far from the sources of raw material, and probably changed hands many times before finding their way to the regions with which we are concerned. Hence, reconstructing such routes is no simple matter, and must take the social as well as the physical landscape into consideration.

Finally, it may be that Moundville's priority was essentially a stochastic event, which is to say that the precise reasons for it are now unknowable. For example, the critical factor may have been a particular leader who, by virtue of unusual charisma and political skill, was able to outmanoever rivals in neighboring regions. Archaeologically, this is the alternative one is left with when all other possibilities have been eliminated.

Many aspects of the model I have presented remain speculative and in need of further empirical support. Yet to the extent that these arguments are plausible, they should lead us to realize that particular trajectories of chiefly development may be inexplicable unless they are considered in the context of broader political and economic processes that transcend the boundaries of any single region.

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Notes

1. This estimate was derived by means of the least-squares method of Kohler and Blinman (1987), applied to Wimberly's (1956) sherd counts. A more complete presentation of this analysis is forthcoming.
2. This pattern is remarkably consistent with the political relationships described in the earliest historical records, which come from two Spanish expeditions that took place between 1539 and 1561. Based on these records, Hudson et al. (1989) argue that the mid-sixteenth-century landscape in this area was dominated by a hostile rivalry between two sets of paramount chiefdoms. On one side was a polity called Apafalaya, whose settlements were located in the Moundville region along the Black Warrior River. On the other side were the chiefdoms of Tascaluza and Coosa, whose settlements were found along the Alabama and Coosa rivers to the east. The absence at Moundville of trade pottery from the latter regions fits nicely with this historical model (see Hudson et al. 1989: 43), and further suggests that this social boundary predated the Spaniards' arrival by at least two centuries. The same observations would generally hold true even if one allowed for some uncertainty over exactly where the historically documented chiefdoms were located (cf. Curren 1987; Hudson 1989).
3. Evidence from the nearby Tombigbee Valley suggests that, by A.D. 900–1000, the hunting-gathering-gardening economy was operating close to its productive limits. All the classic indicators of "subsistence stress" were present: the diversity of species being eaten was high, average prey sizes (both within and across taxa) were unusually low, and a large percentage of the burial population showed signs of nutritional deficiency (Woodrick 1981; Cole, Hill, and Ensor 1982; Scott 1983; Welch 1985).