David J. Hally

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The Social Archaeology of a Late Mississippian Town in Northwestern Georgia

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For Carolyn

Contents

CONTENTS OF ACCOMPANYING COMPACT DISC

Illustrations

Figures

Tables

Preface

When I began analyzing the archaeological material from the King site more than 10 years ago, I was concerned that I would not find enough new and interesting things to say about the site to merit publication as a book. I needn't have worried. At every step in the analysis, as I dug deeper into the architectural and mortuary evidence from the site, I found patterns and relationships in the data that I had not anticipated and that suggested new lines of inquiry. I began my research with the spatial clusters of postholes and features that represent domestic structures and found that I could identify individual construction stages and describe their architectural characteristics with some accuracy. This led to, among other things, the recognition that domestic structures varied greatly in size and that size related systematically to a number of other architectural variables. Hypatia Kelly pursued some of these relationships and found that structure size varied directly with number of construction stages and number of subfloor burials and with structure location within the habitation zone. These insights led to the identification of household architectural complexes, which in turn permitted comparison between households along a number of dimensions. Further investigation eventually led to the discovery that much of the variability in domestic structures was related to the life history of the King site community and the polity to which it belonged. Analysis of the site's public architecture and human burials followed similar paths of discovery and evolving research focus.

My goal in writing this book was to reconstruct as fully as possible the nature of the King site community and to place that community in its larger re-

gional and historical context. The degree to which this goal has been accomplished is due in part to the nature of the site: its relatively simple stratigraphy, its short occupation span, its well-preserved architectural features (at least in the eastern portion of the site), and its extensive excavation. Equally important, however, are the wide range of materials that my colleagues and I have investigated—postholes and features representing domestic and public structures and facilities, burial form and location, human skeletal remains, grave goods, and regional site distributions—the depth to which these investigations were pursued, and my conscious effort to integrate the resulting insights into a comprehensive view of the King site community.

Archaeologists know more about Mississippian culture and its regional and temporal variants than any other prehistoric culture in the eastern United States. In large part, this is due to the great amount of fieldwork that has been devoted to Mississippian sites since the 1940s. More Mississippian sites have been excavated and more extensively excavated than is the case for any other prehistoric period. Yet, archaeologists have shown little interest in synthesizing and integrating the wealth of information resulting from these investigations in order to reconstruct Mississippian lifeways at the local and regional levels.

This lack of synthesis, integration, and reconstruction is most striking at the level of the community. Excavations covering an acre or more have been conducted at dozens of Mississippian villages and towns across the East. The published and unpublished reports describing these investigations may say something about domestic architecture, overall site layout, and the general nature of mortuary practices. In no instance that I am aware of, however, are the different kinds of information available from these field investigations thoroughly analyzed and integrated in a detailed reconstruction of community social, political, and economic organization.

This needs to change. Most extensively excavated Mississippian sites have considerable research potential—and there are more of them every year. If this book about the King site has any meaningful impact on Southeastern archaeology, I would hope that it serves as a demonstration of just how much can be learned from large-scale excavations of Mississippian settlements. I would hope that it also serves as a stimulus for others to pursue the long-term, in-depth investigations that are necessary to fulfill the research potential of such sites.

The architectural and burial data that I have used in the analysis of the King site settlement plan, mortuary practices, and sociopolitical organization are presented in eight appendixes. These appendixes have been reproduced as Adobe Acrobat PDF files on the CD that is located in the pocket at the back

of this book. Appendix A describes the architectural features associated with each primary domestic structure (PDS) identified in the excavated site area. It also describes the architectural characteristics of each PDS construction stage and the evidence used to identify each construction stage. Appendix B presents the same information for rectangular structures (RS), the second type of domestic building recognized at the King site.

Appendix C describes, in tabular form, the physical characteristics of each of the 249 burials recorded at the King site. Given the size of the collection, it was not practicable to describe and illustrate each burial. The stratigraphically more complex burials—those that have been disturbed or that contain multiple interments—are, however, individually described in Appendix D. Appendix E lists for each burial the sex and age identifications that have been made by the five bioarchaeologists who conducted systematic osteological analyses of the burial collection. It also identifies which of the five sets of sex and age identifications I have chosen to use in the mortuary analysis. Appendix F describes in tabular form the grave goods recovered from multiple and intrusive burials and identifies, where possible, which grave goods were interred with specific deceased individuals.

Appendix G illustrates in a series of large-scale maps the location of all recorded burials at the site. Appendix H does the same for postholes and features.

Acknowledgments

Major grants to support field and laboratory investigations at the King site in 1974, 1992, and 1993 were provided by the National Endowment for the Humanities (grant number RO-20561-74-441) and the National Geographic Society (grant numbers 1245, 4818-92, and 5063-93). Financial support in the form of small monetary grants and field equipment loans were also provided by the Coosawattee Foundation, Inc., the University of Georgia, Shorter College, and Berry College. Critical financial support was also provided during the fall of 1973 by a number of Rome, Georgia, citizens, including Pat Garrow, Joel and Sandra Jones, Richard and Vanda Leigh, and Howard Markel.

I am especially appreciative of the contributions of Mr. Harold W. King and Mr. James (Jamie) T. Jordan, owners of the King site property in the early 1970s and 1990s, respectively. Without their interest, cooperation, and assistance, professional excavations at the site would never have taken place. They provided access to the site and storage space for equipment, and they accepted the financial cost and inconvenience that resulted from having several acres of their most productive cropland tied up in excavations for several years. I have also enjoyed getting to know these men and their families.

A number of individuals worked at the King site as volunteers. Among those who worked the longest and whose names Pat Garrow and I have been able to recall are Kay Collins, Mike Grissin, Phil Hanus, Joel Jones, David Leigh, Steve Leigh, Kathleen Mulchrone, Ben Romines, Marvin Smith, Leslie Swan, Paul Webb, and Steve Webb. Gordon Lee Hight was an especially valuable volunteer. He was the field photographer in 1974 and he developed a technique for

taking extraordinarily clear, high-contrast burial photographs. The paid field crew during the fall and winter of 1973 and the following spring and summer included John Dolin, Greg Paulk, Marvin Smith, Stephanie Stephens, and Lucy Tally.

University of Georgia summer field schools were held at the King site in 1974, 1992, and 1993. Gina Matthiesen was my graduate student assistant in 1993. Cassandra (Timmy) Hill was my field assistant during the 1992 and 1993 seasons and was responsible for burial excavation. Students participating in the 1974 field school included Gary Barber, James Bates, Robert Clute, Beverly Connor, Anna Dince, Christine Johnson, Robin Johnson, Ben Lohman, Thomas McRae, William Mitchell, Janet Roth, Richard Sellers, and Patricia Shank. Field school students in 1992 included Ben Carlton, Johnson Clark, Margaret Cooper, Hugh Crumley, William Damato, Georgeann Ellis, Grace Fordham, Thomas Foster, Elizabeth Grace, Scot Keith, Hyla Lacefield, David Lineberry, Jeanne Marshall, Raymond Prothero, and Patricia Tooke. Field school students in 1993 included Robert Ashby, Joseph Berry, Stephanie Brown, Sherry Fleming, Victor Fraker, Leah Gennings, Charles Heilig, Troy Johnson, Kevin Jones, Neal Moon, Ronald Rowe, Mary Siders, Susan Taylor, and Jennifer Yost. Along with the paid crew in 1973 and 1974, these individuals provided most of the labor that went into field investigations at the site.

I received invaluable assistance from a number of people during the analysis and writing phase of the King site investigations. The human osteological data used in the mortuary analysis of the King site burials were provided by Mark Griffin, Timmy Hill, Clarke Larsen, Leslie Sering, and Matt Williamson. Matt Williamson answered countless questions concerning the proper way to use and interpret these data. Timmy Hill identified skeletal pathologies in a number of burials that led to a greater understanding of the social positions those individuals occupied in King site society. Mary Ritke identified the sex of one burial through DNA analysis and caused me to rewrite most of one chapter. Betsy Reitz and Barney Pavao-Zuckerman provided species and element identification for a number of grave goods made of animal bone. Amy Edwards identified the mollusc species that were used to make shell beads. Jim Whitney provided mineral identifications for most of the grave goods made of nonsiliceous rock. Beth Misner analyzed the large bifacial blades for signs of use wear.

Several individuals made important contributions to the production of the manuscript for this book. The maps of the King site were produced using ATLAS GIS. Gisela Weiss Gresham drew the regional maps and charts and made additions to some of the ATLAS GIS maps. Charles M. Hudson drew

the burial figures and the reconstruction of a typical King site primary domestic structure (Figure 5.3) based on the excavation map of Structure 4. The reconstruction of the King site that appears on the book cover was drawn by L. Kenneth Townsend for the National Park Service and was originally published in *De Soto, Coronado, Cabrillo: Explorers of the Northern Mystery,* by David Lavender (1992, Handbook 144, National Park Service, Washington, D.C.). Lisa Norris converted the text, figures, and tables in Appendixes A–H to PDF files and saved them to the CD located at the back of the book. Kathy Cummins copyedited the manuscript. Her skill and effort are evident in the high quality of the final draft.

A number of people provided valuable information from their own research that allowed me to put King site architecture, settlement plan, and burials into a larger comparative context. These include Errett Callahan, David Dye, Bud Freeman, Nan Gonlin, Jim Hatch, Charles Hudson, William Iseminger, Jim Knight, Keith Little, Bonnie McEwan, Jerald Milanich, Cheryl Munson, Richard Polhemus, Chris Rodning, Gerald Schroedl, Craig Sheldon, Marvin Smith, Mary Starr, Lynne Sullivan, Gail Wagner, Karen Walker, Paul Webb, Brent Weisman, Mark Williams, and John Worth. I appreciate their generosity and quick responses to my email queries.

Finally, I want to acknowledge my indebtedness to Pat Garrow. Pat "discovered" the King site, recognized its historical importance and research potential, and directed field investigations through the spring of 1974. We worked together on the site for about a year but eventually parted ways. I completed the field research and undertook the analysis and writing that have led to the production of this book. Without Pat's foresight, hard work, dedication, and personal sacrifice in the early days of the project, however, there would be no book.

1
Introduction

At the time of Spanish contact in A.D. 1540, the Mississippian inhabitants of the Great Valley in northwestern Georgia and adjacent portions of Alabama and Tennessee were organized into at least seven chiefdoms distributed along the Coosa and Tennessee rivers and their major tributaries. The administrative centers of these polities were large settlements with one or more platform mounds and plazas. Each had a large resident population, but most polity members lived in a half dozen or so towns located within a day's walk of the center. This book is about one such town, located on the Coosa River in Georgia and known to archaeologists as the King site (9FL5).

The book's subtitle, "The Social Archaeology of a Late Mississippian Town in Northwestern Georgia," describes the focus of my investigation of the King site. Much of the book is devoted to the description and analysis of the site's architectural features, settlement plan, and human burials. I use this information to (1) identify the kinds of status positions that were held by individual inhabitants; (2) identify individual households and investigate the role they played in King site society; (3) reconstruct the community that existed at King, including its size, life history, symbolic associations, and integrative mechanisms; and (4) place that community in the larger regional political system.

For a variety of reasons, the King site represents a nearly ideal opportunity to do social archaeology. An area of 158,500 square feet, representing almost three-quarters of the 5.1-acre (2.05 ha) site, has been excavated and mapped (Figure 1.1). The perimeter of the town, represented by a ditch and palisade,

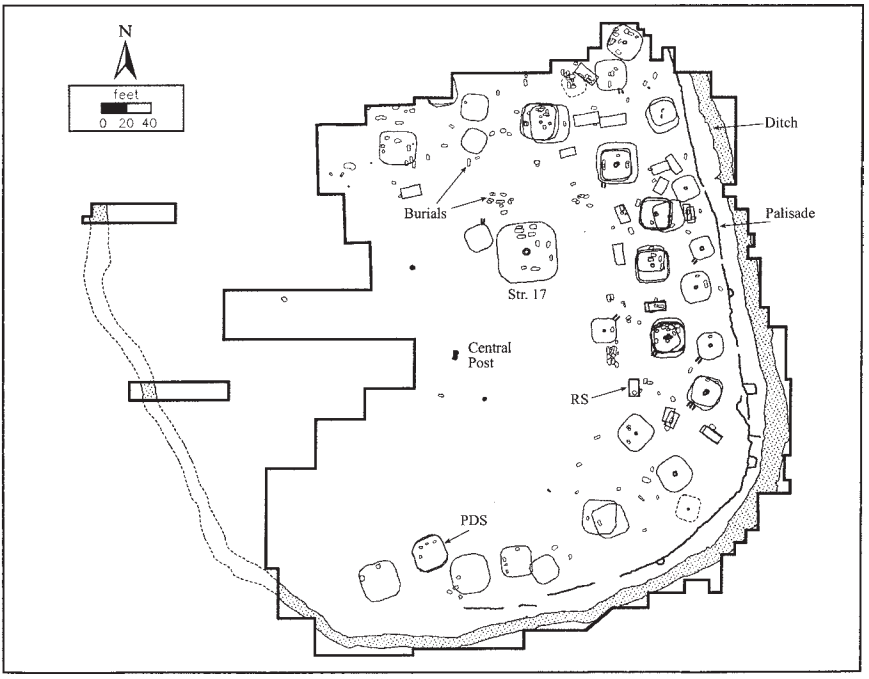

Figure 1.1. Major architectural features and human burials recorded at the King site.

has been plotted over most of its length, providing an accurate picture of the town's spatial configuration. A variety of buildings and architectural features exists within the excavation area, along with a large number of human burials. Because we know the site's configuration and because so much of it has been mapped, it is possible to reconstruct most of the town plan and to situate specific kinds of features within it. Buildings and burials can be related to functionally distinct areas such as the plaza and habitation zone. Within the latter, many structures and burials can be assigned to specific households.

Another advantage is that King is essentially a single-component site. This plus the relatively short duration of occupation (approximately 30–40 years) means that architectural patterns are not obscured by a welter of postholes and other features. As a result, most buildings with some preserved architectural elements can be easily distinguished and multiple construction stages, when present, can be sorted out.

Finally, the regional context in which the town existed is unusually well understood. The polity to which the town belonged has been identified and important aspects of its life history can be reconstructed in broad outline. Many

aspects of the King settlement plan, architecture, and burial population make sense when seen in this context.

On the negative side of the ledger, overbank erosion by the Coosa River during flood stage has destroyed most archaeological features in the western third of the site. One and possibly more public buildings may have been lost along with at least a third of the domestic structures. The destruction of features in this part of the site reduces the sample of domestic structures available for analysis and severely reduces our ability to evaluate how representative the structures and burials on the east side are of the town as a whole.

The residents of the King site would have recognized literally hundreds of different statuses or social positions based on age, sex, kinship relations, personal attributes and accomplishments, and social group membership. I have used mortuary data such as burial sex, age, location, and grave goods to identify some of these statuses. Although the number I have been able to distinguish is relatively small, some are likely to have been among the most important ones in the community. Analysis of the mortuary data demonstrates, among other things, that individuals passed through several age-related status changes prior to adulthood; that adult males were able to earn a number of military and civic/ceremonial statuses that brought them prestige and a certain amount of power within the community; that there was a hierarchical component to King site social organization; and that, with the probable exception of the town chief and his close relatives, most statuses were achieved. The sources of these insights, the burials and their contents, are described in Chapter 7; the analyses upon which they are based are presented in Chapters 9–11.

Households have received a considerable amount of attention from archaeologists for almost three decades. As the basic building blocks of society, they provide a ready access to most kinds of social and economic behavior that humans engage in on a day-to-day basis. Archaeologists have been quick to exploit this research potential, and as a result the literature is filled with studies that look at a variety of household characteristics, including size, composition, life history, wealth and rank variation, craft specialization, the role of women in household affairs, and symbolic associations of households.

Anthropologists are in general agreement that households should be defined in functional terms rather than on the basis of their morphology or kin composition and size (Wilk and Netting 1984). Households, according to Ashmore and Wilk (1988:6), are groups of people who share in a "maximum definable number of activities including one or more of the following: production, consumption, pooling of resources, reproduction, co-residence, and shared ownership." For the archaeologist, household identification begins with the

recognition of its physical remains—the structures in which household activities occur and the associated residues of those activities (Ashmore and Wilk 1988:5). Having isolated these, the investigator can then turn to questions related to household activities, composition, and coresidence.

Households can be recognized at King by the existence of what I call primary domestic structures (PDS). These are square buildings that were erected in shallow basins and had substantial walls of single-set posts, interior partition walls, and a central hearth. They are often physically associated with a more lightly constructed rectangular structure (RS), an outdoor work area, and a number of human burials. Occupation refuse on the floors of PDS is the result of food preparation and consumption and craft activities such as flintknapping. There are more than two dozen such structures in the preserved habitation zone at King and at least half a dozen identifiable structure/work area/burial groupings. Taken together, the evidence for PDS being domestic residences is indisputable. The only real question is whether each PDS can be equated with a different household or whether some households may incorporate multiple PDS. As we shall see, there is architectural and mortuary evidence indicating that both situations are represented.

The task of identifying households at King is discussed in Chapter 8. Their activities, composition, relationship with one another, and position within the larger community are considered in Chapters 8 and 12.

American archaeologists have been investigating sites and groups of sites that represent communities since at least the 1930s. Only in the past 20 years or so, however, have they begun to view the community as a research topic in its own right. As was the case when households first became a focus of archaeological research, the question of what constitutes a community and how they can be identified in the archaeological record has received a fair amount of attention during this period.

Murdock (1949:79), in an influential statement, defines communities as the "maximal group of persons who normally reside together in face-to-face association." Elaborating on this definition, he proposes that communities (1) seldom exceed 1,000 members, (2) usually have a territory with resources that their members exploit, (3) are the primary locus of social control, (4) typically have a distinct culture, and (5) are integrated by a complex network of interpersonal relationships between their members and by a sense of group solidarity (Murdock 1949:81–83). Murdock and others of his generation viewed the community as a natural, universal, and largely static social institution. More recently, anthropologists have come to realize that communities are dynamic, ever-changing institutions that are created and maintained by the social

actions and interactions of individuals. Within this framework, contemporary archaeologists of different theoretical persuasions consider some dimensions of the community to be more important than others. These include coresidence or spatial localization (Peterson and Drennan 2005), involvement in subsistence production (Kolb and Snead 1997), intensity and scale of human interaction (Peterson and Drennan 2005), social reproduction (Yaeger and Canuto 2000), and emic or imaginary identification (Hegmon 2002; Isbell 2000). Most agree, however, that the identification of communities in the archaeological record is often difficult and that communities should not be automatically equated with individual archaeological sites.

Available archaeological evidence indicates that the King site formed the core element of a distinct community. On the basis of the number of houses (PDS) likely to have been built within the town's perimeter, the site had a resident population of 200–300 people. Human settlement along the Coosa River in the sixteenth century appears to have been restricted almost exclusively to large towns like King, there being few recorded sites that might be farmsteads or hamlets. The nearest large settlement is located upstream at a distance of 5 km. Such spacing would have restricted daily, face-to-face interaction to those individuals living at King. Other contemporary towns located along the Coosa River and its tributaries in northwestern Georgia and along the Tennessee River in southeastern Tennessee are spaced 3–7 km apart. Such consistency suggests that individual communities needed several kilometers of river floodplain soils to meet their agricultural and other subsistence needs. Presumably the 2–4 km of river bottom located immediately upstream and downstream from each town was recognized as community land to be used only by community members.

The King site has several large architectural features, including a 1,300-foot-long defensive ditch and palisade, a large post located in the center of the plaza, and a 48-foot-square building (Structure 17) located in the northeast corner of the plaza (Figure 1.1). Given the size, nature, and location of these features, we can be confident that they were constructed or erected by labor parties drawn broadly from the resident population and that they functioned for the well-being of the community as a whole. The large square structure had benches placed around its entire interior and was almost certainly a meeting house where social, political, and religious activities took place that benefited the entire community and probably involved a significant proportion of its members. Eighteenth-century European accounts tell us that the political affairs of Creek and Cherokee communities were dealt with in council houses similar in size and construction to Structure 17. Together with the

existence of burials in the plaza that probably represent the immediate family of the town chief, this structure demonstrates that residents of the King site had their own political institutions and controlled their own affairs to a significant degree. The structure and the large post, furthermore, were probably symbols of the community's existence and identity. In the eighteenth century, animal figures representing individual Creek towns were carved on the posts of the square ground, the warm-season equivalent of the council house (Swanton 1928a:243).

The King site community was part of a polity or chiefdom that consisted of at least six large towns strung out along the Coosa River for a distance of 19 km. One of these sites had a platform mound and can be identified as the administrative center for the polity. The nature of Mississippian chiefdoms in the Southern Appalachian region is described in Chapter 2. The evidence for the polity that included King is presented in Chapter 3. Much of what is known and can be inferred about the King site as a community can be fully appreciated only when viewed in the context of this polity and the larger regional political system. Frequent reference will be made to both in later chapters.

My goal when I began working on this book more than 10 years ago was to analyze all of the material from the site in as thorough a manner as possible and to write a detailed paleoethnography of the community that existed there in the mid-sixteenth century. This goal to a large extent has been accomplished. The overall settlement plan has been reconstructed. Architectural features have been interpreted within the framework of that settlement plan. Matrilocal households, the basic social units in the community, have been identified with specific sets of architectural features and burials and have been compared with respect to craft specializations, wealth, and the sociopolitical ranks of their members. The life history of the community, from the arrival of the first settlers to its final abandonment, has been reconstructed. Many of the different social statuses recognized by the community have been identified, as have the identities of some of the town's important office holders. Last, but not least, the role of the town in one of several chiefdoms known to have existed in northwestern Georgia since A.D. 1000 has been reconstructed and used to further our understanding of the nature of the King site community.

In spite of these accomplishments, several important sets of King site data by necessity have been neglected in the present study. Artifacts used as grave goods are thoroughly described and interpreted with respect to their function and symbolic meaning, but artifacts from domestic contexts have received virtually no attention. Large quantities of animal bone and carbonized plant material recovered from house floors have likewise been slighted, although

the paleobotanical remains from the Little Egypt site (Hally 1981) are probably comparable in species variety and equability. Five preserved house floors were systematically excavated using piece plotting and flotation recovery techniques, but the various analyses that this material deserves have not been conducted. To do so would have delayed completion of this study by two to three years. Ramie Gougeon's study of similar material from house floors at the Little Egypt site (Gougeon 2002) is broadly applicable to King. Finally, mitochondrial DNA analysis of human skeletal material that might answer questions concerning household membership, postmarital residence patterns, and the household identity of individuals interred in public spaces has not been undertaken.

The organization of this book is fairly straightforward. Chapter 2 presents a model of Mississippian sociopolitical organization that will serve as a source for analogues appropriate to interpreting elements of King site society. Chapter 3 describes the location and natural setting of the King site and places it in cultural and historical contexts. In that chapter, the site's age and cultural affiliations are considered, as well as its position in the regional political system.

Field and laboratory methods employed in the investigation of the King site are described in Chapter 4. Chapters 5–7 deal with architectural features and burials recorded in the field. Domestic architecture is described and analyzed in Chapter 5, with public architecture receiving similar treatment in Chapter 6. The nature of the burial sample, variation in burial form, and the different types of artifacts used as grave goods are described in Chapter 7. Much of this information is brought together in Chapter 8 for the purpose of identifying households and reconstructing the life history of the town.

Chapters 9–11 focus on the burials. The different dimensions of variability evident in the burials are described and compared in Chapter 9, while Chapter 10 focuses on adult female and subadult burials and Chapter 11 focuses on adult male burials. Insights from the settlement and mortuary analyses are brought together in Chapter 12 in an effort to compare households with respect to craft specialization, wealth, and social standing and to fully reconstruct the place of the King site town in late Mississippian political developments in the Southern Appalachian region.

2
The Nature of Mississippian Society

The archaeological evidence from the King site can be fully utilized only if placed in the larger context of what we know about Mississippian society as it existed in the Southern Appalachian region at the time of initial European contact in the mid-sixteenth century. To that end, the present chapter will outline what I believe are the basic characteristics of Late Mississippian social and political organization in the region. Central to my view of these societies is the belief that they were organized as chiefdoms, as defined by Earle (1987), and that they differed in several fundamental ways from eighteenth- and nineteenth-century ethnographic tribes such as the Creek and Cherokee. They were politically centralized entities; their leaders had some coercive powers, including the ability to extract and use surplus production and labor from their subjects; and society was hierarchically organized and divided into at least two rank strata, commoners and elite. Some archaeologists (Cobb 2000; Muller 1997) will disagree with this characterization, but I believe our differences of opinion are primarily a matter of degree.

The descriptive model of Mississippian society that I develop in the following pages is based on evidence drawn from a variety of sources. The French descriptions of Natchez and Taensa culture in the late seventeenth and early eighteenth centuries, summarized in Swanton (1911), provide the most complete picture of how Mississippian chiefdoms were organized politically and socially. Seventeenth-century Spanish descriptions of Apalachee (Hann 1988, 1992) and Timucua culture in Florida (Hann 1992; Worth 1998) are not as detailed, but they generally agree with French accounts of the Natchez and dem-

onstrate that the latter were not unique in the Southeast. The mid-sixteenth-century accounts of the De Soto, Luna, and Pardo expeditions (Hudson 1990, 1997; Hudson et al. 1989) demonstrate that chiefdom organization was characteristic of Southern Appalachian region societies at the time and provide insights into polity size and interaction not found in other ethnohistoric sources. Finally, Mississippian archaeology has supplied invaluable evidence on the nature of chiefdom administrative centers, the spatial size and life histories of Mississippian polities, and sociopolitical status hierarchy.

Life at the community level in the Southern Appalachian region is most thoroughly documented by eighteenth- and nineteenth-century ethnohistorical accounts of the Creek and Cherokee. These describe, among other things, household organization, kinship and descent systems, warrior hierarchies, civil offices, domestic and public architecture, and belief systems.

The depth and breadth of our knowledge of colonial-period Creek and Cherokee is considerably greater than our knowledge of their sixteenth-century predecessors. European contact caused extensive culture change in these societies. Among the most striking cultural casualties were chiefdom political organization and hereditary social ranking (Hudson and Tesser 1994), but it is also clear that household economy, settlement pattern, gender roles, and belief systems were also affected to some degree (Braund 1993; Keyes 1994; Perdue 1998; Waselkov 1993). As a result, much of what we know about the Creek and Cherokee may not accurately reflect native culture in the mid-sixteenth century (Urban and Jackson 2004). While I have drawn heavily on colonial-period ethnohistorical accounts in developing a descriptive model of Mississippian society in this chapter and in interpreting specific aspects of the King site archaeological record in later chapters, I am well aware of the dangers in doing so.

The ethnohistorical sources for the Natchez, Taensa, Apalachee, and Timucua, as well as the De Soto narratives, all provide evidence that Mississippian chiefdoms were politically centralized societies. Each chiefdom consisted of multiple towns or multiple communities composed of dispersed farmsteads and hamlets. Each was under the control of a single leadership hierarchy consisting of a polity chief and subordinate village chiefs. Ethnohistoric sources and archaeological evidence demonstrate that each chiefdom had an administrative center, characterized by one or more platform mounds surmounted by temples and high-status residences, a plaza, and a resident population (Hally 1996; Hudson 1997; King 2003; Knight and Steponaitis 1998; Peebles and Kus 1977; Swanton 1911).

Political and religious institutions involved in administering the polity and

supporting the authority of its chief were located at the administrative center and were closely associated with the mound/plaza architectural complex (Hally 1996). Among the Natchez, the chief resided in a structure on the summit of one mound. Other instances of this practice are described in various narratives of the De Soto expedition (Hudson 1997). Among the Natchez, a sacred fire, representative of the Sun deity and emblematic of the polity's existence, burned in a temple structure located on a second mound. The Taensa (Swanton 1911:159) had a similar fire in their temple, but there are no other early European accounts of this practice. Eighteenth- and nineteenth-century Creek and Cherokee towns maintained sacred fires that appear to have had approximately the same ideological significance (Swanton 1928b, 1946). Hearths are a typical feature of Mississippian mound summit structures (Polhemus 1987:183–199).

Among the Natchez, the corporal remains of the chief's direct ancestors and predecessors in office were stored in the temple structure that contained the sacred fire. Except for Garcilaso de la Vega's description of containers of human bones in a temple at the town of Talomeco in present-day South Carolina (Shelby 1993), this practice is not recorded in the Spanish documents, unless interment in mission church structures represents a postcontact variant (Worth 1998:113). Interments in prehistoric Mississippian mounds such as Mound C at Etowah are almost certainly a manifestation of this practice (King 2002; Larson 1971).

The office of polity chief among the Natchez was titled "Great Sun" (Swanton 1911). *Mico* and *orata/holata* appear to have been used interchangeably for both polity chiefs and village chiefs among the seventeenth-century Apalachee, Guale, and Timucua and the polities encountered by Pardo in the Carolinas. Hudson (1990), however, argues that *mico* was restricted to polity chiefs and *orata* to village chiefs, while Hann (1992) suggests that the two terms had different geographical distributions, *mico* being used by the Guale and other people in the eastern Carolinas and *holata* being used by the Apalachee. Polity chiefs were usually male, but female chiefs have been reported for Cofitachequi and other polities in the Carolinas and for the Guale and Timucua (Hann 1992; Hudson 1990, 1997; Worth 1998; see also Trocolli 2002).

The French accounts state that the Great Sun had the authority to collect tribute from subordinate communities, give periodic feasts, entertain foreign emissaries, and punish wrongdoers, including having them killed. There is some debate about how much power he actually had, especially over subordinate towns (Lorenz 1997; Muller 1997). In regard to the latter, there appears to have been a factional division within the Natchez polity that focused at least

in part on the difference between communities that had close ties with the French and those that were allied with the English. By the second decade of the eighteenth century, this division apparently had developed to the point that the latter communities were openly challenging the authority of the French-allied Great Sun. Factionalism was probably a common element of Mississippian sociopolitical systems and was probably one of the factors responsible for the collapse of some polities (Anderson 1994). We can imagine that the English would have encouraged such divisions in Natchez society for their own benefit.

Regardless of the ambiguities and inconsistencies in the French accounts, the fact remains that French observers describe the Great Sun as having divine origins, as being a key element in the worship of the Sun supreme deity, as being set apart from the rest of society by numerous sumptuary rules, and as having the power to extract surplus production from the citizens of his polity. The familiarity of the French chroniclers with aristocratic political institutions and behaviors in their native land doubtless colored the way they perceived Natchez political institutions (Lorenz 1997). We must remember, however, that some of these observers (e.g., Charlevoix) or their countrymen also were seeing and accurately recording very different political institutions among the Huron and other northeastern tribes.

Polity chiefs encountered by the De Soto expedition in the Southern Appalachian region had some degree of control over large stores of foodstuffs and were able to provide large numbers of porters to transport the expedition's supplies (Smith and Hally 1992). Little was recorded about the authority and power of Apalachee and Timucua chiefs in the seventeenth century, and in all likelihood it was undermined to some degree by the Spanish early in the mission period. Hann (1988) believes they presided over ceremonies, led military expeditions, and served as spokesmen for their people.

The Natchez Great Sun inherited his office matrilineally from his predecessor's eldest sister, who had the title of "White Woman." This matriline was traced back to male and female emissaries from the Sun deity, who lived with the Natchez in ancient times and gave them important elements of their culture. Apalachee and Timucua polity chiefs also inherited their offices matrilineally, but the Spanish sources are silent on whether these individuals were considered to be divine (Hann 1988, 1992; Worth 1998). There is, however, indirect evidence that the belief was widespread in the Southeast. The body of the Natchez male emissary turned to stone at the time he returned to the Sun. This statue was kept in the Natchez temple, where it would have served as a symbol of the Great Sun's divine origins. Given the importance of his con-

sort in establishing the Sun matriline, it seems likely that her body also turned to stone and was kept in the temple. Kneeling or seated male and female stone statutes, often in pairs, are known from mound contexts at a number of Mississippian sites across the Southeast (Brown 1985, 2001). They may represent the corporal remains of emissaries that visited other Mississippian polities and started their chiefly lineages.

The divinity of the Natchez chief was an important source of his authority and power and was symbolized in mortuary practices such as retainer sacrifice and the curation of ancestral remains and in a variety of sumptuary rules that set the chief apart from the rest of society. Infant burials in mounds at Moundville suggest the Natchez practice of sacrificing infants during the funerals of the sister and brother of the Great Sun and perhaps of the Great Sun himself (Peebles 1971). Farther afield, groups of burials in Mound 72 at Cahokia are generally interpreted as sacrificial victims associated with the so-called beaded burial (Fowler et al. 1999). The De Soto narratives report the use of liters to transport the polity chief or his representatives in South Carolina and Georgia, matching a practice described for the Natchez Great Sun.

Each subordinate community in the Natchez, Apalachee, and Timucua polities and those visited by Pardo in the eastern Carolinas had its own headman or village chief. Their title in Florida and the Carolinas was *holata* or *orata.* Female village chiefs, reported to occur among the Timucua, were called *niaholata* (Worth 1998). Among the Timucua and Apalachee, at least, the office of village chief was inherited matrilineally, and among the Timucua this matrilineage was the highest-ranking descent group in the community. There is evidence that at least some polity chiefs and village chiefs were related. Several Apalachee chiefs listed in a 1657 document were related as uncle and nephew (Hann 1988:98); the Timucua polity chief, Saturiwa, had several brothers serving as village chiefs (Knight 1990:11); and in at least one Timucua chiefdom, the eldest sister of the polity chief was the head of a subordinate community (Worth 1998:92). There is also some suggestion that polity chiefs appointed subordinate village chiefs, at least on some occasions (Worth 1998:92). It is reasonable to suppose that as new communities were founded within a polity, the leaders of those communities would come from a junior line in the polity chief's matrilineage.

French sources list a number of officials who were appointed by the Great Sun. They included two "war chiefs," "two masters of ceremonies for the temple," "two officers who preside over the other ceremonies which are observed when foreigners come to treat of peace," an officer who "has the inspection of the public works," and "four others charged with the arrangement of

the festivals with which they publicly entertain the nation and such strangers as come to visit them" (Swanton 1911:102–103). Spanish sources refer to three types of officials by title: *yniha/inija/iniha, chacal,* and *yatika.* Several officials were referred to as *inihas* in some Timucua polities, but for the most part the term appears to have designated a single individual (Hann 1992:204). In the Pardo documents, they are said to be "like magistrates or jurymen as it were, who are in charge of villages" and like a "sheriff who commands the town" (Hudson 1990:65). Hann (1992:204) describes them as village administrators who were responsible for making sure that important tasks were taken care of. Among the Apalachee, he says, they were repositories of tribal myths and the genealogies of chiefs. In various accounts of the Timucua, they are said to be second in command to the polity chief and to accompany him on all important occasions. Fray Pareja describes the *iniha* as "a counselor who leads the cacique by the hand" (Worth 1998:89–90). This type of official appears to have survived into the late eighteenth century among the Creeks as the *heniha.* Hawkins (Swanton 1928a:293–294) describes these later officials as having "the direction of the public works appertaining to the town, such as the public buildings, building houses in town for new settlers, or working in the fields" and as being responsible for the black drink ceremony.

Among the seventeenth-century Apalachee and Timucua, the *chacal* may have been a distinct official, subordinate to the *iniha,* although the position seems to have been held by the *iniha* in some cases (Hann 1988:106, 1992). Responsibilities included assigning people to work in the community fields and to fill the labor quota due the Spanish. The office of speaker or interpreter (*yatika/atequi*) is documented for the Apalachee (Hann 1988) and the eastern Carolinas (Hudson 1990:66).

As one would expect, most references to *inihas, chacales,* and *yatikas* are in the context of polity-level organization. Subordinate communities in Timucua polities, however, also appear to have had *inihas* (Worth, personal communication 2003).

Warfare occupied a prominent place in historic Southeastern aboriginal culture, and there is every reason to believe that it was equally if not more important among the chiefdoms of the late prehistoric and early historic periods (Bridges et al. 2000; Dye 2002). Relations between neighboring chiefdoms were to a significant degree conditioned by warfare, chiefdoms had specially designated head war chiefs, and graded hierarchies of warriors were recognized.

During much of the time the Natchez and French were in contact, the head war chief was the younger brother of the Great Sun. The Great Sun is also said to have appointed two war chiefs (Swanton 1911:102, 103). Whether the posi-

tion of head war chief was one of these or was inherited within the Great Sun's matriline is not known, but the latter seems likely. The one military duty that was explicitly assigned to the head war chief in the French accounts was to call a council of older and respected warriors to consider declarations of war (Swanton 1911:127).

The De Soto chroniclers make no specific mention of war chiefs or warrior hierarchies. Bandera, the notary for the second Pardo expedition, refers to some men in the eastern Carolina polities as *mandadores.* Hudson (1990:66) identifies these as war chiefs, but Hann (1992) and Worth (1998) believe the term was used among the seventeenth-century Apalachee and Timucua to refer to the *iniha.* Hann and Worth cite no Spanish references to a separate office of war chief among the Apalachee and Timucua; the office may have disappeared or lost importance as a result of Spanish suppression of warfare among the missionized Indians. Among the Apalachee, warriors were led in battle by their polity or town chief (Hann 1988:105). Eighteenth-century Creek towns each had a war chief who directed council meetings at which the decision to go to war was made and who led at least some of the war parties that originated in a town (Swanton 1928a:297–298).

Military prowess was one of the main avenues to higher social standing and political power in historic-period aboriginal society. Young men strove to earn a war name and be elevated to the rank of warrior (Moore 1988:62; Swanton 1928a:297, 434; Williams 1927:93). Among the Creek, young men who had not achieved this rank were compelled to perform menial tasks around the town square ground and for other recognized warriors. The requirements for earning a war name varied from tribe to tribe but might entail participating in a raid in which scalps were taken or actually taking a scalp (Campbell 1930:161; Hann 1988:71; Swanton 1928a:434). Different grades or titles were recognized within the warrior rank and these required capturing or scalping set numbers of enemy or the performance of other valorous acts (Campbell 1930:162; Ethridge 2003:103; Gearing 1962:26; Hann 1988:71; Swanton 1911, 1928a; Williams 1927). The Natchez recognized three grades of warriors—apprentice warrior, ordinary warrior, and true warrior—and individuals received new names from the "ancient war chief" after each new war exploit (Swanton 1911:124–125, 129). At least four warrior grades were recognized by the Apalachee, and each was attained by killing and scalping a set number of enemy (Hann 1988:182).

Military accomplishments could be displayed by designs tattooed on the arm and chest (Swanton 1928a, 1946) or by war trophies such as scalps and body parts (Dye 2007) and could also be memorialized by receipt of a new

name (Swanton 1911:124, 1928a:434). DeBrahm, writing about the Cherokee in the early 1770s, provides perhaps the most detailed description of these practices:

> A certain Number of Scalps are required from the Hands of a young Indian before he can be honoured with the first military Title, which is a Slave-Catcher; and a certain Number more for the next higher Title, which is a Raven. The next higher Title to this is a Man-killer (as much as a Colonel); their highest Military Rank is that of a Warrior (as much as a General). They receive at every Promotion, certain Marks on their Necks, Cheeks, and Breast, printed in the Skin with Scratchings of a Pin and Gun Powder or Coal Dust; before they have any Title given them, they are only called Gun-Men or Boys, which in time of hunting and War attended their Chiefs as Servants, bring them Water, Wood Fire and Venison [DeVorsey 1971:109].

War and its counterpart, peace, were basic distinctions in the Creek and Cherokee dualistic conceptualization of the world. Each received expression in social, political, and ideological realms of society, and they were symbolized by the colors red and white, respectively (Gearing 1962; Hudson 1976:235). According to Hudson (1976:235), the color red had the meaning of war, danger, and disunity, while white stood for peace, purity, and unity.

There are a few early historic references to councils that would seem to indicate that polity chiefs were not the sole source of power and authority in Mississippian chiefdoms. Swanton (1911:107) states that the Great Sun had a council that advised him and limited his authority, but there are few references to such in the French accounts. Relating the events leading up to the fourth Natchez war, Du Pratz (Le Page du Pratz 1947:74) describes how the chief of the White Apple village held a council with "the old men of his village" to discuss how to deal with the demands of a corrupt French official. According to Du Pratz, the matter eventually was taken to the Great Sun and his council. Du Pratz also describes war councils that were called to consider declarations of war. According to Du Pratz (Le Page du Pratz 1947:350), such councils were composed of the "oldest and bravest warriors," were attended by the great chief, and were led by the great war chief. The decisions of such councils could not be overridden by the great chief or the war chief.

Timucua polity chiefs apparently also shared power to some extent with councils. The latter were composed of individuals known as *principales*, who were related to the polity chief, their rank being determined by the genea-

logical proximity of their lineage to that of the chief. The *iniha* was the highest ranking of the *principales,* but at least seven other titled offices were distinguished (Knight 1990:14; Worth 1998:90). *Indios principales* also existed in the sixteenth-century polities of the Carolinas and were likewise related to the chief (Hudson 1990:66). Except for the Du Pratz statement noted above, there is little evidence in the early documents concerning whether subordinate communities also had councils and *indios principales.* The eighteenth-century Creek equivalent of the *indios principales* may have been the "Beloved Men," former war leaders and older respected members of the community who served as advisors to the town headman (Hudson 1976:225; Swanton 1928a:302).

Large public structures where councils presumably conducted their business are known from several early historic accounts and archaeological sites. The residence of the Great Sun was evidently large and used for some meetings of officials, including the reception of large peace delegations. Penicaut describes it as holding 4,000 people (Swanton 1911:100). Le Petit refers to a "large hall, which is on the mound of the great chief by the side of his cabin" (Swanton 1911:135). Among the closely related Taensa, the chief's house was apparently used in a similar fashion. Tonti describes it as measuring 40 feet across the front. Upon entering the cabin, he found the chief reclining on a couch with "60 old men opposite him" (Swanton 1911:259).

Principal towns of the Timucua and Apalachee in the seventeenth century had large council houses with seating assigned by rank. Formal government meetings, as well as a variety of ceremonies, were held within these large public buildings. They also provided visitors with temporary shelter and served as men's clubhouses. Large public structures, which almost certainly had similar uses, are known from aboriginal contexts at King, at the Mouse Creek phase Ledford Island site (Sullivan 1987), and at the Middle Qualla phase Coweeta Creek site (Rodning 2002). Like King, Ledford Island probably was a secondary town within a chiefdom. Presumably council houses were also present at the administrative centers of Mississippian chiefdoms, but there is little archaeological evidence for them at present.

Descent systems and domestic organization are reasonably well documented for the ethnographic tribes of the nineteenth and early twentieth centuries. The Creek (Swanton 1928a), Seminole (Spoehr 1941), Cherokee (Gilbert 1943), Chickasaw (Swanton 1928c), and Choctaw (Swanton 1931) had matrilineal clans, and these typically were totemic, regulated marriage, and extended throughout the entire society. Moieties were present in Creek, Choctaw, and

Chickasaw society but are not reported for the Cherokee. Moieties appear to always have had symbolic associations with war and peace. Other functions, such as regulating marriage and organizing the ball game, apparently differed from tribe to tribe. Matrilocal, multiple-family households (Hammel and Laslett 1974) are reported for the Creek, Cherokee, Choctaw, and Chickasaw.

Matrilineal descent, or at least the matrilineal inheritance of leadership positions, is reported for the Timucua (Knight 1990:9; Worth 1998:87) and Apalachee (Hann 1988:70) in the early seventeenth century and for the Natchez (Swanton 1911) and Chickasaw (Moore 1988) in the early eighteenth century. There is, furthermore, one early seventeenth-century reference to matrilineal totemic clans among the Timucua (Knight 1990:9). Beyond this, there is no direct ethnohistorical evidence concerning the nature of aboriginal descent systems at the time of earliest European contact.

The divine nature of the Natchez Great Sun and the matrilineal inheritance of his office and that of polity and village chiefs among the Apalachee and Timucua indicate that Mississippian society was hierarchically organized along kinship lines and that heredity was a major determinant of high status and political power. The polity chief and his matrilineage occupied the top of the sociopolitical hierarchy, and other matrilineages and clans were ranked according to their genealogical proximity to the chief's line. It is not clear whether this ranking extended throughout society and involved all descent groups in subordinate communities, but it probably did (Knight 1990). It also is not clear whether descent groups were internally ranked. Knight (1990) argues that they were not and musters considerable evidence in support of his position.

Overlying this system of ranked clans among at least the Natchez and Timucua was a division of society into nobles and commoners (Knight 1990; Swanton 1911:107). The social and economic characteristics of this distinction are not very well understood, but it is likely that the nobility included the polity chief and his matrilineage and a number of related descent lines. Male offspring of the polity chief declined in rank over several generations and eventually entered the commoner class.

Colonial-period Creek and Cherokee society lacked this kind of hierarchical social order. Instead, high status, along with the authority and power that accompanied it, was determined by personal achievement, genealogical and age seniority within local clan segments, and age (Hudson 1976:203; Sattler 1995). The Creek appear to have placed more emphasis on ranking and hereditary access to high status than did the Cherokee. Descent groups were ranked relative

to each other, and most high statuses and offices were passed down within a small number of clans or appointed by the town chief (Braund 1993:20; Sattler 1995).[1]

The historic Creek and Cherokee assigned very different roles to adult males and females (Bell 1990; Braund 1993; Ethridge 2003; Perdue 1998; Sattler 1995). Men hunted, went to war, constructed houses and public buildings, and made most of the implements they used in daily and ritual activities. Women did most of the farming, all of the food preparation, and made pottery, baskets, and clothing, among other things. The Creek and Cherokee considered women to be dangerous and polluting to males and male activities during menstruation and childbirth, while men were considered to be dangerous immediately before and following their participation in warfare. While such gender roles are not unusual in aboriginal eastern North America, the Creek and Cherokee appear to have carried gender distinctions and separation to an extreme (Bell 1990; Braund 1993:15; Hudson 1976:317–319; Perdue 1998:18–36). Men and women were like different kinds of human beings and were assigned to fundamentally different social categories that—along with the upper world of order and stability and the under world of disorder and change—were part of a larger cosmic structure characterized by opposition and balance (Bell 1990; Hudson 1976:127–128; Perdue 1998:18). As with other elements of this cosmic structure, failure to keep the male and female categories separate and unmixed was believed to be dangerous and polluting.

Sattler (1995) argues that Cherokee women enjoyed higher status in society than did Creek women. They had more sexual freedom, retained greater personal and economic power in marriage, and participated more actively in political affairs. Unlike Creek women, their status and influence increased as they grew older and attained greater seniority within their clans. Women recognized as "War Women" as a result of their involvement in warfare and postmenopausal women who gained the status of "Beloved Woman" were held in high regard and were given special roles in Cherokee ritual and political life. Among other things, they decided the fate of war captives and could incite or terminate warfare (Perdue 1998:36–39; Sattler 1995:218–223). Contrary to Sattler's characterization, there is some evidence that the Creek recognized a Beloved Woman status and that women sometimes accompanied war parties and even fought in battles (Braund 1993:22–23).

Archaeological evidence from northern Georgia and surrounding states provides a number of insights into the internal settlement organization of Mississippian chiefdoms and their spatial and temporal dimensions. The distance separating the mound centers of neighboring, contemporary polities in

northern Georgia ranges between 32 and 55 km (Hally 1996). If this space is equally divided between adjacent polities, each would have controlled a territory with a radius of less than 30 km. Survey data for mid-sixteenth-century sites in the Valley and Ridge Province of Georgia, Alabama, and Tennessee indicate that such territories can be divided into core and buffer zones. Settlement in the region was typically in large towns, with individual chiefdoms consisting of around half a dozen towns. These towns tend to be distributed at intervals of 3–7 km along sections of river measuring 15–20 km in length (Hally et al. 1990). This core area of alluvial floodplain and adjacent uplands was densely occupied and intensively exploited for subsistence purposes, especially maize cultivation (Hudson et al. 1985:727–728). Surrounding it was a lightly occupied or unoccupied zone measuring 10–30 km across that probably functioned as a military buffer and reserve for wild food species. In the Georgia Piedmont, where river floodplains are less extensive, populations seem to have resided primarily in smaller, more dispersed settlements. The same core–buffer zone pattern, however, appears to be characteristic of polities here as well (Hatch 1995).

Chiefdoms in northern Georgia inevitably passed through a life cycle that began with the establishment of centralized political institutions and ended with their collapse (Anderson 1994; Hally 1996).[2] Mound construction sequences and ceramic cross-dating provide evidence that this cycle usually played out in a hundred years or less (Hally 1996).

Survey data from several locations across northern Georgia indicate that local populations either disappeared completely or declined dramatically in size when chiefdom political systems collapsed (Hally 1996). While we do not know that this happened in every case of chiefdom collapse, it is difficult to imagine how communities could survive in competition with neighboring chiefdoms without some sort of effective centralized political organization. When area abandonment did occur, people probably either joined existing neighboring chiefdoms or participated in the formation of new ones.

Mississippian chiefdoms are known to have existed in 27 different locations across northern Georgia. Ceramic and stratigraphic evidence from platform mounds indicates that as many as 47 distinct chiefdoms rose and fell in these loci during the Mississippi period (Hally 1999). Most of these polities appear to have developed in locations that were lightly inhabited or uninhabited at the time. Again, we do not have archaeological or documentary evidence for where the citizens of such chiefdoms originated, but it is reasonable to assume that they came from neighboring chiefdoms, some of which may have been in the process of breaking up.

Kopytoff (1987) describes a similar pattern of polity breakup and creation for indigenous African societies. According to his internal frontier model, new societies continually emerged and developed in the uninhabited or sparsely inhabited frontier areas lying between established polities. For a variety of reasons—factional disputes, oppressive authority, military defeat—established societies tended to segment and fission. Disaffected and displaced individuals often left their homes in large numbers and moved to frontier areas, where they attempted to establish new communities. Strengthened by the addition of later immigrants, these communities might develop in economic and political strength over time to the point that they rivaled the very polities from which they had originated. In 1708, Thomas Nairne (Moore 1988) described a process of community fissioning for the Chickasaw that conforms in several respects to Kopytoff's model. The sociopolitical and ideological mechanisms underlying the process of community fissioning that Nairne observed probably operated at the polity level in the sixteenth century and in prehistoric times.

The internal frontiers in northern Georgia could be locations where no chiefdoms had yet developed or they could be locations that had been abandoned following the collapse of earlier polities. Preference seems to have been given to places that previously were home to a chiefdom, since 19 of the 27 known chiefdom loci were reutilized at least one time during the Mississippi period. Reuse typically occurred following periods of abandonment lasting a hundred years or so. In most such cases, the new chiefdom used the administrative center of the previous chiefdom as its own center, even building its temple and chief's residence on the summit of the earlier platform mound.

Most chiefdoms in northern Georgia and elsewhere across the Southeast had only a single administrative center and had only a single level of political control above the community. In some cases, more complex chiefdoms developed that were characterized by two levels of control. The Etowah site in northwestern Georgia and the Moundville site in west-central Alabama are good examples of such polities. Each site had multiple platform mounds. Four or more secondary centers with a single platform mound were distributed up and down the respective river valleys for a total distance of approximately 40 km (King 2003; Knight and Steponaitis 1998).

The early Spanish documents describe situations in which a number of chiefdoms were under the political domination or control of another more powerful chiefdom and its leader (Hudson et al. 1985). At least three such paramount chiefdoms can be identified in the Southern Appalachian region in the mid-sixteenth century: Coosa, comprised of at least seven chiefdoms lo-

cated in the Great Valley of Tennessee, Georgia, and Alabama; Ocute, which included four chiefdoms located in the Middle Oconee River valley; and Cofitachequi, with an unknown number of subordinates in the Wateree Valley of South Carolina (Hudson 1994). Little is known about the nature of these larger polities. Subordinate chiefdoms paid tribute to the paramount, acknowledged his superior position, and participated in joint military actions against common enemies. Beyond that they seem to have been left alone to run their own affairs.

Notes

1. Sattler (1995) discusses social status among the Muskogee and includes in that category both Creek and Seminole.

2. Blitz (1999) has argued that some Mississippian chiefdoms in the Southern Appalachian region went through a more complicated life cycle involving fission and fusion processes and potentially four different stages of development. With the possible exception of the Brewster phase occupation at Etowah, none of the types of mound site distribution that his model is supposed to explain can be documented for northwestern Georgia.

3
The Natural, Cultural, and Historical Context of the King Site

Northwestern Georgia has received a considerable amount of attention from archaeologists since the late 1930s (Hally and Langford 1988). The entire region was surveyed in a nonintensive manner by Wauchope in 1938–1940 (Wauchope 1966). More intensive surveys have been conducted at Carters Dam on the Coosawattee River and along the Etowah River in the vicinity of Cartersville, Georgia, and in the Allatoona Reservoir to the east (Caldwell 1957; Southerlin 1993). Other area surveys of varying intensity and extent have been conducted by Shorter College, the University of Georgia, the Coosawattee Foundation, Inc., and a number of cultural resource management firms. Seven Mississippian mound sites have been subjected to large-scale excavation, as have three habitation sites, including King. As a result of this work, we have a good understanding of the region's culture history and a fairly large inventory of recorded aboriginal sites. I will use this wealth of information in the present chapter to develop a picture of the culture historical and political contexts in which the occupation of the King site occurred. These perspectives will be drawn upon frequently throughout the remainder of this book.

The Natural Setting

The King site is located at Foster Bend on the Coosa River in Floyd County, northwestern Georgia (Figure 3.1). Foster Bend is a large, east–west oriented meander loop in the Coosa River (Figure 3.2). Its western half is an older terrace surface with elevations ranging between 580 feet (176.8 m) and 590 feet

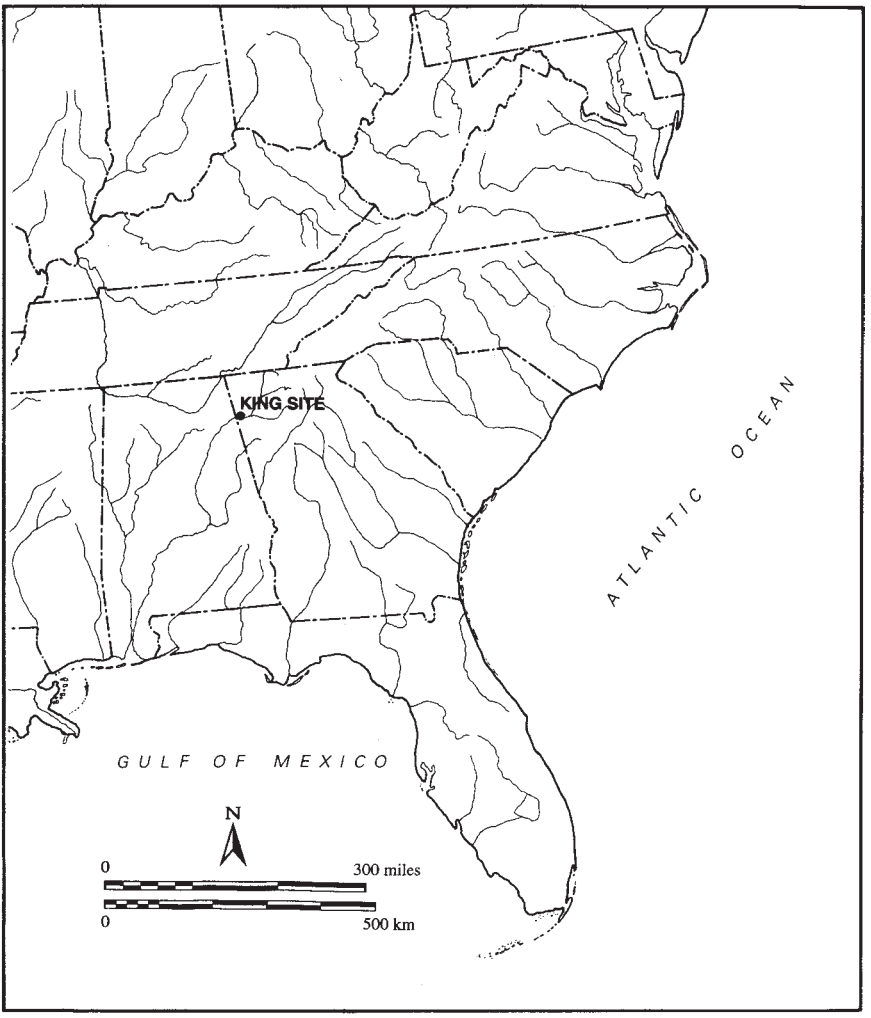

Figure 3.1. Location of the King site.

(179.8 m) amsl. Its eastern half, where the King site is located, is active floodplain with elevations ranging around 570 feet (173.7 m) amsl (Figures 3.3 and 3.4). Much of Foster Bend is characterized by a ridge-and-swale topography that was produced at the time the river migrated eastward to its present location against the hills that border it on the east. The King site is located on a north–south oriented ridge with an elevation of approximately 572 feet (174.3 m) amsl but extends into a swale to the west. Surface elevation at the

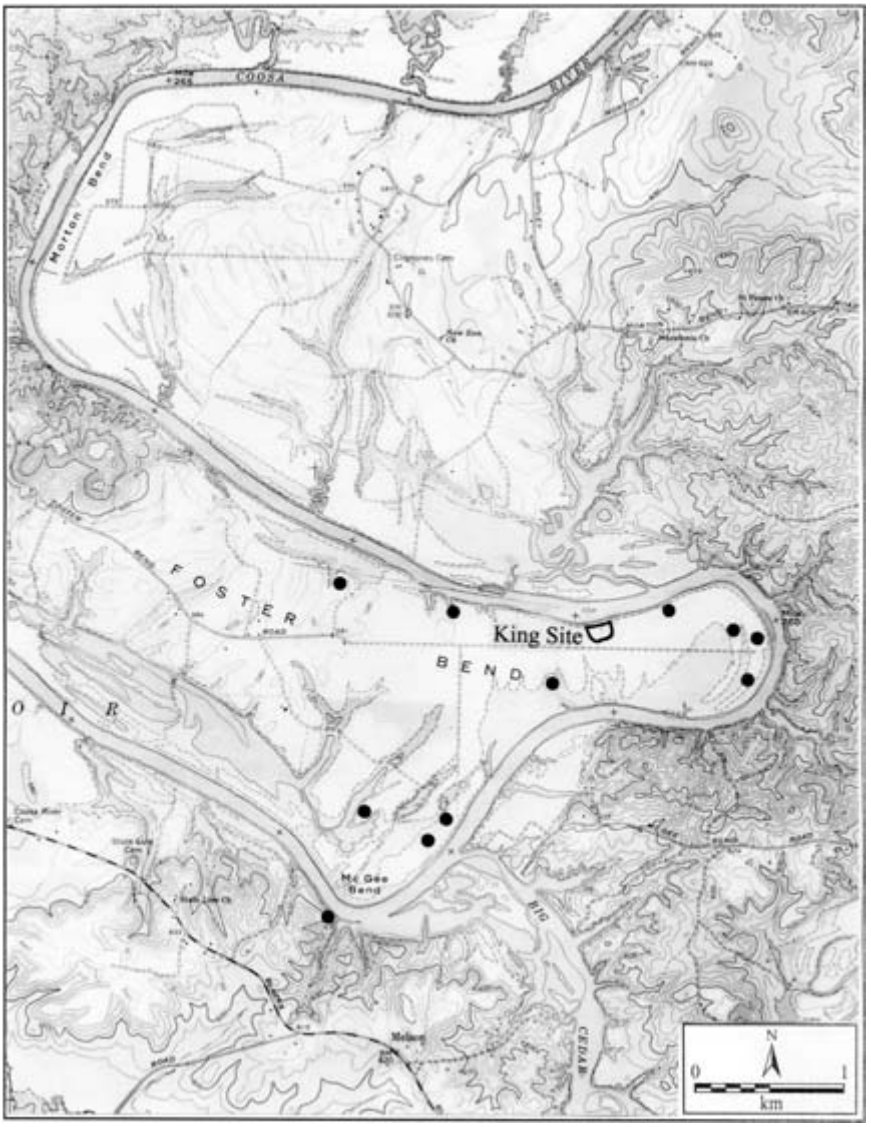

Figure 3.2. Mississippian sites recorded in Foster Bend.

western edge of the site is approximately 568 feet (173.1 m) amsl. Surface elevation decreases only gradually to the south along the ridge and is essentially level within the limits of the site.

Soils in the eastern third of Foster Bend alternate between a well-drained Toccoa Fine Sandy Loam on ridges and Chewacla Silt Loam in the more poorly

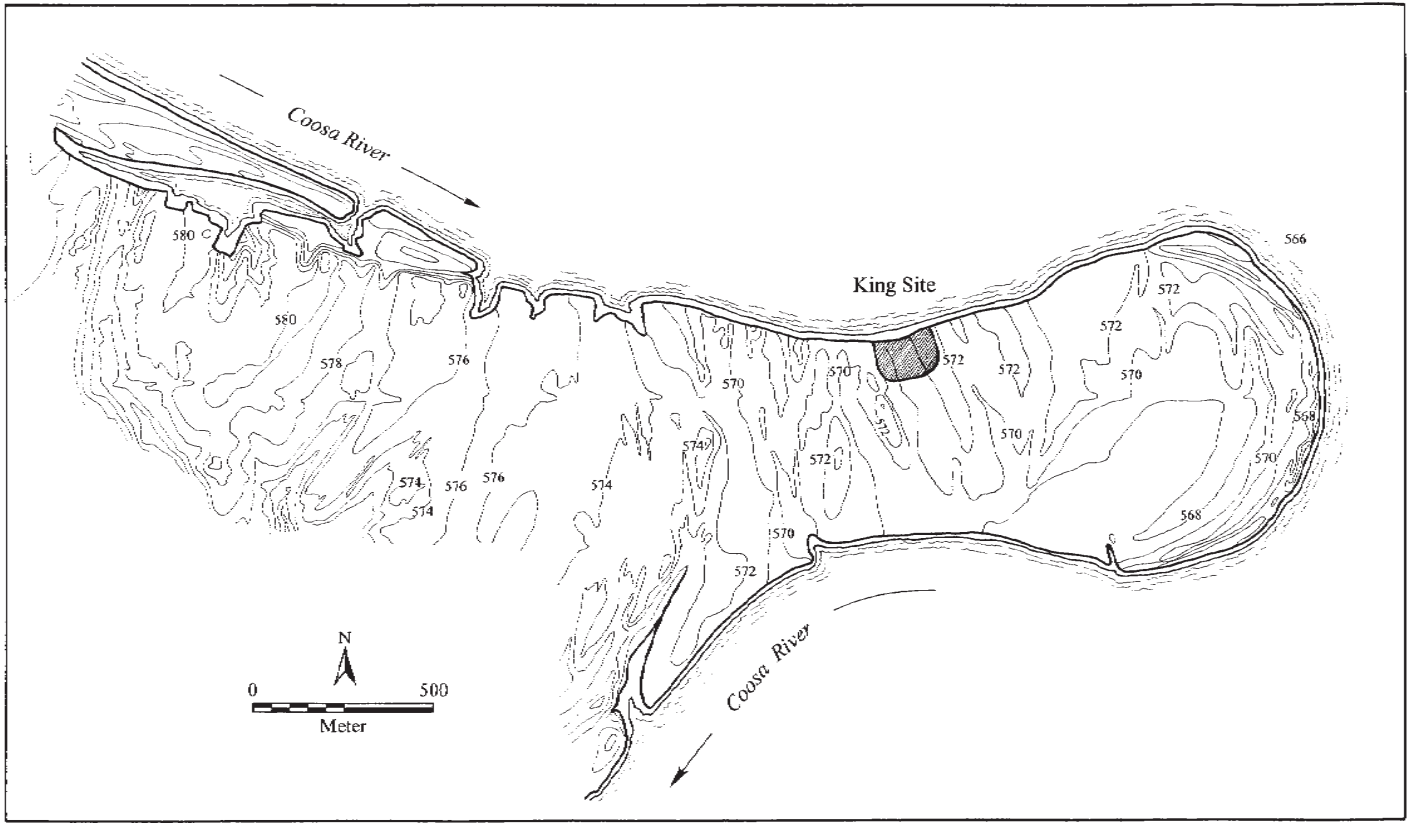

Figure 3.3. Contour map of Foster Bend showing the ridge-and-swale topography (contour intervals in feet).

Figure 3.4. View looking east across the Foster Bend floodplain. The King site is located immediately to the right of the tall trees. The distance to the hills bordering the Coosa River at the eastern end of the bend is approximately 1 mile.

drained swales. To the west, the higher terrace soils alternate between Rome Fine Sandy Loam and Roanoke Silt Loam and between Etowah Loam and Wax Loam. According to the USDA soil survey for Floyd County (Tate 1978), the Rome and Etowah soils are well drained, high to moderately high in natural fertility, and produce the highest yield of corn (95–100 bushels per acre under a "high level of management") in the county (Tate 1978:Table 2). The Toccoa soils are well drained but are frequently wet, have moderate natural fertility, and yield 90 bushels of corn per acre. The Chewacla, Roanoke, and Wax soils are poorly drained and generally poorly suited for row crops, although Chewacla Silt Loam is identified in the county soil survey report as having a very high corn yield of 100 bushels per acre. The Toccoa, Rome, and Etowah series soils cover more than two-thirds of the floodplain area within Foster Bend and Morton Bend to the north.

Surface scatters of Late Archaic and Woodland period artifacts in the eastern portion of Foster Bend indicate that the river has been in its current location for several thousand years. This antiquity is confirmed by the soil types.

The Toccoa soils at the eastern end of the bend are entisols with an age of at least 1,000 years. The Rome and Roanoke soils are ultisols with an age of more than 5,000 years. The Etowah and Wax soils are also ultisols but belong to the paleudult and fragiudult subclasses, respectively, and are considerably older (David Leigh, Department of Geography, University of Georgia, personal communication 2005; Tate 1978:Table 14). The progressive drop in surface elevation from west to east and the accompanying decrease in age of soils suggest that the Foster Bend meander loop formed over a long period of time during which the elevation of the river dropped 20 feet or more.

The King site lies within the Great Valley District of the Valley and Ridge Province (Clark et al. 1976) (Figure 3.5). The Valley and Ridge Province consists of a wide belt of unmetamorphosed sedimentary rocks of Paleozoic age that extends from Alabama to New York State. These rocks tend to be strongly folded and faulted and, through erosion, have been formed into a series of parallel ridges and valleys. The Great Valley, measuring 30–40 km across, occupies the eastern and southern half of the province in northwestern Georgia. Compared with the rest of the province, it is relatively flat with elevations ranging between 200 and 250 m (650–820 feet) amsl; the few widely spaced ridges and hills seldom exceed 30 m in height. The Great Valley is bordered on the east and south by the Blue Ridge and Piedmont physiographic provinces. A geological fault line, the Cartersville Fault, visible as a prominent escarpment, separates the more rugged Piedmont and Blue Ridge provinces from the Great Valley.

The Great Valley is drained by the Coosa River and its tributaries, the Etowah River and the Conasauga-Coosawattee-Oostanaula rivers (Hally and Langford 1988). The Coosa River is formed at Rome, Georgia, by the confluence of the Etowah and Oostanaula rivers. The Etowah, Coosawattee, and Conasauga rivers originate in the Piedmont and Blue Ridge provinces and flow westward into the Great Valley. Although flanked by broad floodplains for much of their length in the Great Valley, these rivers and the Coosa and Oostanaula rivers do not have sufficiently wide valleys to permit their channels to meander freely. As a result, oxbow lakes are not common. Natural levees are poorly developed.

Braun (1950) and Kuchler (1964) identify the forest of the Valley and Ridge Province as oak-pine and oak-hickory-pine, respectively. Oak and hickory are dominant species, but pine is also common, especially on drier and poorer soils. Early nineteenth-century land surveys report that oak, pine, and hickory occurred in ratios of 50:18:8 (Plummer 1975).

Climate in the Valley and Ridge Province is relatively uniform and mild (Bramlett 1965; Tate 1978). Precipitation amounts to 50–65 inches per year, with most falling in the period December–March. Rainfall in the summer is

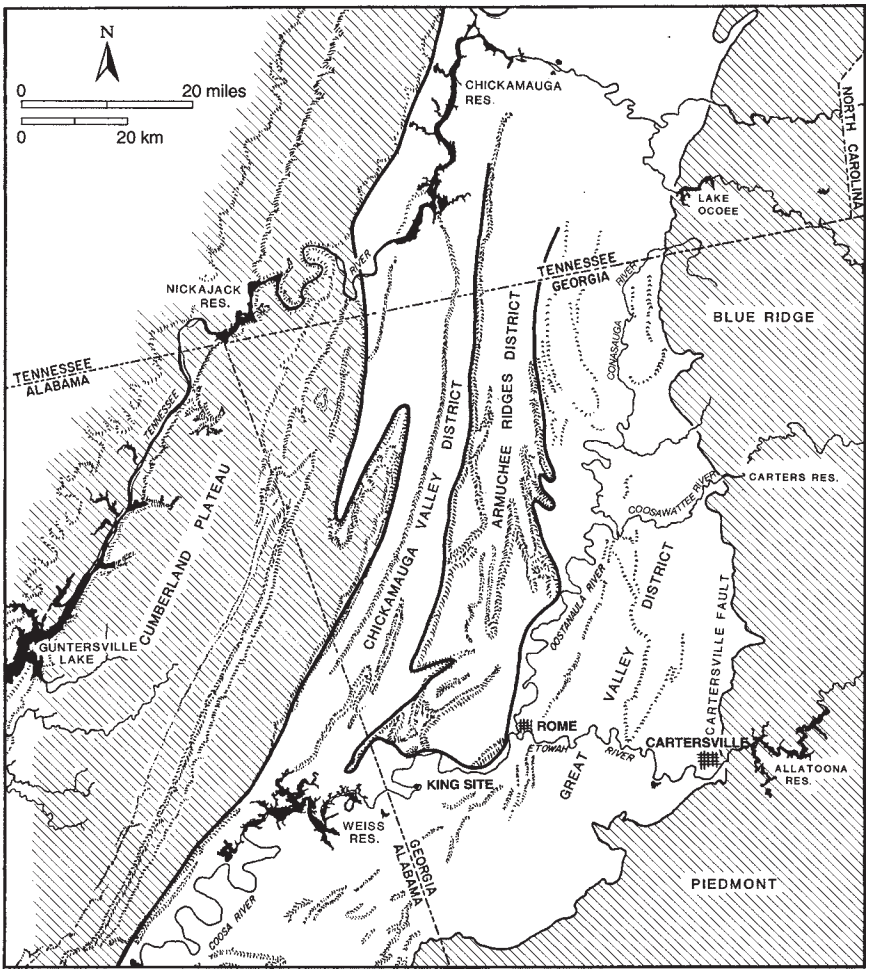

Figure 3.5. Physiographic features of the Valley and Ridge Province in northwestern Georgia.

only slightly less, but it occurs mainly as localized, sometimes intense, showers. Average maximum and minimum temperatures for Gordon County in the Great Valley District are, respectively, 87.5 degrees Fahrenheit in July and 32.3 degrees Fahrenheit in January. The average number of frost-free days for the area is 215.

The Culture Historical Setting

A fairly tight ceramic chronology has been developed for northwestern Georgia over the years by archaeologists working in the region (Caldwell 1950, 1957;

Fairbanks 1950; Hally and Langford 1988; King 2003; Sears 1950, 1958; Wauchope 1948, 1950). There are a few minor problems with the chronology that need to be resolved, but most site components represented by reasonably large pottery collections can be dated to one of six periods having durations of 75–100 years each (Table 3.1). Such short time intervals are possible because of the rapid pace of change in complicated stamped motifs and vessel rim shape modes that characterize the region's pottery. Seven ceramic phases have been defined. These can be assigned to three cultures (*sensu* Willey and Phillips 1958)—Etowah, Savannah, and Lamar—that extend throughout the region and across most of northern Georgia.

The known Mississippian sites in northwestern Georgia tend to be clustered in four locations: the Lower Etowah River valley immediately west of the Cartersville Fault; the Upper Coosa River valley between Rome and the Alabama state line; the Lower Coosawattee River valley between the Cartersville Fault and the mouth of the Conasauga River; and the Conasauga River valley immediately below the Cartersville Fault (Figure 3.5). Ceramic phase sequences for each of these locations are shown in Table 3.1. They are based primarily on ceramic collections from mound sites: Wilbanks (9CK5), Etowah (9BR1), Plant Hammond (9FL3), Sixtoe (9MU100), Bell Field (9MU101), Little Egypt (9MU102), Baxter (9GO8), and 40PK16 (Figure 3.6). The most well-defined sequence is in the Lower Etowah Valley, where five Mississippian phases have been defined and dated. The sequence of occupations is equally well known in the Coosawattee and Coosa river localities, but only two phases have been formally defined in print, both in the Coosawattee locality. The Conasauga River valley is the least well-known locality but appears to have been occupied during at least three periods. The 42-km-long Oostanaula Valley appears not to have had any significant Mississippian occupation except near its northern end at the junction of the Conasauga and Coosawattee rivers and at its southern end where it joins the Etowah River. This is probably due to its location between centers of development on the Coosawattee and Coosa rivers. Most periods of occupation along the Conasauga, Coosawattee, and Coosa rivers are identified in Table 3.1 by phase names borrowed from adjacent localities or by period names. I suspect that most of these occupations will be assigned to new phases once large ceramic collections suitable for in-depth analysis become available.

The Upper Coosa River valley in Georgia was occupied at three different times during the Mississippi period. Mohman (9FL155) and Coosa Country Club (9FL161) have each yielded small collections of Etowah Complicated Stamped pottery that can be dated to the Late Etowah period. After an occupation hiatus of approximately a hundred years, the Plant Hammond (9FL3)

Table 3.1. Local phase sequences in northwestern Georgia and adjacent areas

	Culture Periods	Lower Etowah Valley[1]	Upper Coosa Valley[2]	Lower Coosawattee Valley[3]	Lower Conasauga Valley[3]	Middle Coosa Valley[4]	Middle Chattahoochee Valley[3]	Guntersville Reservoir[5]	Chickamauga Reservoir[6]	Tellico Reservoir[7]
1600								Crow Creek		
1500	Middle Lamar	Brewster	Barnett	Barnett	Middle Lamar	Barnett	Middle Lamar		Mouse Creek	Dallas
1400	Early Lamar			Little Egypt	Early Lamar		Early Lamar	Henry Island		
1300	Late Savananah	Late Wilbands Early Wilbanks	Wilbanks	Late Savannah		Late Savannah			Early Dallas	
1200	Early Savannah						Early Savannah		Late Hiwassess Island Early Hiwassee Island	Hiwassee Island
1100	Late Etowah	Late Etowah	Late Etowah			Etowah	Late Etowah	Langston		
1000	Early Etowah	Early Etowah		Early Etowah	Early Etowah				Martin Farm	Martin Farm
900	Woodstock	Woodstock		Woodstock			Woodstock			

1. King 2003:Table 1.
2. Chamblee et al. 1998; Hally and Langford 1988.
3. Hally 1996:Table 6.2.
4. Holstein and Little 1987; Knight 1985; Little and Curren 1981.
5. Walthall 1980.
6. Sullivan 2007.
7. Schroedl et al. 1985.

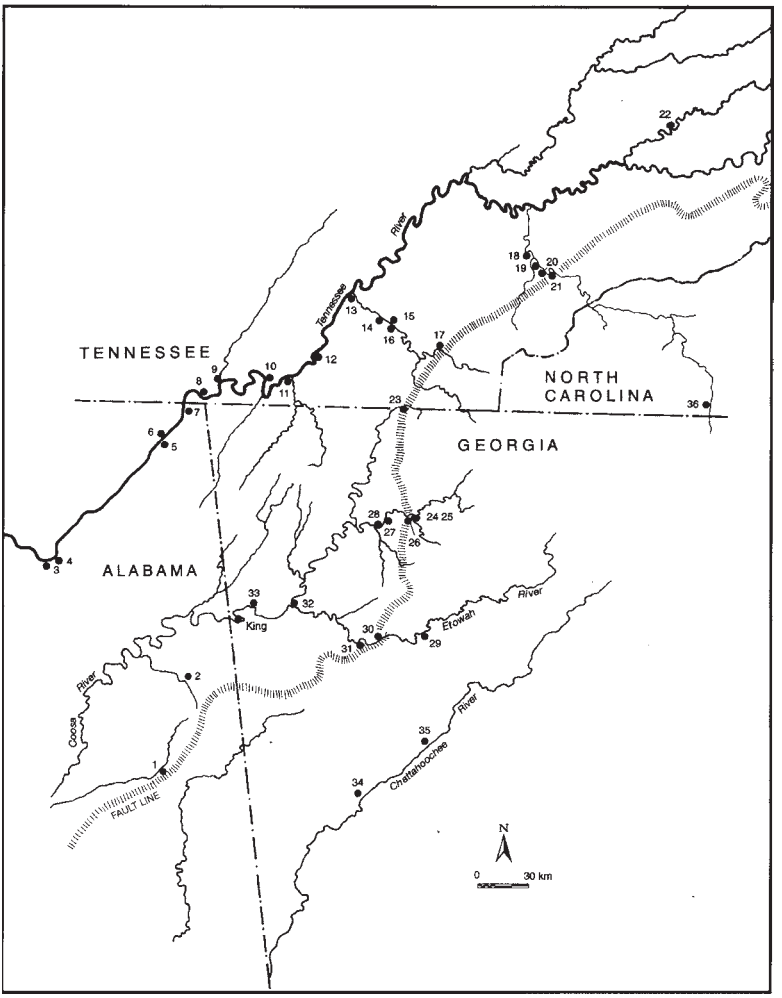

Figure 3.6. Selected Mississippian sites in the Southern Appalachian region.

1. Davis Farm (1CA196)
2. 1CE308
3. Gunter's Landing (1MS39)
4. Henry Island (1MS55)
5. Cox (1JA176)
6. Rudder (1JA180)
7. Long Island (1JA340/40MI69)
8. Wilson (40MI1)
9. Bennett (40MI7)
10. Williams Island (40HA60)
11. Citico (40HA65)
12. Dallas (40HA1)
13. Hiwassee Island (40MG31)
14. Ledford Island (40BY13)
15. Mouse Creeks (40MN3)
16. Rymer (40BY11)
17. Hiwassee Old Town (40PK3)
18. Mialoquo (40MR3)
19. Tomatley (40MR5)
20. Toqua (40MR6)
21. Chota-Tanasee (40MR2/62)
22. Loy (40JE10)
23. 40PK16
24. Sixtoe (9MU100)
25. Bell Field (9MU101)
26. Little Egypt (9MU102)
27. Thompson (9GO4)
28. Baxter (9GO8)
29. Wilbanks (9CK5)
30. Etowah (9BR1)
31. Leake (9BR2)
32. Nixon (9FL162)
33. Plant Hammond (9FL3)
34. 9DO39, 9DO45
35. Vandiver (9DO1)
36. Coweeta Creek (31MA34)

mound was constructed and used during the Wilbanks phase. Two other sites in the valley have yielded small collections of Wilbanks sherds. The third occupation, following a second hundred-year-long period of valley abandonment, is identifiable with the Barnett phase and is represented at King and several other large village sites.

The local sequences in northwestern Georgia are interesting because each has one or more gaps, representing periods when a locality either was not occupied or had a very small resident population. The Etowah Valley, for example, appears to have been vacant during the Early Savannah period and to have had a very small population during the Early Lamar period. These gaps in the Etowah Valley sequence have been confirmed by intensive site survey of a 5-km-radius area centering on the Etowah site (Southerlin 1993). Except for the immediate vicinity of Carters Dam on the Coosawattee River and the Allatoona Reservoir on the Etowah River, no other intensive site surveys have been conducted in the region. Nevertheless, the archaeology of the Coosawattee and Coosa river valleys is well enough known through professional and amateur archaeological investigations that we can be fairly certain the occupation gaps identified in those areas are real. The significance of these occupation hiatuses will be discussed in the following section.

Late Mississippian occupations are known from a number of areas surrounding the Valley and Ridge section of Georgia, including the Upper Etowah River to the east, the Middle Chattahoochee River to the south, the Middle Coosa River to the southwest, the Guntersville Reservoir on the Tennessee River in northeastern Alabama, the Chickamauga Reservoir on the Tennessee River to the north, and the Tellico Reservoir on the Lower Little Tennessee River to the northeast (Figures 3.5 and 3.6). Cultural sequences in the Middle Coosa River valley, the Upper Etowah River valley, and the Chickamauga Reservoir, for the most part, can be cross-dated to the northwestern Georgia sequences with some accuracy. The sequences in the Guntersville and Tellico reservoirs, on the other hand, cannot be because their ceramic assemblages are so different. It is unfortunate that these latter sequences cannot be accurately tied into the northwestern Georgia sequences because the growth and decline of Mississippian chiefdoms in these areas would have had an impact on developments in the Upper Coosa River valley.

The King site's position in the region's culture history is fairly straightforward. To begin with, King is essentially a single-component site. Early utilization of the area is suggested by the presence of Archaic and Woodland period points in the plow zone. No features resulting from such use, however, have been found in excavations, suggesting that utilization was not very intense.

Table 3.2. Radiocarbon dates from the King site

Laboratory Number	Provenience	^{14}C Years B.P.	Uncorrected Calendar Date	MASCA Corrected Date (1 sigma)	Reference
UGA 589	Structure 8	280 ± 70	1670 ± 70	1460–1600 1530–1680	Unpublished
UGA 590	Structure 5	Modern			Unpublished
UGA 591	Structure 4	120 ± 65	1830 ± 65	1615–1775 1715–1865	Unpublished
UGA 307	Structure 2	540 ± 55	1410 ± 55	1335–1445	Noakes and Brandan 1974:134

The major occupation, accounting for all recorded features and burials and probably all postholes, dates to the middle decades of the sixteenth century. The pottery assemblage is very similar to the Barnett phase type collection from the Little Egypt site, located on the Coosawattee River 80 km to the northwest (Hally 1979). There are slight differences in the relative frequencies of shell and grit tempering and in plain and complicated-stamped surface treatments, but for all practical purposes the assemblage is identifiable as Barnett phase.

Four radiocarbon dates have been obtained from charred wood recovered by Pat Garrow in 1973, but they are not internally consistent, and only one of them (UGA 589) is consistent with age estimates based on pottery and historic artifacts (Table 3.2). The Barnett phase can be assigned to the Middle Lamar period on the basis of ceramic cross-dating. Available radiocarbon dates for Mississippian sites in northern Georgia date this period to approximately A.D. 1450–1550 (Hally and Langford 1988).

A much more precise and reliable date for the Barnett phase occupation of King is provided by Spanish artifacts recovered from five burials. Marvin Smith (1987:45–46) assigns these items to his European Artifact Assemblage A, which he dates to A.D. 1525–1565. The De Soto and Luna expeditions are believed to have followed the Coosa River in their passages through northwestern Georgia in 1540 and 1560, respectively. The Spanish artifacts in burials at King were probably obtained directly from one or both of these expeditions. They

allow us to date the occupation of the King site to the middle decades of the sixteenth century.

As we will see in the following section, there are a number of large habitation sites on the Coosa River upstream from King that are contemporary with it. There is no evidence, however, for any occupation of the river valley during the preceding Early Lamar period. Plant Hammond (9FL3), located 7.5 km northeast of King on the Coosa River, is a Wilbanks phase mound site and as such demonstrates that there was a substantial population on the Coosa River a hundred years earlier during the Late Savannah period (Hally and Langford 1988). The Coosa River valley in Georgia was abandoned again in the late sixteenth century, presumably at about the same time the King site occupation ended (Marvin Smith 1987). Cherokee settled in the area beginning sometime in the middle to late eighteenth century (Hally 1986b).

Regional Sociopolitical Context

The eastern two-thirds of Foster Bend has been in row crops since at least 1870. This entire area has been surface surveyed by members of King site field crews, but relatively few sites have been found. Only 12 sites are recorded in the Georgia Archaeological Site File at the University of Georgia (Figure 3.2). These include eight lithic scatters of unknown age, three Woodland period sites, and one Middle Lamar period site. The latter is located approximately 450 m east of King and has yielded a few sherds that probably represent a Barnett phase occupation.

The small number of recorded sites suggests that some sites found by surveyors were not submitted to the state site file. We do not know how many sites suffered this fate, but there is no reason to believe that the sample we do have is unrepresentative of the kinds of sites present in Foster Bend. On the basis of the known sites, two observations seem warranted: King is the only large Barnett phase settlement in the bend, and small Mississippian farmsteads do not appear to be a very common type of site. In other words, most, if not all, of the Barnett phase population living within Foster Bend resided at King.

The Weiss Reservoir, located immediately downriver from Foster Bend, was surveyed by the Alabama Museum of Natural History in 1957 (DeJarnette et al. 1973). Three hundred and five sites were recorded, but none date to the Middle Lamar period (Marvin Smith 1987:76). The large floodplain located in Morton Bend immediately north of Foster Bend has not been surveyed. It is possible that other large Barnett phase sites or numerous farmsteads are lo-

cated there. Site distribution data from elsewhere in northwestern Georgia, reviewed below, indicate that the latter is unlikely.

Survey data from a number of locations in the Valley and Ridge section of Georgia, Alabama, and Tennessee demonstrate that most people in the mid-sixteenth century and probably throughout the Late Mississippian period resided in large towns similar to King (Hally et al. 1990; Polhemus 1987:1246). Kimball (1985:Table 1) reports finding small Mississippian sites in the intensively surveyed Lower Little Tennessee River valley, but the numbers are quite small. Only 4 out of 31 sites with Hiwassee Island or Dallas phase components reported by Kimball had areas less than a quarter hectare. Even if all of these were farmsteads, their total resident population would have been insignificant compared with the number of people residing in large towns like Toqua (40MR6) and Citico (40MR7) (Polhemus 1987). Smith's (1988) compilation of Mouse Creek phase sites in the Lower Hiwassee River valley lists seven sites. Six, including Ocoee (Lewis and Kneberg Lewis 1995), are large sites of a hectare or more, and one is of unknown size. Smith's intensive shoreline survey of the Hiwassee River segment of the Chickamauga Reservoir found no definite farmstead or hamlet-size Mouse Creek sites.

Both the Coosawattee and Coosa river valleys in northwestern Georgia have been surveyed fairly intensively if not systematically by amateur and professional archaeologists. The state site file at the University of Georgia lists 48 prehistoric sites occurring within 2 km of the Coosawattee River. Eleven of the sites have late Mississippian or Barnett phase components. Seven of these are large towns, three are of unknown size, and one probably covers less than half a hectare. Seventy-one recorded prehistoric sites occur within 2 km of the Coosa River. Twelve are late Mississippian or Barnett phase. Five and possibly six of these are large towns; five have no size data while one covers approximately .10 ha. In both areas, site survey has been sufficiently intensive that more small late Mississippian sites should have been found and recorded if they existed. We can conclude from these data that the great majority, if not all, of the Middle Lamar period inhabitants of these two river valleys were living in large, compact settlements.

King is one of five known sites with spatially extensive Barnett phase components located along a 20-km stretch of the Coosa River between Rome and Foster Bend (Figure 3.7). They include Coosa Country Club (9FL161), Johnstone (9FL49), 9FL175, Mohman (9FL155), and King. Like King, Johnstone has yielded Spanish artifacts belonging to Marvin Smith's (1987) Assemblage A, which places its occupation in the middle decades of the sixteenth century.

The Nixon site (9FL162) may be a sixth contemporary site. It was located

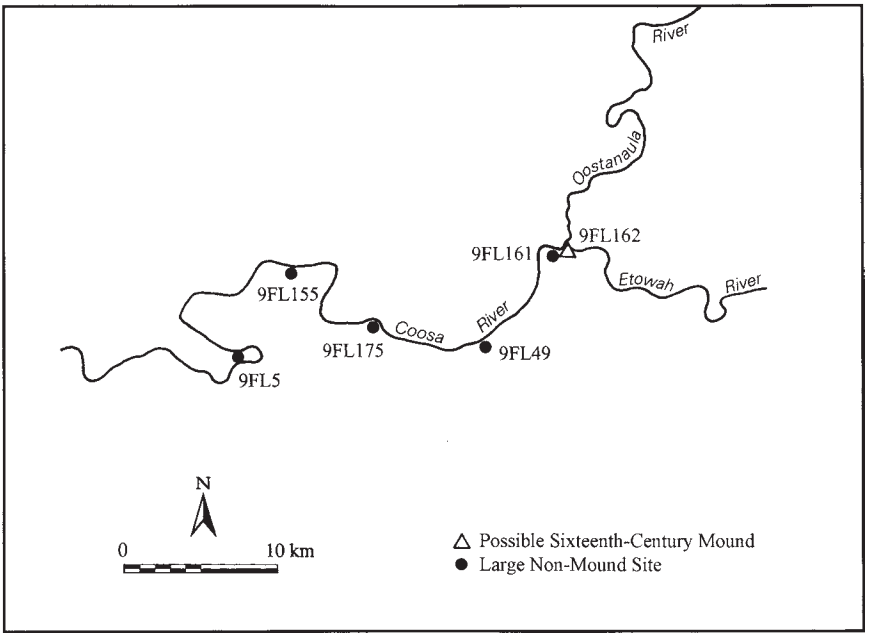

Figure 3.7. Location of towns making up the Rome polity.

at the junction of the Etowah and Oostanaula rivers but was destroyed in the nineteenth century. Charles C. Jones (1861:82–83) described the site as having a circular mound, 12–15 feet in height and more than 50 feet in diameter. He noted that the mound was largely destroyed by the time of his visit in the mid-nineteenth century, its fill being used to level streets in Rome and to construct a ferry landing. There is no trace of the mound or any associated habitation deposits today.

The Nixon site apparently did have a Barnett phase component. Jones (1861) reported that the mound contained burials with pots, shell ornaments, stone discoidals, and pipes. He also described a heart-shaped silver buckle as being found in the mound. These descriptions do not tell us very much about when the site was occupied, although the buckle is obviously a European artifact. Much more useful is a collection acquired by the Smithsonian Institution in 1900 from Roland Steiner, a collector from Augusta, Georgia (King 2003:38–39). Steiner evidently purchased artifacts from the owners of the site sometime between 1894 and 1897. Among a number of artifacts said to have come from the mound are a knobbed shell pin, a small stone discoidal, a perforated spatulate celt, and a Citico style gorget. All of these artifact types are repre-

sented in King site burials, but the Citico gorget is a diagnostic marker for the Barnett phase and the Middle Lamar period. The presence of Barnett phase burials in the mound at Nixon does not guarantee that mound construction and use date to that period, but it certainly increases the likelihood.

The settlement pattern characteristics of the six sites on the Upper Coosa River known to have Barnett phase components conform to the chiefdom model presented in Chapter 2. The sites are fairly evenly spaced along the river. One of the six sites, Nixon, had an earthen mound that probably dates to the Barnett phase. The distance separating the easternmost sites (Nixon and Coosa Country Club) in the cluster from the westernmost site (King) is 20 km. There is no evidence for contemporary occupation for a distance of 20 km to the east along the Etowah River, for a distance of 45 km to the northeast along the Oostanaula River, and for a distance of 25 km to the southwest along the Coosa River. We may conclude from this evidence that the six sites represent a polity, that Nixon was probably its administrative center, and that King was one of several subordinate towns. This polity has been designated the Rome polity (Hally et al. 1990). Similar clusters of contemporary mid-sixteenth-century towns have been identified in six other locations in the Valley and Ridge section of Alabama, Georgia, and Tennessee (Figure 3.8; Hally et al. 1990).

As noted in the previous section, the Coosa River valley was uninhabited immediately prior to the occupation of King and the other four or five towns constituting the Rome polity. We must conclude from this that most of the inhabitants of these towns were not native to the Coosa River valley and that they moved into the area at the time the polity formed. Presumably they came from polities located elsewhere in the Coosa drainage or from the Tennessee River or Chattahoochee River drainages.

The route of the De Soto expedition through northwestern Georgia has been reconstructed by Hudson and his colleagues (DePratter et al. 1985; Hudson 1997; Hudson et al. 1985). Three mid-sixteenth-century site clusters in northwestern Georgia can be equated with provinces and towns described in expedition accounts (Figure 3.8). The expedition entered Georgia from Tennessee and traveled southward along the Cartersville Fault to the Coosawattee River, where the Little Egypt site is the probable capital of the Coosa chiefdom. This polity consisted of at least seven large towns (Hally et al. 1990). From there, the expedition continued southward along the fault line to the town of Itaba, represented by the Etowah site located on the Etowah River. This town was probably the administrative center for a chiefdom that consisted of at least four large towns. Departing from Itaba, the expedition headed west along the Etowah River to the town of Ulibahali, which was probably located at the junc-

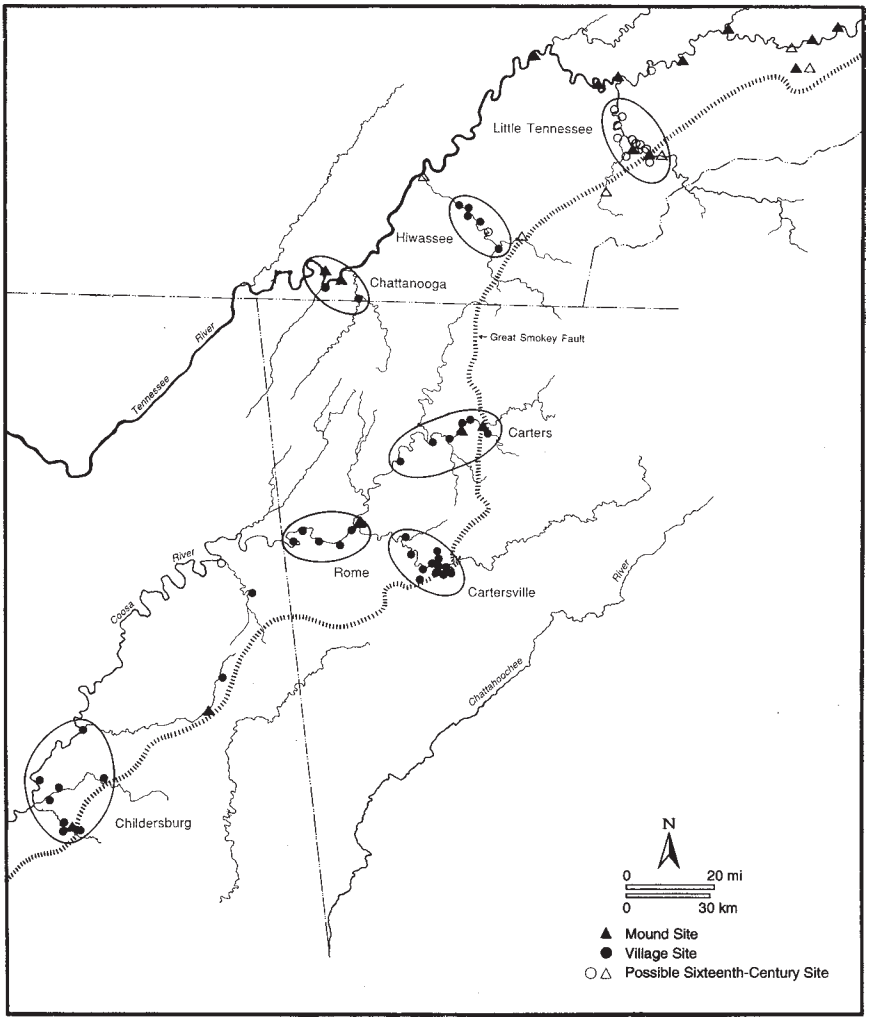

Figure 3.8. Mid-sixteenth-century polities in the Valley and Ridge Province of northeastern Alabama, northwestern Georgia, and southeastern Tennessee

tion of the Etowah and Oostanaula rivers and may have been the Nixon site. Ulibahali was probably the administrative center for the Rome polity. Traveling down the Coosa River, the expedition subsequently stopped at two more towns, one of which may have been the King site.

There is strong evidence in the expedition narratives that the chiefdom of Coosa controlled the Itaba and Ulibahali chiefdoms as well as others in south-

eastern Tennessee and northeastern Alabama. This larger polity is generally referred to as the Coosa paramount chiefdom (Hally et al. 1990; Hudson et al. 1985).

The Place of King in Southeastern Prehistory

The information presented in this chapter allows us to construct a fairly detailed picture of how the King site fits into the late prehistory of the Southern Appalachian region. This reconstruction is based upon the model of Mississippian chiefdoms developed in Chapter 2 and upon the information concerning the Mississippian archaeology of northwestern Georgia that has been presented in this chapter. We know with some certainty that:

1. The King site was occupied around the middle of the sixteenth century.
2. It was one of five, and possibly six, large towns located on the Upper Coosa River that made up a chiefdom—the Rome polity.
3. Nixon, the sixth site, had an earthen mound and was probably the administrative center for this chiefdom.
4. Nixon lies on the eastern end of the polity at the junction of the Etowah and Oostanaula rivers. King is located 20 km downstream at the western end.
5. Most, if not all, people in the polity lived in large towns such as King.
6. There was no polity and no significant resident human population in the Upper Coosa River valley for approximately a hundred years prior to the Rome polity.
7. The inhabitants of the King site and the other towns making up the Rome polity appear to have been immigrants to the area.
8. Chiefdom polities that are roughly contemporary with the Rome polity existed on a tributary to the Coosa River to the southwest in Alabama, on the Etowah and Coosawattee rivers to the east, and on the Tennessee River to the north in Tennessee. All were located within 75 km of the Rome polity.
9. The Rome polity was visited by the De Soto and Luna expeditions in 1540 and 1560, respectively. The presence of iron tools in burials at the King site indicates that it too may have been visited by one or both expeditions.
10. The Rome polity was part of a larger Coosa paramount chiefdom centered at the Little Egypt site on the Coosawattee River.
11. The Rome polity appears to have collapsed early in the second half of the sixteenth century. King and the other towns were abandoned at this time.

4
Site Excavations

This chapter describes the physical nature of the King site and its investigation. It begins with a description of site stratigraphy and preservation state. This is followed by a brief history of site investigations and a description of basic field and laboratory procedures.

Site Stratigraphy

Site stratigraphy, for the most part, consists of two distinct strata: plow zone and subsoil. The latter is yellow to orange-brown in color and varies in texture with increasing depth from a sandy loam to a silt loam. Subsoil originated several thousand years ago as point-bar deposits laid down by the Coosa River as it migrated eastward to form Foster Bend. Plow zone, measuring approximately .6–.8 feet thick, overlies the entire site area. In the east-central portion of the site, a third stratum, identified in field notes as a "gray humus," lies between the plow zone and subsoil. This stratum, measuring only a few tenths of a foot thick, apparently represents subsoil that had been stained by the aboriginal occupation deposits that formerly overlay it. The exact mechanism producing this staining—whether groundwater leaching, microfauna burrowing, or a combination of both—is not known, but a similar soil discoloration exists at the Little Egypt site (9MU102), where plowing has also destroyed aboriginal occupation deposits (Hally 1979). This transitional zone of midden-stained subsoil presumably occurred across the entire site area at one time.

At the time excavation began in 1971, all cultural features—postholes, burial

pits, house basins, and defensive ditch—were restricted to the subsoil stratum. The aboriginal habitation surface and associated occupation deposits, from which all features originated, were presumably destroyed by the initial plowing of the site area sometime in the middle of the nineteenth century. The site surface was scoured by floodwaters from the Coosa River at least three times during major floods in 1881, 1886, and 1916. Human bone and artifacts identifiable as grave goods were exposed by these floods (Battey 1922:76), indicating that the accompanying erosion removed more than a foot of soil from at least some parts of the site. Erosion may have occurred at other times during less severe floods. Each time surface soil was removed from the site area by erosion, subsequent plowing would have cut deeper into subsoil.

The impact that this cycle of erosion and plowing had on occupation deposits and features can be gauged by looking at the elevation of the sub–plow zone surface across the site area (Figure 4.1). Variation in the elevation of this surface matches fairly closely the present-day contours of the site surface as depicted on the 2-foot contour map of Foster Bend (Figure 3.3). Measured from the site elevation datum (100 feet), the sub–plow zone surface decreases from 98.5 feet in the east-central site area to 96.0 feet along the western edge of the site. On the eastern side of the site, the sub–plow zone surface rises slightly then declines as one moves south away from the river. Total elevation change here is approximately 1 foot.

The decrease in sub–plow zone surface elevation from east to west is paralleled by a decrease in the variety and frequency of occupation features (Figure 4.1). Primary domestic structures (PDS), the most common type of domestic structure at the site, were constructed in basins measuring 1–2 feet deep. PDS with preserved floor deposits are restricted to areas with elevations above 98.0 feet. Structures 11 and 14 (see Chapter 5), with partially preserved floors, are located in the northeastern corner of the excavated site area, where subsoil surface elevations are above 98.0 feet. Structures with completely intact floors, such as Structures 4, 5, 7, 8, 9, and 23, are restricted to an area to the south where subsoil surface elevations exceed 98.5 feet. This is also the area where the "gray humus" occurs.

Moving west and south across the site, fired soil features, marking the base of hearths in PDS, disappear when subsoil surface elevation decreases to 97.0 feet. Most postholes located outside these structures disappear as well. Below 97.0 feet, most palisade posts, wall posts belonging to PDS, and burials located outside PDS disappear. Below 96.0 feet, all features except the defensive ditch disappear.

There are several pieces of evidence that provide insight into the topog-

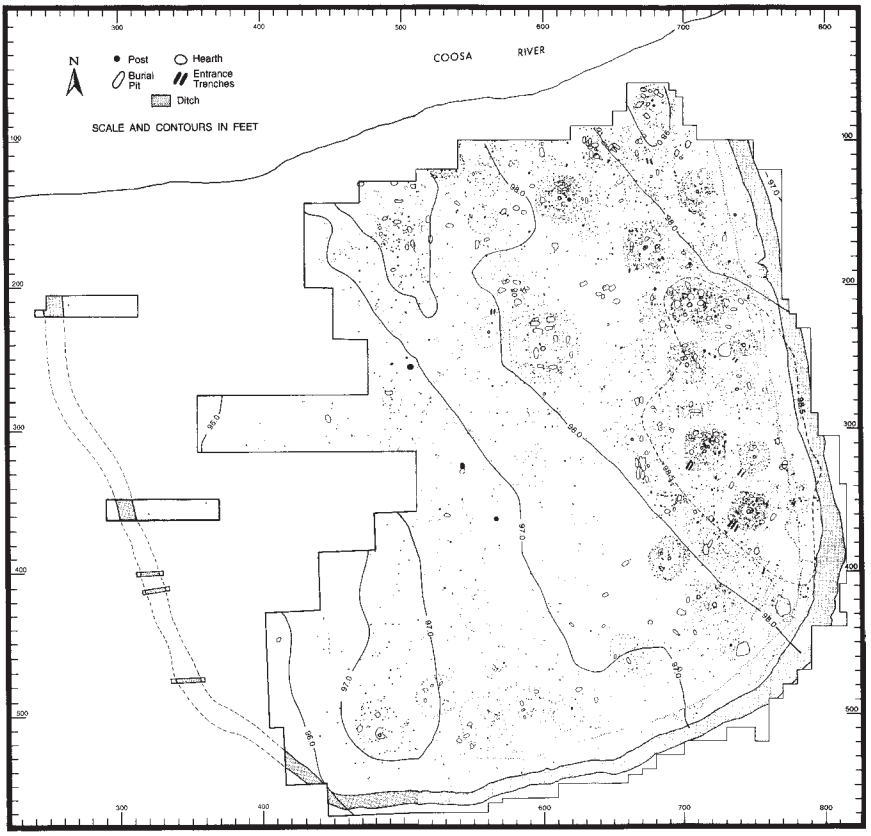

Figure 4.1. Map of King site excavations showing postholes, features, burials, and contours of the sub–plow zone ground surface.

raphy of the aboriginal ground surface at the time of site occupancy. Floor elevation for the seven domestic structures with preserved floors varies between 97.9 feet and 98.6 feet. These structures are distributed over a north-to-south distance of almost 300 feet along the eastern side of the site and indicate a fairly level aboriginal ground surface along this axis.

Burial pits located outside PDS in the habitation zone and containing individuals older than 7 years appear to have been excavated to a relatively uniform depth below the contemporary ground surface (see Chapter 7). This being the case, variation in the elevation of these burial pits (measured to pit bottom) should parallel to some extent topographic variation in aboriginal ground surface. Sixty-eight burials have depths ranging between 96.2 and 98.1 feet, but most range between 97.2 and 97.9 feet. There is little north-to-south variation in pit depth in the habitation zone on the eastern side of the

site and little east-to-west variation on the northern side of the site—at least as far west as the E470 grid line. The few burials located outside PDS recorded in the south-central portion of the habitation zone, however, have pit depths ranging between 96.2 and 96.6 feet. Erosion has severely impacted this portion of the site, and any burial pits with elevations above approximately 96.6 feet presumably have been destroyed by erosion and plowing. The small number of surviving pits indicates that most burials in the area probably had elevations above 97.0 feet.

The defensive ditch is fairly uniform in width and cross-section shape throughout its length. Given the time and energy involved in hand excavation with aboriginal equipment, we can expect that the ditch would not have been excavated deeper than necessary and that its depth below contemporary ground surface would have been relatively uniform. Profiles were recorded at 14 locations along the length of the ditch. Overall, elevations recorded for the ditch bottom vary between 92.4 and 94.1 feet, a difference of 1.7 feet. Most of this range is due to difference in depth between the eastern and western sides of the site. Three elevation readings along the eastern ditch range between 93.7 and 94.1 feet. Five readings along the western ditch range between 92.4 and 92.9 feet. Three readings along the southern ditch fall between these two extremes, ranging between 92.9 and 93.6 feet. To the extent that the ditch was excavated to a relatively uniform depth throughout its length, these elevations indicate that the western side of the site was approximately 1 foot lower than the eastern side, while along the eastern side, ground surface dropped approximately half a foot from north to south.

Measurements from structure floors, burial pits, and the defensive ditch indicate that the ground surface upon which the King site was established was relatively level with, at most, a 1-foot decrease in elevation from east to west. Present-day topography, with surface elevation dropping more than 3 feet between the eastern and western sides of the site, is due in part to recent overbank erosion from the Coosa River. The intensity of overbank flooding and erosion on the western side of the site may have been conditioned in part by the prior existence of a shallow, natural swale in that location.

History of Site Investigation

The earliest published reference to the King site occurs in Battey's *A History of Rome and Floyd County,* published in 1922. In one plate, Battey illustrates several human skulls and a variety of artifacts, including whole pots, shell beads, and shell gorgets. The caption to the plate reads in part, "Here is part of Wesley O. Connor's collection of relics at Cave Spring. These artifacts were mostly un-

covered on the Moultrie farm, Foster's Bend, Coosa River, in the freshets of 1881 and 1886" (Battey 1922:76). The skulls and most of the artifacts almost certainly came from burials that were washed out in the two floods.

Margaret C. Ashley, a graduate student at Columbia University working under the direction of Franz Boas, visited the site in February 1928 as part of an archaeological survey of Georgia that she was conducting. A brief account of the site and her investigations was published in Moorehead's *Etowah Papers:*

> A village site is located on the property of Mr. E. J. Moultrie of Rome, Georgia, in Foster's Bend on the right bank of the Coosa River. During the freshets of 1881, 1886 and 1916 the river broke across this point and unearthed numerous burials and specimens. These were collected by local enthusiasts and now little of the material can be found. There is one small collection at Cave Springs, owned by Mrs. Hattie Stevens, the daughter of Professor W. O. Connor. Judging from the specimens one would conclude that the culture of the site was like that of Etowah.
>
> All of the land in the point was under cultivation at the time of the freshet of 1881, but since that time only part has been reclaimed.
>
> With permission of the owner the site was excavated February 21, 1928. It was found to contain only a few fireplaces, located about 6 inches to a foot below the surface. In one of these, a pot broken in situ was uncovered. Not far from this were found the remains of charred upright poles. Apparently the hut had burned to the ground, leaving the unburned supports in the earth and forming, I would judge, the line of the front, or side of the house [Moorehead 1932:157].

It is clear from her description that Ashley encountered a domestic structure that had been destroyed by fire. The sketch map accompanying her description (Moorehead 1932:Figure 99) shows an area, described by the phrase "River breaks at this point," covering the western third of the site. This is the most heavily eroded portion of the site and presumably is where burials had been washed out.

The King site was not visited by WPA survey crews working in north Georgia during the 1930s. In his *Archaeological Survey of Northern Georgia,* Robert Wauchope merely paraphrases Ashley's account (Wauchope 1966:219–220).

The present investigation of the King site began in the spring of 1971 when Patrick Garrow, then an instructor of anthropology at Shorter College in Rome, commenced weekend excavations with a volunteer crew. Excavations were con-

tinued intermittently by Garrow until the summer of 1973 when a formal 10-week field season was undertaken with financial support from Shorter College and the University of Georgia.

The landowner was planning to deep plow the site in the near future. This would have caused considerable damage to the features that were preserved below the current plow zone. Driven by this pending disaster, Garrow and I decided in July 1973 to work together on the site and seek funds for large-scale excavations in 1974. By the end of August, Garrow had excavated and mapped approximately 17,500 square feet of the site, exposing a 200-foot section of the ditch and palisade, posthole patterns representing eight structures, and 41 burials. Resistivity survey and test trenching conducted in October revealed the location of the ditch at the northwest corner of the site and on its southern side, demonstrating that the site covered approximately 5 acres. On the basis of this information, application was made to the National Geographic Society for funds to cover fieldwork during the winter and spring of 1974 and to the National Science Foundation and the National Endowment for the Humanities for funds to cover fieldwork during the summer of 1974 and laboratory analysis through May 1975. Grants were ultimately received from the National Geographic Society and the National Endowment for the Humanities, but efforts to raise additional funds from local citizens in the Rome area fell short.

Our goal in the field was to excavate and map the entire 5-acre area enclosed by the defensive ditch and to excavate all surviving burials, pit features, and intact house floors. Unforeseen circumstances prevented us from achieving all of these objectives. For one thing, the landowner was unwilling to allow excavation in the portion of the site lying west of grid line W510, an area that was in woodlot and pasture. As a result, we excavated only 126,250 square feet or approximately two-thirds of the site during the project. Second, near-record rainfall during the January–April period significantly reduced the amount of site stripping and mapping that we were able to accomplish by the beginning of summer. Ultimately, this meant that we had to change our excavation procedures for two PDS, Structures 7 and 23, and continue excavation of Structure 7 on weekends during the fall. Our inability to raise private funds also meant that some National Endowment for the Humanities money earmarked for laboratory analysis had to be used to cover fieldwork expenses.

Ownership of the King site changed hands in 1976. The new landowner, Jack Dickey, cleared the woodlot in the northwest corner of the site and early in 1982 plowed the entire area lying west of grid line W510. Plowing disturbed several burials located along the northern edge of the site, and in at least one case brought human bone and artifacts to the surface. In the spring of that

year, looters excavated six burials in this area, including one (Burial 234) that contained a European sword (Little 1985).

Analysis of material recovered through 1974 raised several interesting questions about the nature of the King site settlement plan that could be answered only by investigating the unexcavated western portion of the site:

1. How many entrances to the town were there and where were they located?
2. Was the physical layout of the town as symmetrical as it appeared to be based on excavations through 1974?
3. Were there public buildings in the northwestern sector of the plaza to match those known from the northeastern sector?
4. What was the total number of houses and households in the town?
5. Were there burials in the western part of the town with high-status grave goods comparable to those known from the northeastern sector?

Additional excavation also had the potential to yield evidence useful in verifying and interpreting observations made in the eastern part of the town, including the nature and distribution of less easily distinguishable architectural features such as sun shades and granaries, drying racks, and palisade bastions; the existence of multistructure households; the growth and decline in community size through time; and the existence of high-status households.

Excavations in 1974 indicated that erosion and plowing had probably destroyed most of the architectural features and burials in the western third of the site. The looters' discoveries, however, suggested that perhaps damage had not been that severe. With this in mind, I submitted a proposal to the National Geographic Society for funds to cover two seasons of excavation beginning in 1992. The objective of this research was to strip and map the western third of the site and excavate features in a manner comparable to earlier fieldwork. With National Geographic Society funds, an additional 38,000 square feet were excavated during field seasons in 1992 and 1993. These investigations were not as productive as anticipated. Erosion and plowing had destroyed most features west of grid line E510 and all features except the ditch west of grid line E420.

Field Methods

Fieldwork at King involved five basic tasks: removal of plow zone, mapping of features exposed on the subsoil surface, excavation of burials and other

features, testing and profiling the defensive ditch, and excavating preserved house floors. The manner in which the first two of these tasks were carried out varied somewhat from one field season to the next. Prior to January 1974, the basic excavation unit was a 10-foot square and plow zone was removed by hand. Beginning in January and continuing in the 1992 and 1993 field seasons, mechanical equipment (such as self-loading dragpan, tractor-mounted box scraper, and tractor-mounted dirt scoop) was used to strip large sections of the site. The 1–3 inches of plow zone left in place to protect the subsoil surface from the tires of this equipment was excavated manually with shovels. The exposed subsoil surface was then shaved with square-blade shovels and trowels to reveal postholes and other features. It was frequently necessary to wet and rescrape this surface in order to bring out the soil color and texture contrasts indicative of features. Shovel shaving and feature recognition became much more difficult when subsoil dried out, and consequently maintaining soil moisture became a major problem when large areas were stripped at one time. Such areas were covered with black plastic and repeatedly hosed down with water pumped from the river.

The site grid system was established by Garrow in 1971 with the zero coordinates located several hundred feet north and west of the site. A vertical datum marker was placed on the north side of the site and assigned the arbitrary elevation of 100 feet. All feature mapping was done at a scale of 1 inch equals 2 feet. Prior to 1974, when the standard excavation unit was a 10-foot square, features were mapped with a folding ruler and plumb bob. Approximately 21,800 square feet were excavated and mapped in this manner. Beginning in January 1974, mapping units were increased to 40×50 feet and mapping was done with a plane table and alidade. This approach was more efficient and also made feature recognition more accurate and reliable.

Posthole fill was recorded at the base of the plow zone and assigned to one of 20 fill types. The overwhelming majority of postholes, however, could be assigned to just six categories: humus, humus with charcoal, dark humus with charcoal, charred post, sand, and clay. Time did not permit cross-sectioning of postholes during the 1973 and 1974 field seasons. In 1992 and 1993, the depth of all postholes was determined with a 1-inch tube-type soil sampler. In those cases in which identification as a posthole was uncertain or depth could not be determined with the soil sampler, postholes were cross-sectioned.

Most human burials were excavated according to a standard procedure worked out following the 1973 Shorter College summer field school. Burial pits were cross-sectioned and profiled, and soil samples were taken from the

bottom and top of pit fill. Skeletal and artifactual material was fully exposed, mapped, and photographed (Garrow and Hight 1975). All recoverable human bone and artifacts were removed, cleaned, and stabilized.

Six PDS with intact floors were excavated. Three of these—Structures 8, 9, and 14—were excavated according to a procedure worked out over several field seasons at the Little Egypt site. Basin fill was removed as a single stratigraphic unit. Preserved superstructure material—charred posts and fired daub—was mapped and removed. Large artifacts lying on the structure floor were piece plotted, assigned individual lot numbers, and removed. The floor area of each structure was then divided into 1-foot squares, and a 25-percent, systematic sample of squares was selected for special processing. In these squares, the floor surface, overlying occupation debris, and a small amount of underlying subsoil was removed as a single unit and processed by flotation. For the excavation of the remaining floor surface, floor area was divided into nine quadrats defined by the four interior roof support posts and consisting of a central floor space and eight outer floor sectors lying between the roof support posts and the outer structure walls.[1] Floor deposits from each quadrat were removed as a unit by troweling and were sifted through a 1/4-inch-mesh screen.

Structures 4, 7, and 23 were excavated in a similar manner except that flotation samples were not taken and all floor deposits were dry screened through 1/4-inch mesh. Structure 4 was excavated by Garrow in 1973 (Garrow and Smith 1973). Systematic flotation sampling was dropped for Structures 7 and 23 because of time limitations at the end of the 1974 field season.

Following removal of floor deposits in all six structures, the underlying subsoil surface was scraped and postholes, hearths, and burial pits were mapped. Charred wall posts, present in Structures 8, 14, and 23, were removed intact and treated with a paraffin preservative for eventual dendrochronological analysis (Hally and Grissino-Mayer 1999).

The ditch was trenched and profiled in 14 locations spaced at fairly regular intervals around the perimeter of the site. The configuration of the unexcavated portion of the ditch on the western side of the site was investigated using posthole tests and shallow trenches. The absence of evidence for earth embankments spanning the ditch along the eastern and southern sides of the site indicates that the ditch was crossed on log bridges. Such features are unlikely to have survived erosion and plowing, but their location may be marked by occupation refuse that was thrown into the ditch by people as they walked across. Posthole tests were excavated at 10-foot intervals along the midline of the entire ditch in search of increased quantities of refuse on the ditch floor. One

trench was excavated at S400 in the western ditch to investigate a high density of artifacts in posthole tests in that location.

Several looters' pits were investigated in the northeast corner of the site. With the exception of three large post pits, and excluding two pits that may have been dug by Margaret Ashley, no aboriginal pit features were encountered at the site.

Following the termination of field work, all grave goods and human skeletal remains were catalogued and photographed. In addition to standard measurements and classification based on form, several classes of material were also subjected to special analyses, including form and function analysis of flintknapper kits recovered from burials (Cobb and Pope 1998); technology and spatial analysis of flaked stone debitage from one PDS (Ruggiero 2000); microstyle analysis of projectile points recovered from burials (Matthiesen 1994); typological analysis of iron tools recovered from burials (Smith 1975); form and function analysis of non–flaked stone tools recovered from house floors and burials (Pennington 1977); form and function analysis of pottery vessels recovered from house floors and burials (Hally 1986a); dendrochronological analysis of charred house posts (Hally and Grissino-Mayer 1999); and osteological analysis of human skeletal remains (Blakely, ed. 1988; Hill 1994, 2001a, 2001b, 2002; Humpf 1995; Larsen et al. 1994; Milner et al. 2000; Tally 1975).

The size of the excavated site area (3.9 acres) and the number of mapped postholes and features (>14,000) presented a problem for settlement plan analysis. The only practical way to deal with such material was to digitize it and enter it into a geographic information system program. Atlas GIS, version 2.1 was chosen for this task, and a student, Thomas Foster, was hired in 1993 to digitize the mapped data.

Note

1. Throughout the remainder of this book, the eight outer floor sectors will be referred to by the exterior structure wall they are adjacent to and their position along that wall. Those located between two adjacent interior roof support posts are "central sectors" and those located in a corner bounded by a single roof support post are "corner sectors." Thus artifacts on the floor of a PDS that is oriented with the cardinal directions can be described as being located in, for example, the northeastern corner sector, the north-central floor sector, or the northwestern corner sector. In a PDS that is oriented approximately 45 degrees off the cardinal directions, these artifacts would be described as being located in the north corner sector, northeast central sector, or south corner sector.

5
Domestic Architecture

Almost 9,400 postholes were recorded in excavations at the King site. The great majority of these occur in the habitation zone and can be assigned to two types of buildings, primary domestic structures (PDS) and rectangular structures (RS). There are, in addition, several hundred postholes in the habitation zone that represent other types of facilities, including what are probably drying racks, hide-working frames, sun shades, and screens or short wall segments. These kinds of facilities lack diagnostic architectural characteristics and, as a result, received little attention during the analysis of King site architecture. The present chapter looks at the architectural characteristics of primary domestic structures and rectangular structures.

Primary Domestic Structures (PDS)

Primary domestic structures served as the primary residences for site inhabitants and the loci for a variety of domestic activities such as food preparation and consumption, sleeping, and tool manufacture and maintenance. Twenty-five PDS can be identified with certainty in the excavated site area (Figure 5.1). Three additional structures—Structures 3, 13, and 20—were tentatively identified in the field and subsequently have received some degree of confirmation through analysis of posthole patterns and other associated architectural features. Structures similar to PDS have been reported from a number of late prehistoric sites in the Southern Appalachian region, including Little Egypt

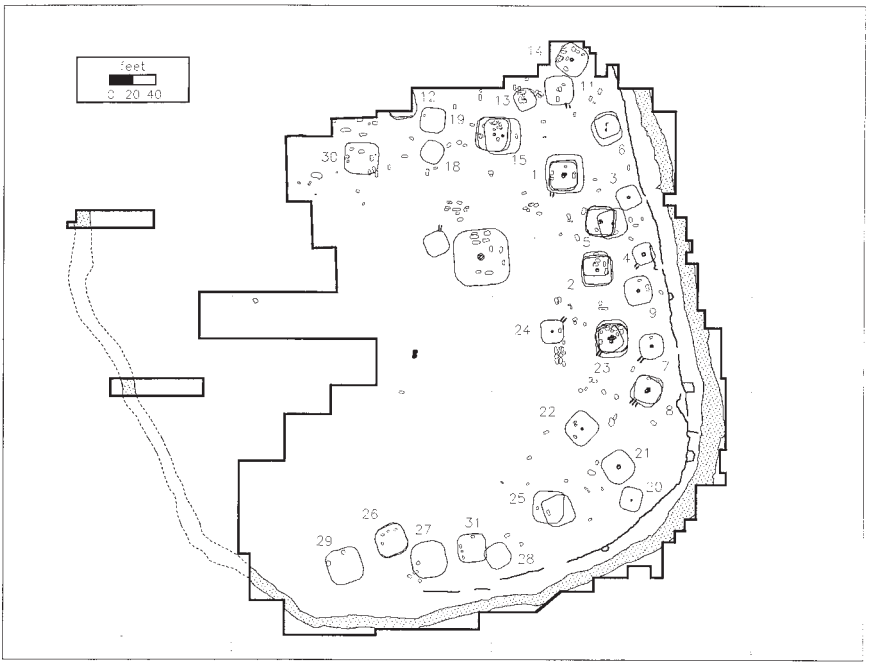

Figure 5.1. Location of primary domestic structures.

(9MU102) (Gougeon 2002; Hally 1980); Potts Tract (9MU103) (Hally 1970); Leake (9BR2) (Patton 1990); Dyar (9GE5) (Smith 1994); 9DO39 and 9DO45 (Poplin 1990); Toqua (40MR6) (Polhemus 1987); Loy (40JE10) (Polhemus 1998); Rymer (40BY11) Ledford Island (40BY13), and Mouse Creeks (40MN3) (Sullivan 1987); Coweeta Creek (31MA34) (Rodning 2004); and Town Creek (31MG2-3) (Boudreaux 2005) (Figure 3.6).

The Nature of Primary Domestic Structures

Primary domestic structures are architecturally elaborate buildings that have the potential to tell us a great deal about domestic life and community organization at the King site. In the following pages, I will outline the steps involved in their analysis and describe in detail their architectural characteristics. In order for these discussions to be intelligible, however, it is necessary to first summarize what we know about the physical nature of these buildings.

Primary domestic structures at King were square in plan with rounded corners (Figures 5.2 and 5.3). Exterior dimensions range between 17.5 feet and 33 feet and average 24 feet. Structures were erected in basins excavated into the

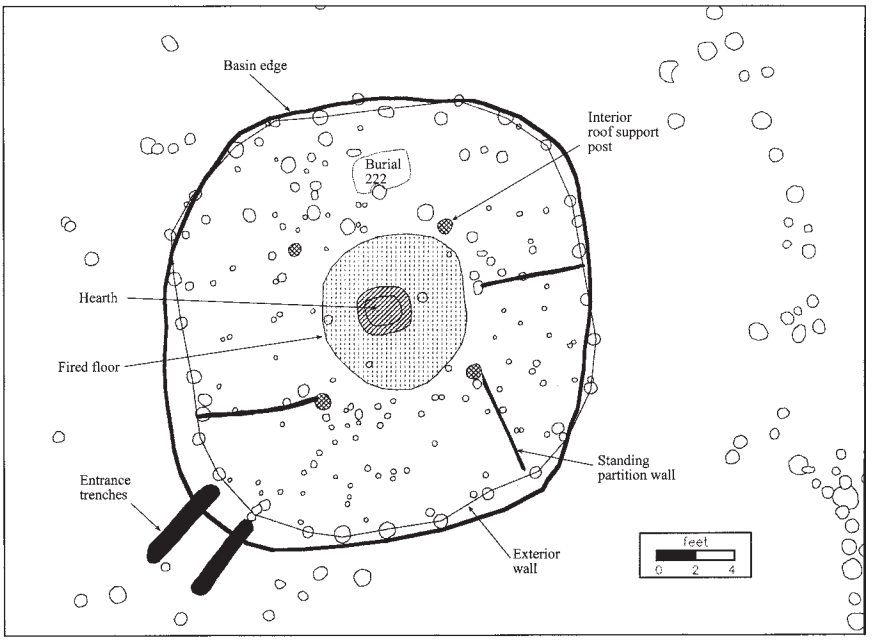

Figure 5.2. Plan view of Structure 7.

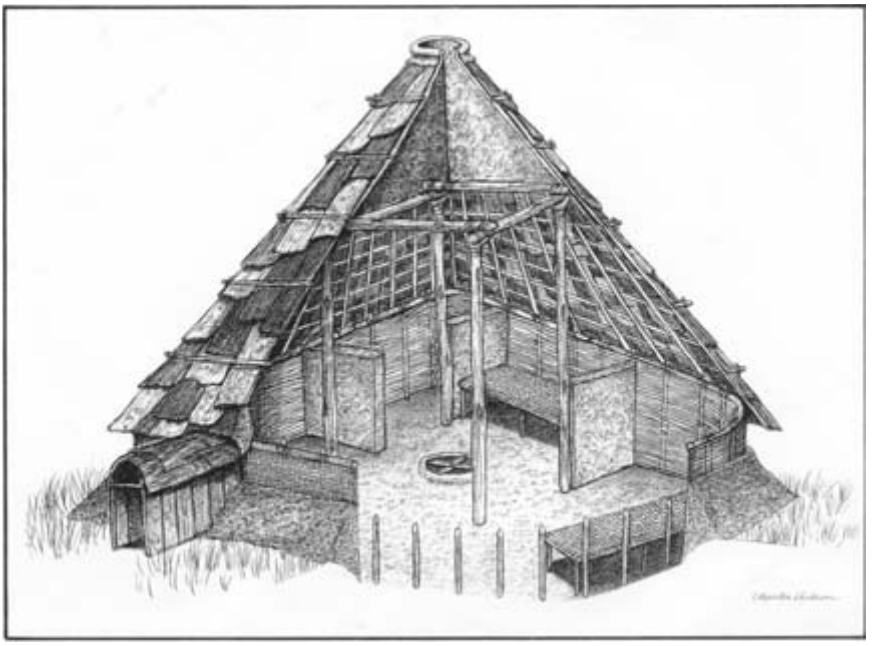

Figure 5.3. Artist's reconstruction of typical primary domestic structure.

Figure 5.4. Structure 4 viewed from the west. The photograph shows the basin outline, preserved partition walls, central hearth, and large artifacts left in situ on the structure floor.

ground to a depth of probably 1.5–2.0 feet (Figure 5.4). The level surface of the basin served as the house floor.

Exterior walls were constructed of single-set posts placed in the ground to a depth of 1.0–1.5 feet. Spacing between posts averages 3.1 feet. Posts were cut from young trees that were debarked and used either whole or split. Small-diameter wooden strips—probably cane, split poles, or small saplings—were woven horizontally between the upright posts. This lathing may have been covered with woven cane mats or mud plaster, but there is little evidence for either in the King site data. Earth excavated from house basins was probably banked against exterior walls to a height of 2–3 feet.

Structures were entered through narrow passageways approximately 2.5 feet wide and extending 4–5 feet beyond exterior walls. These had walls that were probably constructed of wooden planks placed on end in shallow trenches and roofs that were probably made of bark. Entrance passages were placed at one corner of the structure or in an exterior wall near the corner.

Roofs were pyramidal in shape and steeply angled. Rafters rested on the exterior wall plates and on horizontal beams supported by four interior roof support posts placed in a square around the central hearth. Roofs were probably

covered with sheets of bark or thatch. A smoke hole was located at the peak of the roof, and clay was plastered on the underside of the roof in the area between the smoke hole and the four support posts.

The interior floor space was divided into two main areas by the four interior roof support posts. The central floor space, occupying approximately one-quarter of the total floor area, contained a clay hearth with a depressed basin and molded rim. The outer floor zone was divided into a number of cubicles or compartments by low wattle-and-daub walls. These extended at right angles from the exterior walls to the edge of the central floor space. Beds were placed against the exterior wall in some cubicles. Other cubicles served as storage and work spaces.

Structures were sometimes torn down or destroyed by fire and rebuilt one or more times in the same location. Later construction stages typically shifted laterally 1 or 2 feet and had approximately the same size and compass orientation as their predecessor. In a few cases, however, location, size, or orientation changed significantly from one construction stage to the next.

Analysis of Primary Domestic Structures

Two basic problems present themselves in the analysis of King site PDS: structure recognition and construction stage identification and characterization. Most PDS at King have only one construction stage and are represented by a cluster of postholes forming recognizable wall alignments, a central hearth, and one or more burial pits. Under these conditions, structures can be easily recognized. When one or more of these characteristics is absent or incompletely represented, structure identification can be difficult and in some cases rather uncertain. Fortunately only three structures presented such problems.

The identification and characterization of individual construction stages in multistage PDS is another matter. In this endeavor, my goal has been to reconstruct what each construction stage looked like in as much detail as possible. This requires that the exterior walls of each stage be reconstructed with some degree of accuracy so that structure orientation and size and number and spacing of wall posts can be calculated. Wall reconstruction may be hampered by poor posthole preservation and inadequate field records, but it is made most difficult by the sheer number of postholes that result when a structure has been rebuilt one or more times in the same location.

The following procedure and techniques were used in the analysis of PDS architectural remains. I began the analysis with the best-preserved, single-stage structures where architectural features and posthole patterns were clear-

est and easiest to interpret and proceeded to single-stage structures that were less well preserved and ultimately to multistage structures. In this way, I was able to isolate regularities in architectural design early in the analysis and then use them to identify feature and posthole patterns in the more complex cases involving poorly preserved and multistage buildings. Structures 4 and 7, with preserved floors, preserved carbonized wall posts, and a single stage of construction, were the first to be analyzed, while Structures 5 and 23, with four construction stages each, were among the last.

Compass orientation of features is an important clue in identifying construction stages. Exterior walls, the square floor space enclosed by interior roof support posts, square-shaped hearths, and contemporary subfloor burials all tend to have parallel orientations in a PDS. In order to make comparisons of compass orientation easier, all measurements of orientation were converted to the range 0–90 degrees east of north. A compass orientation of 137 degrees, for example, becomes 47 degrees east of north.

Hearths played an important role in structure analysis. They signaled the existence of a PDS, the spatial center point of the structure, and, where well enough preserved, the number of PDS construction stages and their sequential order. The compass orientation of square hearths also helped in the identification of structure orientation.

Burials also supplied important clues for PDS reconstruction. The pits of burials interred beneath the floors of PDS were on average 1 foot deeper (below the base of plow zone) than burials interred outside structures (see Chapter 7). This is because PDS were erected in basins. The difference in pit depth was useful in identifying the existence of structures in locations where erosion and plowing had destroyed most architectural features. Structure 31 was initially identified using this criterion.

Burials interred beneath the floors of PDS almost always were oriented parallel to the adjacent exterior wall. This observation has proved useful in determining structure orientation and the existence of multiple construction stages. The two construction stages of Structure 25 were initially distinguished on this basis.

Finally, the combination of burial pit depth and orientation has made it possible to identify situations in which the use of a location within the habitation zone changed over time. For example, 10 burials are located within the walls of Structure 14, but, on the basis of their relatively shallow depth and compass orientation, it is clear that at least two and possibly seven predate the structure.

Wall-trench entrances indicate the presence of a PDS and can help identify the location of exterior walls in multistage buildings. They are one of the strongest pieces of evidence for the existence of Structure 24, a structure that is represented by only eight exterior wall posts, a hearth, and a burial. The spatial configurations of exterior walls for some construction stages in Structures 8 and 23 were identified using the proximal ends of wall trenches.

Primary domestic structures were invariably nearly perfectly square in plan and centered on the hearth. The distance between opposing exterior walls and between these walls and the hearth usually varied by less than 1 foot. In even the most poorly preserved structures or those with multiple construction stages, it was possible to identify at least one exterior wall with certainty. The compass orientation of that wall and its distance from the hearth could then be used to predict where the other three walls were located.

When structures were destroyed by fire, posts tended to burn down to the floor but not below it. Termites and wood rot destroyed the uncarbonized lower section of the post. The result of these two processes was that carbonized segments of posts measuring .1–.4 feet thick often remained at the level of the house floor and, if not destroyed by later construction activities or erosion and plowing, survived to the present. When primary domestic structures were rebuilt, the old floor surface was thoroughly cleaned, and features such as hearths that protruded above it were leveled. Carbonized posts were usually destroyed during this process. Taken together, these several processes usually resulted in only the carbonized posts of final construction stages being preserved. This situation proved useful in identifying the construction sequence in multistage structures.

Structures 4 and 7 had fired daub partition walls still standing. These structures and contemporary Dallas phase structures excavated by Polhemus (1987, 1998) at the Toqua and Loy sites in eastern Tennessee provide evidence for where partitions were typically placed in PDS. Discrete piles of fired daub present in these locations have been assumed to represent the collapsed remains of partition walls in several PDS at King.

A number of other stratigraphic and architectural details were useful in reconstructing buildings in a few individual cases. These kinds of evidence are discussed where relevant in the descriptions of individual PDS.

Description and Comparison of PDS Architectural Characteristics

Twenty-eight primary domestic structures represented by a total of 44 construction stages have been identified within the habitation zone at King. Each construction stage, along with the evidence used to identify and reconstruct

it, is described in Appendix A (on the accompanying compact disc). Table 5.1 summarizes most of the architectural features of King site PDS. The following types of information are included in this table.

Compass orientation—Structure orientation is determined from the most well-preserved exterior wall and is converted into degrees east of north.

Exterior dimensions—The size of a PDS is determined in two dimensions by measuring between the centers of postholes forming opposing exterior walls.

Floor space—The product of a structure's exterior dimensions.

Roof support spacing—The distance between the centers of roof support postholes measured along each axis of the structure.

Central floor space—The space enclosed by the four roof support posts.

Central floor space/total floor space—The ratio of central floor space to total floor space.

Outer floor width—The distance between interior roof support posts and the adjacent exterior walls.

Number of postholes in exterior wall alignments—The number of postholes that are located along the posthole alignments forming exterior walls. In most PDS construction stages, posthole alignments representing the exterior walls are readily distinguishable. Wall post spacing (measured between the centers of adjacent posts) varies from one PDS to another but tends to be fairly uniform within each PDS. This means that the average distance separating postholes in a structure's walls can be used to identify gaps in wall alignments where individual postholes have been either destroyed or not recognized in the field and to estimate the number of postholes that have been lost from a section of wall. Average spacing also allows us to identify postholes that are unusually closely spaced and that are probably not part of the original wall; that is, posts that are replacements for decayed wall posts, auxiliary posts that have other architectural functions, posts that may belong to other construction stages, and errors in field identification. Together with actual posthole counts, these estimates allow us to estimate the total number of posts in a structure's exterior walls. Table 5.1 lists these figures for each construction stage where they can be determined with reasonable certainty.

Preserved basin/house floor—This identifies those PDS that have some intact floor surface or preserved basin fill.

House basin dimensions—The horizontal and vertical dimensions of house basins measured at the base of plow zone.

Table 5.1. Architectural characteristics of primary domestic structures

	Str. 1.1	Str. 1.2	Str. 1.3	Str. 2.1	Str. 2.2	Str. 2.3	Str. 3	Str. 4
Compass orientation	86	85	3	89	86	85	65	67
Exterior dimensions	32.6	24.1	24.2	21.6	24.9	24.9	18.7?	17.5
	33.1	24.1	24.4	21.5	25.4	26	19.5?	17.5
Floor space	1,079.	581	590	464	632	674	365?	306
Roof support spacing	15.4		10.6	8.7	10.5	9.4	7.5	6.7
	15.9		11.1				7.5	6.7
Central floor space	245		118	76?	110	88	56?	45
Central floor space/total floor space ratio	0.23		0.2	0.16	0.17	0.13	0.15	0.15
Outer floor width	8.6		6.75	5.9	7.8	7.7	5.8	5.3
Number of postholes in exterior wall alignments	39	46	44	26			17	30
Average exterior wall posthole spacing	2.7	2.7	3.1	2.7				2.5
Number of closely spaced exterior wall postholes	6	19	18	7				3
Estimated number of missing postholes	11	5	2	10				0
Estimated number of exterior wall posts	44	32	28	29				27
Preserved basin or house floor	No	No	No	No	No	No	Yes	Yes
House basin dimensions								20.1 × 19.3 × .5
Hearth present	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of hearth stages or repairs								
Hearth shape	Round	Round	Round		Round	Round	Oblong	Square

Hearth profile								Square
Hearth size, exterior	2.8	2.8	3.1	1.7		2.5	2.1	3.1 × 3.1
Hearth basin size	2.1	2.3	2.5				1.7	2.2 × 2.2 × .8
Fired floor				Yes			Yes	Yes
Area of fired floor				31.5			20	13
Entrance passage	Yes							Yes
Entrance location	S wall							SW corner
Entrance trench length	3.2							3.2, 3.5
Trench spacing, interior	1.6							1.7
Destroyed by fire	Yes						Yes	Yes
Number of clay partition walls								3
Central daub deposit								Yes
Number of burials	1 or 2	1 or 2	1 to 3	3	2	1	0	0

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Table 5.1. *Continued*

	Str. 5.1	Str. 5.2	Str. 5.3	Str. 5.4	Str. 6.1	Str. 6.2	Str. 7	Str. 8.1	Str. 8.2	Str. 9
Compass orientation	77	2	5	6	72	67	81	12	32	77
Exterior dimensions	23.9	24.2	23	25.2	20.1	24.3	20.8	23	24.1	23.6
	24	24.6	23.6	25.5	20.7	24.6	21.3	23.8	24.4	24.3
Floor space	574	595	543	642	416	598	443	547	588	573
Roof support spacing	9.4					9.6	8	9	9.2	8.7
	9.6					9.9	7.6	9.2	9.8	8.7
Central floor space	90					95	61.4	83	90	75
Central floor space/ total floor space ratio	0.16					0.16	0.14	0.15	0.15	0.13
Outer floor width	7.2					7.3	6.5	7.2	7.4	7.4
Number of postholes in exterior wall alignments	38				37	40	36	37	39	28
Average exterior wall posthole spacing	2.5					3	2.7	2.9	2.7	3
Number of closely spaced exterior wall postholes						13	9	11	9	2
Estimated number of missing postholes						2	0	1	2	1
Estimated number of exterior wall posts	32					29	27	27	32	27
Preserved basin or house floor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

House basin dimensions							22 × 22.3 × 1	29.3 × 29.5 × 1	29.3 × 29.5 × 1	25.5 × 26 × .3
Hearth present	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of hearth stages or repairs	1 repair	2 repairs	2 repairs	0 repairs			0 repairs	1 repair	1 repair	0 repairs
Hearth shape	Square	Square	Square	Square?		Square	Square	Square	Square	Round
Hearth profile	Square	Square	Round?	Square			Square	Square	Square	Square
Hearth size, exterior							2.8 × 2.8			3
Hearth basin size	1.8 × 1.8 × .7	2.1 × ? ×.5+	2.0 2.0 × .5	1.7 × ? × .4+		2.1+	1.4 × 1.8 × .7	2+ × 2+ × .9	2.2 × 2.2 × ?	1.8 .8
Fired floor	No	No	No	Yes		No	Yes	Yes	Yes	No
Area of fired floor				29			57	5.5	10.5	
Entrance passage							Yes	Yes	Yes	No
Entrance location							SW corner	SW corner	S wall	
Entrance trench length							5.2, 4.7	5.4, 5.8	3.7, ?	
Trench spacing, interior							1.8	1.4	1.8	
Destroyed by fire				Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of clay partition walls	1	0					3		0	0
Central daub deposit	No	No	No	Yes		Yes	Yes		No	Yes
Number of burials	1 or 2	Up to 4	Up to 4	Up to 4	0	0	1	2	0	2

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Table 5.1. *Continued*

	Str. 11	Str. 12	Str. 13	Str. 14	Str. 15.1	Str. 15.2	Str. 15.3	Str. 18	Str. 19	Str. 20	Str. 21
Compass orientation	85	78	65	31	87	90	5	22	4	16	60
Exterior dimensions	24.3	24.4	17.7?	26.1	30.7	28.9	27.9	18.8	21.5	18.5?	25.7
	24.4		18.2?	25.6	31.1	29.4	27.9	19.4	21.5	19.7?	26.6
Floor space	593		322?	668	955	850	778	365	462	364?	684
Roof support spacing	9.6			9.8	15	10.6			8.7		10.8
	10.5			9.7	15.4	11			8.9		10.9
Central floor space	101			87.3	231	117			77		118
Central floor space/total floor space ratio	0.17			0.13	0.24	0.14			0.17		0.17
Outer floor width	7.2			8	7.8	8.9			6.3		7.2
Number of postholes in exterior wall alignments	28		14	34	37			25	20		34
Average exterior wall posthole spacing	3.4	3.3		3.1	3.7	3.4	3.4	2.7	3.1		3
Number of closely spaced exterior wall postholes	5			8	9			5	2		7
Estimated number of missing postholes	1			2	3			4	5		2
Estimated number of exterior wall posts	24			28	31	31	32	24	23		29
Preserved basin or house floor	Yes	No	No	Yes	No	No	No	No	No	No	Yes
House basin dimensions											
Hearth present	Yes	No	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes

Number of hearth stages or repairs			4 repairs							1 repair
Hearth shape		Round	Round						Round?	Square
Hearth profile		Rounded	Rounded							Square
Hearth size, exterior			2.8–3.1							3.5 × 3.5
Hearth basin size			2 × .8							2.5 × 2.5 × .6
Fired floor	No		Yes							No
Area of fired floor			120							
Entrance passage	Yes		No							
Entrance location	S wall									
Entrance trench length	4.3, 3.6+									
Trench spacing, interior	2.1									
Destroyed by fire			Yes							Yes
No. of clay partition walls			0							
Central daub deposit			Yes							Yes
Number of burials	0	0	3 or more	1	2	1	0	1	1?	0

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Table 5.1. *Continued*

	Str. 22	Str. 23.1	Str. 23.2	Str. 23.3	Str. 23.4
Compass orientation	46	86	87	88	64
Exterior dimensions	24.6	27.1	24.1	27.6	20.1
	25.5	27.4	25.1	28	21.3
Floor space	627	743	605	773	428
Roof support spacing	10.3	10.9			8.7
	10.6	11.3			8.8
Central floor space	109	123			77
Central floor space/ total floor space ratio	0.17	0.16			0.18
Outer floor width	7.3	8.2			6.4
Number of postholes in exterior wall alignments	40	45	26	25	21
Average exterior wall posthole spacing	3.1	3.5	2.8	3.8	2.6?
Number of closely spaced exterior wall postholes posts	11	21			
Estimated number of missing postholes	0	5			
Estimated number of exterior wall posts	29	29		28	
Preserved basin or house floor	No	Yes	Yes	Yes	Yes
House basin dimensions					
Hearth present	Yes	Yes	Yes	Yes	Yes
Number of hearth stages or repairs		1 repair	2 stages, 1 repair	1 repair	3 repairs
Hearth shape		Round	Round	Round	Round
Hearth profile		Round	Square	Square	Square
Hearth size, exterior	2.5 × 2.2	2.4			3.2
Hearth basin size		2 × .4+	2.2 × .5+, 1.8 ×.4+	2.5 ×.6	2.1 ×.4
Fired floor		No	No?	No	No
Area of fired floor					
Entrance passage		Yes	Yes	No	No
Entrance location		SW corner	SW corner		
Entrance trench length		5.2, 6.5	5.2, 6.5		
Trench spacing, interior		1.5	1.5		
Destroyed by fire	Yes			Yes	Yes
No. of clay partition walls					0
Central daub deposit					Yes
Number of burials	5	4 or 5	Up to 3	2 to 6	2

Note: Compass orientation listed as degrees east of north; measurements in feet. Blank cells indicate no data available.

Str. 24	Str. 25.1	Str. 25.2	Str. 26.1	Str. 26.2	Str. 27	Str. 28	Str. 29	Str. 30	Str. 31
84	65	2	66	66	76	58	73	90?	85
19.6	25.3	26.8	25	26.8	30.1	21	29.8		23.9
19.8	25.7	27.3	25.5	26.4	30.8	21	30		24
388	650	732	638	708	927	441	894		574
7	10.2	12.1	9.9	11.5	11.1	8.2	11.8		
7.2	10.3	12.2	9.8	11.8	11.3				
50	105	147	97	136	125	67?	139?		
0.13	0.16	0.2	0.15	0.19	0.14	0.15	0.16		
6.3	7.6	7.3	7.6	7.3	9.6	6.2	8.6		
8	15	26	28	28	29	26	25		16
	3.3	2.9	2.7	3	3.5	2.5	3.6		3.7
		3	2	3	2	1	2		
		10	2	3	3	3	5		
		33	28	28	30	28	28		
No	No	No	No	No	No	No	No	No	No
Yes 0 repairs	No	No	No	No	No	No	Yes	No	No
Round Square 1.8+ 1.4 × .3+									
Yes NE corner 4.5, 5.1 1.8									
1	1	1	Up to 5	Up to 5	1	0	1	6	1

Hearth present—This identifies those PDS that have intact or partially intact hearths.

Number of hearth stages/repairs—The number of times a hearth was totally rebuilt or repaired during each PDS construction stage.

Hearth shape—The shape of a hearth in the horizontal plan.

Hearth profile—This identifies whether a hearth basin is round or square (flat bottom with straight sides) in profile.

Hearth size, exterior—The maximum horizontal dimensions across the hearth rim.

Hearth basin size—The horizontal and vertical dimensions of a hearth basin.

Fired floor—This identifies whether a PDS with preserved floor surface has an area of fired floor adjacent to or surrounding the hearth.

Area of fired floor—The square footage of fired floor surface in a PDS.

Entrance passage—This identifies those PDS that had a preserved wall-trench entrance passage at the time of excavation.

Entrance location—Location of the wall-trench entrance passage relative to the floor plan of the PDS.

Entrance trench length—The length of the preserved wall trenches.

Trench spacing, interior—The width of the entrance passage as measured between the interior edges of the two trenches.

Number of clay partition walls—The number of standing clay partitions that have been preserved in a PDS.

Central daub deposit—Indicates presence of a fired-daub deposit in central floor sector.

Number of burials—A large number of PDS have burials located beneath their floors. Most of these subfloor burials were interred while the structure was occupied and are referred to as "inside" burials. A small number of subfloor burials predate or postdate structure occupation. In describing individual PDS in Appendix A, subfloor burials are identified as "inside," predating structure occupation, postdating structure occupation, or having an unknown chronological relationship with the structure. In the case of multistage PDS, I have also attempted to identify each inside burial with a specific construction stage. Table 5.1 lists the number of inside burials that can be assigned to each construction stage with certainty. The evidence used to make these identifications is described in detail in Chapter 7.

Primary domestic structures are architecturally complex buildings. They are also potential sources of evidence that can be used to reconstruct King site social and political organization and belief systems. It is important, then, that

we review in detail the various architectural features characteristic of these structures and the stratigraphic evidence used to identify them. This will be done in the following sections.

Number of Construction Stages

Seventeen of the 28 primary domestic structures identified within the excavated habitation zone at King have only one construction stage (Table 5.1). Four PDS were rebuilt one time, three were rebuilt two times, and two were rebuilt three times. One of the latter, Structure 23, may actually have five construction stages. The number of construction stages cannot be determined with certainty for Structures 12 and 30.

With over one-third of all recorded PDS having multiple construction stages, it is appropriate to ask why structures were rebuilt. Presumably rebuilding occurred because the original structures needed to be replaced and their occupants wished to continue residing in the same location. But why did structures need to be replaced in the first place? All PDS structural elements in contact with the ground would have been subject to organic decay and termite activity. This destructive process would have been relatively slow, with most structures probably lasting up to 10 years. Accidental fires probably destroyed structures as well. Like organic decay, the toll from accidental fires was probably fairly uniform across the site, so that we should not expect some structures to be destroyed this way more often than others.

It is also possible that PDS were intentionally destroyed and rebuilt by their occupants. Structures may have been "renewed" in conformity with some kind of ritual cycle. Since there is no evidence that Southeastern Indians recognized any kind of multiyear calendrical cycle, however, this explanation is unlikely. Furthermore, we might expect a greater proportion of King site PDS to have been affected by such behavior. I think it is more likely that some PDS were destroyed and rebuilt as a result of the death of a significant household member. Adair (Williams 1930:136) reports that the Choctaw sometimes burned the houses of deceased individuals. Writing in 1791, Swan (1857:270) reports that "[i]f the deceased has been a man of eminent character, the family immediately remove from the house in which he is buried, and erect a new one." This passage may be interpreted to mean that the new house was built in a different location, but a thin layer of clean fill deposited over the old structure may have had the same effect. The Natchez burned the houses of their chief and war chief at their deaths (Swanton 1911:102, 149) and the Timucua burned the houses of their chief and some priests (Faupel 1992).

The incidence of fire destruction is quite high at King. Of 11 PDS with par-

tially or wholly intact floors and a total of 19 construction stages, 14 stages have yielded evidence—charred posts and fired-daub deposits—of burning. Eleven of these were either the final stage or the only stage of the buildings and could be the result of some kind of town abandonment ritual or even town destruction by enemy forces. Three PDS that represent early construction stages are also known to have burned. Since occupation refuse and superstructure materials were usually removed prior to rebuilding a PDS, it is possible that other early stage buildings were destroyed by fire but have gone undetected.

Mississippian houses, especially those with thatch roofs, would have burned very quickly and produced large, hot fires (see, for example, Williams and Iseminger 1989). In a compact settlement such as King, the chance that such a fire would spread to neighboring structures would have been very high. It seems unlikely, therefore, that the inhabitants of the King site were intentionally burning houses, unless the town was being abandoned. This does not mean that PDS were not purposefully torn down and rebuilt in response to the death of a household member.

Depressed Floors

Statements by three early European observers appear to describe the practice of constructing houses with subterranean floors. When the De Soto expedition passed from Florida into southern Georgia in 1540, Beidma observed that "[h]ere we found a difference in the houses of the Indians; we found them as caves below the ground" (Worth 1993a:228). Martinez, a member of the Pardo expedition in 1566, describes the houses of Indians in the mountains of North Carolina as follows: "the Indians took shelter in the huts that they had inside of it [a palisade wall], which were under the ground, from which they came out to skirmish with the Spanish" (Hudson 1990:320). Finally, we have Adair's description of "winter" houses he observed among the Chickasaw, Creek, or Cherokee sometime during the period 1735–1768: "As they usually build on rising ground, the floor is often a yard lower than the earth, which serves them as a breast work against an enemy: and a small peeping window is level with the surface of the outside ground, to enable them to rake any lurking invaders in case of an attack" (Williams 1930:451). The wording in the Beidma and Martinez statements is somewhat ambiguous but is most reasonably interpreted as describing structures that are at least partly below ground level. Adair's reference to a floor depth of 1 yard and an earthen breastwork, however, may be referring to earth that was banked against the lower walls of domestic structures and not to subterranean floors.

Eleven King site PDS (Structures 3–9, 11, 14, 21, and 23) have at least one construction stage with a partially or fully intact floor (Table 5.1). In five of these (Structures 4, 7–9, and 23), floor surfaces are between .3 and 1.0 foot below the base of plow zone, and the outline of the basin in which each was constructed is visible (Appendix A). All 11 structures are located in the east-central and northeastern sections of the site, where erosion has been least severe. The area with least soil loss, where the base of the plow zone elevation exceeds 98.5 feet, contains all five PDS with preserved basins (see Figure 4.1). Presumably, erosion and plowing have destroyed the basins and subterranean floors of PDS located elsewhere in the site.

Evidence that additional PDS were built in shallow basins is provided by the presence of hearths and the depths of burial pits. Structures 13, 20, and 29 have partially preserved hearths. Given the location of these PDS in areas of greater erosion, these features could have survived only if they were on floors that originally had been constructed in basins. Evidence presented in Chapter 7 indicates that burial pits containing individuals older than 7 years and located within the walls of PDS with preserved floors (inside burials) have bottom elevations that are on average 1.0 foot lower than those located outside of but adjacent to such structures. Assuming that all of these individuals were interred in pits of approximately equal depth, the elevation differences indicate that the associated PDS (Structures 5, 9, 14, and 23) were erected in basins and that these basins were approximately 1.0 foot deep.

Eight additional PDS lacking evidence of floors or hearths had one or more inside burials older than 7 years (Table 5.2). In all cases except Structures 22 and 31, the average depth of these pits is substantially greater than that of burials located beyond the structures' walls. These structures were apparently also erected in basins.

Altogether, 20 PDS have stratigraphic evidence of one kind or another indicating that they had subterranean floors and were constructed in shallow basins. There is no evidence that any PDS were constructed on the aboriginal ground surface.

Because of overbank erosion and plowing we cannot determine with certainty how deep basins were excavated at the time of PDS construction. However, evidence presented above does provide some indication. The burial pit data demonstrate that basins were on average at least 1.0 foot deep. More telling, the deepest preserved house basins, occurring in Structures 7 and 8.1, are 1.0 foot deep. If aboriginal ground surface adjacent to these structures has been destroyed by plowing and plow zone is .6 feet deep, these basins would

Table 5.2. Depth of burial pits located within or near primary domestic structures lacking preserved floors

	Inside Burials		Outside Burials	
Structure	Number of Burials	Average Depth	Number of Burials	Average Depth
1	1	3.4	3	.7
2	4	1.7	8	.7
15	4	1.8	16	1.0
22	3	1.1	9	1.1
24	1	2.0	4	.9
25	1	1.0	5	.4
26	2	.8	1	.4
31	3	.5	3	.4

Note: Measurements in feet.

originally have been at least 1.6 feet deep. They could have been deeper, but the burial pit evidence indicates that is unlikely.

The bottom surface of house basins is relatively flat inside structure walls. Beyond these walls, basin surfaces slope upward rather abruptly to the base of the plow zone. Preserved basins extend as much as 2.5 feet beyond exterior walls and doubtless extended farther before the aboriginal ground surface was destroyed by erosion and plowing.

Primary domestic structures at King are very similar architecturally to Type 4a structures at the Toqua site in eastern Tennessee. Seven of the Type 4a structures recorded at Toqua have preserved basins (Polhemus 1987). Depth ranges between .4 and .7 feet, although Structure 54, which was only partially excavated, may have had a basin depth of 3.5 feet. Structures resembling King site PDS and constructed in basins are also reported from Leake (Patton 1990), Little Egypt (Hally 1980), and Potts Tract (Hally 1970) in northwestern Georgia; Dyar (Smith 1994), 9DO39, and 9DO45 (Poplin 1990) in Piedmont Georgia; and Loy (Polhemus 1998) and the Mouse Creek phase sites (Sullivan 1987) in eastern Tennessee.

Exterior Wall Construction Techniques

Over four dozen charred remnants of exterior wall posts were preserved in Structures 4, 7, 8.2, 9, and 14. Most, if not all, of these posts were wedge shaped in cross section and had been split from debarked tree trunks. Field drawings

and measurements made on preserved posts in the lab indicate that wedge-shaped posts measured .3–.45 feet in maximum dimension and were split from trunks averaging around .8 feet in diameter. Split posts have an architectural advantage over full-round posts of equal size. On average they would have been split from tree trunks having at least twice the diameter of full-round posts. Larger trees have a greater proportion of the denser outer growth rings than their younger counterparts, with the result that posts split from them would be stronger and more weather resistant (Julian Beckwith, School of Forest Resources, University of Georgia, personal communication 1990).

Several dozen posts were impregnated with a paraffin-gasoline mixture in the field so that they could be stabilized for later dendrochronological analysis. Twenty posts submitted to Henri Grissino-Mayer for such analysis were identifiable as white pine (Hally and Grissino-Mayer 1999).

Outer walls of the well-preserved Structure 1 at Leake appear to have been constructed with similarly prepared posts. All but approximately five were preserved by charring. Seventy-five percent of these were split and measured around .45 feet in maximum dimension (Patton 1990). All had been debarked, and all were identifiable as white pine (Beckwith, personal communication 1990).

European accounts frequently describe domestic structures as having exterior walls of wattle-and-daub construction (Calder 1967; Swanton 1946; Waselkov and Braund 1995). Elvas's comment on the habitations of the upper Coastal Plain and Piedmont of Georgia is particularly important because it indicates that the construction technique was in use at the time of first European contact: "those of Toalli [on the Flint River at the Fall Line] were covered with canes in the manner of tile. Those houses are very clean and some have their walls plastered and appear to be made of mud. Throughout the cold lands each of the Indians has his house for the winter plastered inside and out" (Robertson 1993:75).

Structure 4 had fired-daub deposits located along its entire northern wall, suggesting that wall was covered with clay plaster at the time the structure burned. Structure 7 had similar deposits located along portions of its western and northern walls. Seven other burned structures at King (Structures 5.1, 5.4, 8.2, 9, 14, 21, and 23.4) had depressed floors that were at least partially intact, but none had fired-daub deposits located along their exterior walls. Erosion and plowing may have destroyed such deposits in Structures 14 and 21, but evidence of wall plaster should have been present in at least some of the remaining five structures if wattle-and-daub wall construction was a common practice.

Four excavated Barnett phase PDS at the Little Egypt, Potts Tract, and Leake sites were also destroyed by fire. Of these, only Structure 1 at Potts Tract bears evidence of possible daubed exterior walls. Here, a foot-wide strip of unfired clay surrounds postholes identified with the structure's western wall (Hally 1970:Figure 10). This material may represent the base of a wattle-and-daub wall.

Structure 1 at Leake is interesting because it suggests another way in which exterior walls may have been constructed. Sections of three charred whole canes were found lying horizontally one above the other against the outer edge of one of the structure's charred wall posts (Patton 1990:20–21). There was no daub in the vicinity and, thus, no evidence that the cane had once been enclosed in clay. Midden soil lay against the exterior surface of the cane and filled the outside portion of the house basin up to the base of the plow zone—a vertical distance of .6 feet. The evidence suggests that exterior walls of this structure consisted of horizontally laid cane placed against the exterior surface of wall posts or woven in and out between adjacent wall posts. Earth was banked against this surface at least to the top of the basin but probably to a height of 2 or 3 feet above the adjacent aboriginal ground surface.

No evidence of exterior wall daubing was found in the eight or so burned and well-preserved structures that were thoroughly excavated at Toqua and Loy (Polhemus 1987, 1998) in Tennessee and at 9DO39 and 9DO45 (Poplin 1990) in the Georgia Piedmont. Given this and the evidence from King and the other northwest Georgia sites, we cannot rule out the use of wattle-and-daub construction in the region during the sixteenth century, but it does not seem to have been a very common construction option.

There is no archaeological evidence for the height of exterior walls at King. The ethnohistorical evidence is ambiguous. Swan (Swanton 1946) describes structures at the Upper Creek town of Hickory Ground in 1770 as having wattle-and-daub walls 6–8 feet high, but the structures in question appear to be transitional to above-ground log cabins since they have oblong floor plans and chimneys at one end. Adair (Williams 1930:451) describes winter structures in the mid-eighteenth century as having walls 5–6 feet high. It is not clear, however, whether this is height above interior floor level or height above outside ground surface. In the latter case, total wall height, counting basin depth, would have approached 8 feet. This seems excessive, given that heat conservation would have been a major consideration in the design of domestic structures utilized in the winter (Hargrave 1991). Evidence will be presented in a later section that indicates the roofs of PDS were very steeply pitched. This being the case, exterior walls 5 feet tall would have been more than ade-

quate to accommodate human activities within PDS. If structure basins were 2 feet deep, 5-foot-high walls would have extended no more than 3 feet above grade.

Earth Embankments

As noted above, exterior walls of most PDS were constructed with individually set posts and probably had a layer of whole cane or small-diameter branches attached to their exterior surface or woven in and out between them. Some PDS may have had plastered walls. In either case, there is evidence that the lower portion of these walls was protected by earth embankments. Structures erected on platform mounds in northern Georgia and eastern Tennessee frequently have earth banked around the base of their exterior walls to a height of 2–3 feet (Polhemus 1987; Rudolph 1984; Smith 1994). We might expect similar earth embankments surrounding domestic structures at habitation sites like King, especially given that earth excavated from structure basins would have been readily available for that purpose. In only one case, however, are earth-embanked structures known from habitation sites in Georgia. At the Bullard Landing site (9TW1) on the Ocmulgee River below Macon, Williams (Williams and Evans 1993) mapped 24 circular to square mounds of earth averaging 49 feet in diameter and 1.5–2.5 feet in height. The central portion of most mounds was a foot or so lower than the mound edge. Test excavations demonstrated that the mounds cover structure floors and that their elevated perimeters represent earth that had been banked against the outer walls of the structures. Bullard Landing has never been plowed, and it is probably for this reason that these above-ground features are still intact. Plowing and erosion would have quickly destroyed similar features at King.

Three ethnohistorical accounts may describe earth-embanked domestic structures. Beidma's (Worth 1993a) and Adair's (Williams 1930) descriptions have been cited earlier in this chapter. Fray Anunciacion, accompanying the Luna expedition to northwestern Georgia in 1560, reported that in the Coosa chiefdom "[t]hey have winter and summer houses. The winter houses are all covered with earth, and they sow whatever they like over them" (Priestley 1928:239).

While the Beidma and Adair statements probably describe houses with subterranean floors, their references to "caves" "rising ground," and "breast work[s]" seem more applicable to earth embankments placed against the walls of structures. The Anunciacion reference suggests that earth was not only banked against exterior walls but also placed on the roofs of structures as well.

Earth embankments also seem likely for several practical reasons:

1. Northwestern Georgia receives more than 50 inches of rain a year. Much of this comes in the form of heavy downpours during the winter and in summer thunderstorms. Some architectural adjustment would have been necessary to prevent water from seeping into structures with subterranean floors, especially since the edges of basins lie outside the house walls. By banking earth against exterior walls to a height of several feet and sloping the surface of the embankment downward at a fairly steep angle, rainwater would have been carried several feet away from the structure.
2. The earth embankment would have served as very effective insulation, shielding structure interiors from winter cold and summer heat.
3. The soil excavated from house basins would have to be disposed of. The easiest solution would be to deposit it against house walls. Alternatively, it would have been necessary to carry this soil to the defensive perimeter of the town, where it could be used in constructing the palisade, or to dump it outside the town altogether.

On the basis of these considerations, I believe that most, and probably all, PDS at King had earth banked to a height of 2–3 feet against their outer walls. Given the wide geographical distribution of house basins, I suspect that this architectural feature was common throughout northern Georgia and much of the surrounding states in the late prehistoric period. Indeed, earth rings were a common feature at many Mississippian sites in the Southeast prior to intensive European cultivation in the nineteenth century (Moore 1915; Myer 1928; Nash 1968; Stirling 1935; Thruston 1897).

Entrance Trenches

Nine construction stages, representing seven PDS, have pairs of trenches extending outward from their exterior walls (Table 5.1). This kind of feature is common across Georgia, eastern Tennessee, and the Carolinas during the latter half of the Mississippi period and is usually interpreted as representing an entrance passage. Polhemus (1987:200) found evidence in one burned structure at the Toqua site that boards were placed on end within the trenches. His proposal that the closely spaced boards formed the walls of the entrance passage seems to be a reasonable explanation for how these features were constructed.

Wall trenches extend into structure basins and abut the exterior wall of the structure in all cases where these spatial relationships can be detected. Exclud-

ing Structure 1, where erosion appears to have shortened the trenches, and Structures 23.1 and 23.2, where overlapping trenches make accurate measurement difficult, wall trenches average 4.6 feet in length. The average distance between pairs of trenches, measured from the midline of each trench, is 2.5 feet. If the walls of entrance passages were made of boards placed along the midline of each trench, the passages themselves would have measured just under 2.5 feet in width.

Most structures (23) and construction stages (35) did not have wall trenches at the time of excavation. Some, especially those located in the western part of the excavated site area, have no doubt lost them to erosion and plowing. In other cases, however, wall-trench entrance passages may not have been constructed.

The depth of wall trenches is important information because it may help us determine whether some structures were indeed constructed without entrance passages. Unfortunately trench depth was recorded in only one case. The trenches associated with Structure 11 extended .3 feet below the floor level of that structure. If the basin of this structure had been 1.5 feet deep at the time of construction, the wall trenches would have been approximately 1.8 feet deep. That this depth was not unusual is indicated by the fact that three additional PDS (Structures 1, 16, and 24) had preserved wall trenches in spite of the fact that plowing had destroyed their floors.

Five structures and nine construction stages had preserved floors and/or basins but no wall-trench entrances. If wall trenches approaching 1.5 feet in depth had been part of these structures, evidence of them should have been preserved, especially in the case of Structure 9, where .3 feet of basin fill was still intact in 1974. These cases, then, provide evidence that some PDS were built without wall-trench entrances. If wall trenches varied in depth by as much as .5 feet from one structure to another, however, it is possible that those PDS with preserved floors but no entrance passages simply had relatively shallow wall trenches.

Although wall-trench entrance passages are missing from the majority of PDS, there are practical reasons that all structures should have had them. Hard rains, which are characteristic of the region, would have had the potential to flood subterranean house floors and carry soil from the surrounding earth embankment into the entrance area. With an average length of 4.5 feet, entrance passages probably extended well beyond the earth embankment and helped eliminate this problem.

Stratigraphic evidence from Toqua and the Mouse Creek sites supports the

conclusion that PDS normally were constructed with wall-trench entrances. At Toqua (Polhemus 1987), 8 of the 10 completely mapped Type 4a structures had wall trenches. The exceptions (Structures 21 and 24) had been impacted by plowing to the extent that all floor deposits were destroyed. At the Mouse Creek sites (Sullivan 1987:Figures 2–5), 36 mapped structures (with and without preserved basins and floors) had wall-trench entrance passages. Structures lacking wall trenches either did not have preserved floors (approximately 8) or had only partially preserved floors (approximately 13). Together these figures indicate that all habitation structures at these sites were constructed with wall-trench entrances and that if such features were missing at the time of excavation, plow disturbance may have been the cause.

In six cases at King, wall trenches are located at the corner of the structure and are oriented diagonally across the building. In three cases they are located near the corner of the structure and are oriented perpendicular to the adjacent exterior wall. The location of entrance passages must have had significance beyond mere architectural considerations. The side of the PDS closest to the entrance was probably considered the "front" of the building, and activity space within the building was probably laid out in conformity to this axis. The location of the entrance probably also reflected how the building and its occupants related to neighboring buildings and households and the town as a whole. Entrances presumably opened onto outdoor work areas and faced PDS in which related households or household members resided.

Entrance passages for PDS open to the southwest (Structures 1, 4, 7, 8, and 23), the southeast (Structure 11), and the northeast (Structure 24). The predominance of southwest-oriented entrances may reflect in part the fact that most mapped structures with preserved entrance passages are located on the eastern side of town. In this section of the habitation zone, the direction in which PDS faced (i.e., the location of their entrance) was probably determined by three factors: location of the plaza, the south cardinal direction, and the type of social relationships people had with their neighbors. In general, people probably preferred to have their houses face toward the center of town—the plaza and its associated public structures—rather than toward its perimeter. The large proportion of PDS with southwest-facing entrance passages may be a reflection of such a preference. There seems also to have been a preference for structures to face south. This is indicated by the predominance of south-facing entrance passages and also by the fact that the senior members of multi-structure households tend to reside in structures on the north side of shared outdoor work spaces (see Chapter 8). Both of these tendencies, however, were

probably overridden by the desirability of having one's house face toward the houses of other household members or toward the outdoor space shared with those individuals. PDS, then, may tend to face south and toward the plaza, but some, by necessity, will face in other directions.

Structure Floors

Eleven structures had at least partially intact floor surfaces at the time of excavation (Table 5.1). Four of these (Structures 5, 6, 8, and 23) had multiple construction stages. In all single-stage and first-stage structures, floor surfaces were placed directly on sterile subsoil at the bottom of the house basin. There is no evidence of any special floor preparation such as the addition of a thin layer of sand.

It is not possible to distinguish separate floor surfaces in Structures 5, 6, and 23. These structures were rebuilt 1–3 times and suffered plow damage and, in the case of Structure 5, extensive pothunting damage. The floors of Structures 8.1 and 8.2 were clearly distinguishable and allow us to reconstruct the steps involved in preparation of the later floor surface. There is no evidence that Structure 8.1 burned. Rather, the structure seems to have been dismantled and its floor cleaned of occupation debris. The rim of the earlier hearth stage was removed. The old floor was then covered by a layer of soil, ranging between .2 and .4 feet thick and largely devoid of cultural material. The surface of this deposit served as the floor of the new structure.

Structure 1 at Potts Tract (9MU103) and Structures 2 and 3 at Little Egypt (9MU102) each have two construction stages and are for the most part similar to Structure 8 at King in the way rebuilding occurred (Hally 1970, 1980). They differ only in two respects. Fill soil separating floors contained some artifacts, suggesting that it was obtained from midden elsewhere on the sites. Second, the later floors of Structures 1 and 3 have scattered patches of sand approximately .1 foot thick, suggesting that they originally had a thin sand cover.

The evidence from King, Little Egypt, and Potts Tract indicates that the rebuilding of PDS followed a rather regular pattern. There appears to have been a concerted effort to clean the earlier floor of occupation and superstructure debris and to cover it with a layer of soil. The fact that structures were built on top of one another suggests there was an emphasis on continuity between stages. The cleaning and covering of the earlier structures, however, suggests there was also an emphasis on renewal and starting over. Earlier construction stages seem to have burned infrequently, at least in comparison with terminal

construction stages. Earlier structures may have been carefully dismantled and salvageable building material reused in later stages. The possibility that renewal symbolism was important suggests alternatively that such building materials would have been discarded.

Hearths

Hearths were preserved to varying degrees in 19 PDS (Table 5.1). All structures in the eastern portion of the site had hearths, but only one located in the more eroded western half of the site (Structure 29) had a hearth. All preserved hearths are located quite precisely in the center of their respective construction stage; the distance between the hearth and the four exterior walls seldom varies by more than half a foot.

Multiple hearths can be distinguished in all PDS that have multiple construction stages. In those cases where a structure has been rebuilt, a new hearth was invariably constructed in the center of the new building. With the possible exception of Structure 23.2, no PDS construction stage has more than one "hearth stage." A number of hearths have been remodeled or repaired, which involves adding a layer of clay to the basin bottom or side walls or building a complete new, smaller basin inside an earlier basin. Eleven hearth stages in six structures have been remodeled at least one time. The hearth of Structure 14 was remodeled four times, the most for any hearth recorded at King. These new clay surfaces may represent repairs, but they may alternatively have had a more important function as symbols of household change or renewal.

In 24 construction stages, representing 13 PDS, hearths were sufficiently intact to allow at least partial determination of shape and size (Table 5.1). Three hearth types can be distinguished among them. Eight hearths have square basins and rims, flat bottoms, and molded rims extending .2–.3 feet above the floor surface. Basins measure between 1.4 and 3.4 feet across and .6–1.0 foot deep.

The second type of hearth, represented by five examples in two PDS, has a circular basin and rim, a flat bottom, and a molded rim extending .2–.3 feet above the surrounding floor surface. Basins measure between 1.4 and 2.5 feet across and .4–.6 feet deep.

The third type of hearth, represented in three structures, has a circular basin and rim, a rounded bottom, and a molded rim extending .2–.3 feet above the surrounding floor. Basins measure 2 feet across and .4–.8 feet deep.

Polhemus (1987:187–198) distinguishes nine hearth types in Type 4a structures at Toqua. Six of these are variants of the types recognized at King. Hearths in Structures 2 and 3 at Potts Tract conform to hearth types 1 and 3 at

King. The central hearth in Structure 1, however, appears to be square with a rounded profile, a type present at Toqua and possibly in Structure 5.2 at King.

These hearth types do not exhaust the variety of hearth forms known from the region. Polhemus recognizes three additional hearth types not found at King. At Little Egypt, Structures 1 and 2 had hearths characterized by circular shape and slightly convex surface. With the possible exception of Structure 3, no hearths at King had convex surfaces. This type of hearth was also found in Structure 1 at Leake (9BR2).

Square hearths in Structures 4, 7, 8.1, and 21 have approximately the same orientation as the structure within which they occur. The Structure 5.1 and 5.4 hearths appear to deviate from structure orientation by 22 degrees and 27 degrees, respectively, although the latter estimate is suspect because of damage to the hearth.

The horizontal shape of all hearth stages in four multistage PDS (Structures 2, 5, 8, and 23) can be identified with some certainty. All four hearth stages in Structure 5 and both stages in Structure 8 are square. The three hearth stages in Structure 1 and the four in Structure 23 are circular. Although sample size is small, the fact that basin shape does not vary from building stage to building stage in these structures suggests that the distinction between square and circular basins was considered significant and that the residents of at least some PDS were constrained in some way to use one as opposed to the other.

Each of the hearths in the three construction stages of Structures 2 and 3 at Loy (Polhemus 1998) were round. Of seven structures that had multiple hearth construction stages at Toqua (Polhemus 1987), however, four appear to have maintained the same basin shape while three had both circular and square basins. It is possible that the distinction between hearth forms was not as significant or at least had different significance for the Dallas phase inhabitants of Toqua.

Structures with round and square hearths appear to be randomly distributed across the eastern portion of the King site. More significant, both kinds of hearths are represented in structures that can be identified as forming multistructure households (Structures 2, 4, 9, and 24, and 7, 8, and 23). This evidence suggests that hearth form is not related in a systematic way to household or descent line.

Fired Floor

Seven PDS have at least one construction stage with areas of fired floor located adjacent to their hearths (Table 5.1). The fired floor in Structure 3 differs from the others in two important respects. Whereas the other floor surfaces re-

semble hearths in texture and hardness, the feature in Structure 3 is described in field notes as "red fired sand," implying a different texture and perhaps degree of firing. The Structure 3 feature also extends from the hearth almost to the southwestern exterior wall. All other deposits are confined to the central floor sector and in most cases to the immediate vicinity of the hearth.

The fired floor surface in Structure 3 is probably the product of intense heat generated at the time the building burned. Since five of the other six structures also were destroyed by fire, their fired floors could have formed in this manner as well. Several kinds of evidence, however, point to another interpretation. To begin with, Structure 2 at the Little Egypt site has a similar feature, but that building did not burn. Second, being restricted to the central floor sector, the fired floor features would have been covered to some extent by fallen roof daub. This would have tended to extinguish burning timbers and to reduce temperatures immediately above the fired floor surface. Third, most of the features are relatively small and all are located immediately adjacent to the hearth. It is difficult to see how this pattern could be produced by the more or less random conditions existing in a burning building. Finally, there is a reasonable alternative explanation for the features.

The intensity of firing indicates that hot fires were built and maintained for some time on the floor surfaces. Sixteenth- to eighteenth-century European descriptions of Southeastern Indian food habits indicate that these surfaces may have been used as ovens for bread making. Natchez, Cherokee, Georgia coastal, and Virginia Indians are all described as baking corn bread under ashes and coals (Swanton 1946:355–356). The most detailed descriptions of this process are for the Cherokee. According to Adair, "When they intend to bake great loaves, they make a strong blazing fire, with short dry split wood on the hearth. When it is burnt down to coals, they carefully rake them off to each side, and sweep away the remaining ashes: they put their well-kneeded broad loaf, first steeped in hot water, over the hearth, and an earthen bason above it, with the embers and coals a-top" (Adair in Williams 1930:438). Timberlake relates that "[a]fter making a fire on the hearth-stone, about the size of a large dish, they sweep the embers off, laying a loaf smooth on it; this they cover with a sort of deep dish, and renew the fire upon the whole, under which the bread bakes to as great perfection as in any European oven" (Timberlake in Williams 1927:57).

From these descriptions, it is possible that bread was baked in the hearth basin itself, with firing of the adjacent floor surface occurring when ashes and coals were temporarily swept out of the hearth. This explanation seems unlikely on two counts. First, it is unlikely that such brief exposure to heat would

produce the level of soil firing observed. Second, given the size and depth of most hearth basins in King site structures, it would be difficult to keep a fire going in the hearth while also baking bread. The more likely alternative is that the fire was built on the floor adjacent to the hearth basin and that baking was done on this heated surface.

Structures 2.1, 4, 5.4, 8.1, and 8.2 have fairly small fired floor features located on one side of the hearth and merging with its rim. Structure 7 differs in having fired floor surrounding the hearth on all sides. Both situations conform to what one would expect to find if these features were indeed used as ovens. The fired floor surface in Structure 14, on the other hand, surrounds the hearth but covers almost the entire central floor sector and extends out to the interior roof support posts. Similar-sized fired floor features exist in Structure 1 at Leake (Patton 1990) and Structure 1 at Little Egypt (Hally 1980). Whether these larger features were formed in a different manner is not known.

Polhemus (1987:214) describes a remarkable set of features from Structure 52 at Toqua that supports the functional explanation of fired floor features given above. Three stones were arranged in a triangle on a small area of fired soil located immediately adjacent to the hearth. Ash overlay the fired soil and surrounded the stones. Polhemus identifies the three stones as pot supports. A logical interpretation of this evidence is that pots were being heated over open fire at this location. This implies, in turn, that a variety of cooking activities were conducted on the outer margins of prepared hearths.

Structures 9, 10, and 23 at King have preserved floors but lack areas of fired floor adjacent to the hearth. Variability in the occurrence of this feature in PDS probably reflects minor differences in the food habits of households. Bread, for one, was not a very important food type in the aboriginal Southeast (Hally 1986a) and may not have been baked on a regular basis in all households.

Structure Size

Dimensions and floor areas have been calculated for all PDS except Structures 12 and 30 (Table 5.1). Those calculated for Structures 3, 13, and 20, however, are not reliable and will not be used in the following discussion. PDS are, for all practical purposes, square in floor plan. Distances measured between opposite walls within a single structure differ on average by only .4 feet and by no more than 1.2 feet.

Structure sizes range between 306 square feet (17.5 × 17.5 feet) and 1,079 square feet (32.6 × 33.1 feet) and average 612 square feet. Type 4a domestic structures at Toqua average less than 500 square feet (Polhemus 1987:Table 5.5) and thus tend to be considerably smaller than those at King.

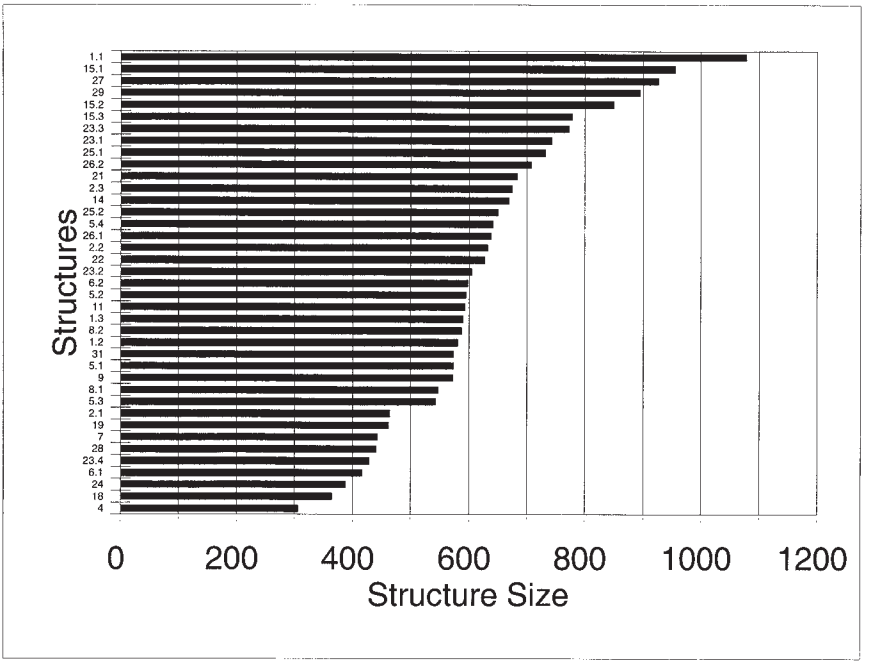


Figure 5.5. Size distribution of primary domestic structures (in square feet).

Structure sizes are plotted in Figure 5.5. The lower end of the S-shaped curve is separated from the middle section by a gap of 79 square feet in what is otherwise a fairly smooth curve. The 21 PDS in the middle section of the curve are relatively uniform in size, spanning a range of only 141 square feet (between 543 and 684 square feet). Beginning with Structure 26.2, PDS size increases more rapidly, with the 10 PDS plotted in this section spanning a range of more than 370 square feet. The largest PDS, Structure 1.1, is 124 square feet larger than Structure 15.1, the next largest PDS.

The flatter part of the curve, containing more than half of the measured PDS, may correspond to what town residents considered to be an ideal size for PDS. We may assume that structures in this size range were sufficiently large to accommodate most resident domestic groups and most household activities but were not too expensive to build or maintain. Structures were presumably built smaller or larger than this only when special circumstances (see Chapter 8) dictated they be.

Polhemus (1987:236) identifies the central floor area of Type 4a structures as "public" floor space and the outer floor area between the roof support posts

and the outer wall as "private" floor space. Although he does not explicitly state why he makes this distinction, it is clear that he sees the former as being the place where activities such as eating and visiting occur that involve all residents and, on occasion, nonresidents and the latter being the place where activities such as sleeping and craft production occur that involve individual residents.

Central floor space estimates are less reliable than those for total floor space because of the greater difficulty in identifying interior roof support posts, especially in PDS with multiple construction stages. Central floor space can be calculated for only 25 out of a possible 44 PDS construction stages (Table 5.1). The amount of such space ranges between 45 and 245 square feet and averages 104 square feet. The ratio of central floor space to total floor space ranges between 13 percent and 24.1 percent. The average of 16.5 percent is considerably smaller than the 21.1-percent average for village area structures (Type 4a) at Toqua (Polhemus 1987:Table 5.2).

Total floor space and central floor space are strongly correlated ($r = .9086$) in King site PDS. Larger structures have larger central floor spaces, but the relationship seems to break down in the largest structures. Structure 27, which is the third-largest PDS, has a central floor area that is more than one standard deviation below the mean for percentage of total floor space. Structures 1.1 and 15.1 are the two largest PDS in both total floor space and central floor space, but they have considerably more central floor space than expected. The percentage of central floor space for both structures—23 percent and 24 percent, respectively—is more than two standard deviations above the mean. These figures are comparable to the ratio of central floor space existing in the two public buildings in the plaza, Structures 16 (20.2 percent) and 17 (20.1 percent).

The outer floor area of PDS, the space lying between roof support posts and outer walls, is presumably where people slept, where household equipment and some foodstuffs were stored, and where certain domestic activities such as flintknapping took place. The width of the outer floor zone ranges between 5.3 feet and 9.6 feet, while square footage ranges between 261 square feet and 834 square feet. There is a strong tendency for width ($r = .89778$) and area ($r = .84108$) of the outer floor zone to increase as total floor area increases. As might be expected, Structures 1.1 and 15.1 have the lowest percentage of outer floor area.

Structure 4 has the smallest total floor space and narrowest exterior floor zone of any PDS on the site. Presumably the 5.3-foot width and 261 square feet of outer floor space was adequate to accommodate the domestic activities of the structure's residents, but we may assume that it was close to the minimum

necessary. In 18 of the 25 measurable structures, the outer floor zone varies in width by only a little more than 1 foot, from 6.2 feet to 7.6 feet, and area ranges between 338 and 572 square feet. Presumably these dimensions represent what was considered to be an acceptable amount of space for the types of activities that took place in this part of the PDS.

Exterior Wall Posthole Number and Spacing

Identification of exterior wall posts is relatively easy in most PDS that have only one construction stage. It is considerably more difficult and much less reliable in those structures with multiple construction stages. The problem one faces in the latter structures is an abundance of extraneous postholes that are not part of the original walls and the existence of gaps in the wall post alignments. Using the procedure described earlier in this chapter, I have been able to estimate the number of exterior wall posts for 30 structures. These numbers range between 23 and 44 (Table 5.1). Structure 1.1, with an estimated 44 postholes, is an outlier in this distribution. Since the structure is also more than 100 square feet larger than any other PDS, it may represent a functionally or socially distinct kind of building. Without it, the range of estimated postholes is reduced to 23–33.

The most obvious explanation for the variability in number of exterior wall postholes is that larger buildings require more exterior wall posts to be architecturally sound. Pearson's *r* for the relationship between the two variables is .6339. While the coefficient is significant at the .001 level, it is clear that much of the variability in posthole frequency is not determined by structure size alone. If we remove Structure 1.1 from consideration, with its exceedingly large size and number of postholes, the correlation is reduced dramatically to .4920. The weakness of the relationship between structure size and posthole frequency is perhaps best illustrated by the fact that the six structures with an estimated 26 postholes each range in size between 441 square feet and 894 square feet.

Figure 5.6 plots the number of exterior wall postholes per structure. The frequency curve is bimodal, with a pronounced peak in the 27–29 posthole range and a second one in the 31–33 range. Together, these two ranges account for 24 of the 28 PDS for which we have estimates. Structures with 27–29 wall posts vary in size between 306 square feet and 894 square feet, while those with 31–33 wall posts vary in size between 574 square feet and 955 square feet. Average posthole spacing ranges between 2.5 and 3.7 feet for the former group of structures and between 2.5 and 3.8 feet for the latter. Given the strong tendency for wall post frequencies to fall into two narrow ranges and the great

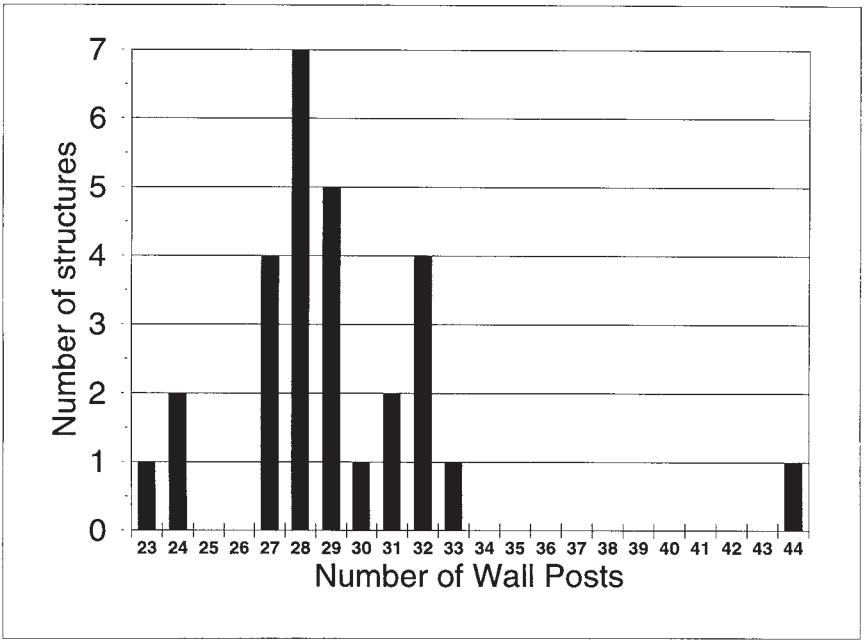


Figure 5.6. Estimated number of exterior wall posts in individual primary domestic structures.

variability in building size and posthole spacing for the structures represented in each range, I think it is safe to say that some factor other than or in addition to building size is determining wall post frequency in PDS.

I think it is likely that King site inhabitants preferred PDS to have either 28 or 32 exterior wall posts. Almost half the structures in the 27–33 post range have either 28 or 32 posts. Posthole counts that deviate from these numbers by one or two posts may very well be erroneous as a result of the unfavorable conditions under which wall post identifications were made. Eight of the 13 PDS that deviate are multistage PDS or, in the case of Structure 22, appear to have rebuilt walls on one or two sides of the building. Two others are located in more heavily eroded areas of the site. Even Structures 4, 7, and 9, with single construction stages and relatively uncomplicated posthole patterns, have more postholes located along the exterior walls than the 27 estimated to be actual wall posts.

I think a good case can be made for wall post number being determined in part by ideological factors. Structures with 28 exterior wall posts have seven posts in each of their four walls. Four and seven are sacred numbers in the

Southeast: the former referring to the cardinal directions and the number of times many ritual acts were repeated and seven referring to, among other things, the number of directions (four cardinal directions, up, down, and center) recognized by the Cherokee, the number of Cherokee clans, and the number of days Creek war parties waited before setting out on military expeditions, as well as several Creek and Cherokee mythological events (Gatschet 1969 [1884]; Gearing 1962; Hudson 1976).

Structures with 32 posts would have eight in each of their four walls. I have come across only one reference in the Southeastern literature suggesting that eight may have been a sacred number—the number of years it took the Choctaw to construct the mound at Nanih Waiya (Lincecum 1904:531)—but eight is the number of roof support posts that are commonly found in late prehistoric and historic public structures in the Southern Appalachian region. Structure 17 at King has this number of posts, as do Structure 51 at Toqua (Polhemus 1987), the mid-eighteenth-century townhouses at Chota-Tanasee (Schroedl 1986) and Tomatley (Baden 1983), and eighteenth-century Upper Creek rotundas (Hawkins 1848; Sheldon 1990; Waselkov and Braund 1995: Figure 25).

This symbolism appears to have been extended to the two public buildings in the plaza. Structure 16 resembles PDS in layout and has 34 exterior wall posts (see Chapter 6). This number is fairly reliable, because the structure has only one construction stage. Nevertheless, it is possible that I have overcounted exterior wall posts, because there is evidence that replacement posts were added in some sections of wall. At 400 square feet, Structure 16 falls in the range of the smallest PDS. Average posthole spacing (2.05 feet) is smaller than that of any PDS. We might conclude that the builders of Structure 16 wanted the exterior walls to have 32 posts and were willing to reduce inter-post spacing to achieve that number.

Structure 17 has an estimated 45 wall posts, but the number might actually be 44 (see Chapter 6). As with Structure 16, replacement posts in several wall sections make it difficult to accurately count exterior wall posts. Forty-four is an interesting number. The Choctaw wandered 44 years before settling at Nanih Waiya (Lincecum 1904:524), and 44 is the product of having four straight wall segments with seven posts each and four rounded corners with four posts each. Structure 1.1, the largest PDS, at 1,079 square feet, is unique among domestic structures with an estimated 44 exterior wall posts, 11 more than the next largest number. As noted above, Structures 1.1 and 17 are also similar in having large central floor areas.

The large number of structures that appear to have 28 or 32 wall posts and

the fact that these structures vary so much in floor space suggest that many households consciously chose to construct their primary residence with one or the other number of posts. Nevertheless, a few PDS (Structures 11, 18, and 19) appear to have had neither 28, nor 32, nor 44 exterior wall posts. This suggests that prescriptions governing number of posts were not inviolable.

Estimates of exterior wall postholes are available from two contemporary structures in northwestern Georgia. Structure 1 at the Leake site had 32 or 33 posts and Structure 1 at Little Egypt had between 28 and 30 postholes. The latter structure was located on a terrace of Mound A and was quite large (960 square feet), but to judge from its artifactual content it was a domestic structure. Most mapped structures at Toqua were rebuilt one or more times and are thus difficult to analyze using only published maps. Structure 39, a well-preserved single-stage structure in the village, had approximately 36 postholes. Several well-preserved structures on Mound A (Structures 3, 11, 12, 14, and 30) had large numbers of postholes, ranging into the fifties and seventies. Whether this reflects the public nature of these buildings or a cultural difference between the Coosa River and Little Tennessee River drainages is not known.

Central Daub Deposits

Large deposits of daub located in the central floor sector are a common feature of PDS. Twelve PDS construction stages with floors that are at least partially intact were destroyed by fire. Eight of these have central daub deposits (Table 5.1). Of the remaining four (Structures 5.1, 6.1, 8.1, and 8.2), later PDS construction stages may have removed daub deposits in three cases (Structures 5.1, 6.1, and 8.1). In the eight structures with central daub deposits, daub covered most of the floor space bounded by the four interior support posts but seldom extended much beyond it. Similar deposits have been reported for late Mississippian structures at several sites in the Southern Appalachian region (Hally 1970, 1980; Keel 1972:44, Figure 2.7; Lewis and Kneberg 1946:48; Lewis and Kneberg Lewis 1995:473, 527; Patton 1990; Polhemus 1987:1222, 1998; Poplin 1990).

Two late eighteenth-century accounts describe the addition of clay plaster to roofs of aboriginal houses. Referring to Chickasaw, Creek, or Cherokee winter houses, Adair states: "They then weave them [rafters] thick with their split saplings, and daub them all over about six or seven inches thick with tough clay, well mixed with withered grass; when this cement is half dried, they thatch the house with the longest sort of dry grass, that their land produces" (Williams 1930:451). Describing Creek townhouses, Hawkins states: "The raf-

ters are near together, and fastened with splits. These are covered with clay and that with pine bark" (Hawkins 1848:71).

Both of these accounts can be interpreted as describing the addition of a clay plaster layer between the rafters and the roof covering. A more probable interpretation is that clay was applied around the rafters but primarily to their underside and that of the roofing material above. This was done presumably to protect these flammable materials from sparks rising from the central hearth. Lewis and Kneberg (1946:48) were the first to recognize this practice in archaeological context, and more recent research tends to support their observations. The size and distribution of central daub deposits indicate that roofs were plastered from the smoke hole out to the four interior roof support posts and no farther. Analysis of the central daub deposit from Structure 1 at Leake reveals that rafters were plastered on their underside and that roof support beams lying on the four interior support posts were also enclosed in plaster.

Plastered roofs would have required a specially constructed opening to allow smoke from the central hearth to escape. Polhemus (personal communication 1990) reports finding fragments of daub in Toqua site structures that had been molded by hand to form the circular opening of a smoke hole. Lewis Larson (personal communication 1990) reports finding a smoke hole made from the neck and shoulder of a broken Lamar Complicated Stamped jar in a Brewster phase structure at Etowah. Fired daub adhering to the vessel surface indicates that it had been plastered into place within the clay layer.

Interior Partition Walls

Evidence of interior partition walls exists in four forms: preserved basal remnants of walls, discrete deposits of fired daub representing fallen walls, artifact distributions on house floors, and postholes that held the supporting posts for partitions.

Structures 4 and 7 contained preserved wall remnants (Figures 5.2, 5.4, and 5.7). These consist of vertical slabs of fired clay extending from the exterior wall toward the center of the structure and terminating at an interior roof support post or the edge of the central floor sector.

The partition walls in Structure 4 are not described in any detail in field notes. Field photographs, however, show them to be between .2 and .4 feet thick. The walls in Structure 7 were about .2 feet thick and were smooth on one surface and rough on the other. The rough surface of one wall had horizontally oriented impressions of cane and one or more impressions that may represent vertically oriented posts. Daub fragments from partition walls at the Leake site had similar impressions. It thus appears that partition walls were sometimes, if

not always, constructed using the wattle-and-daub technique. Presumably clay plaster was applied to both sides of the cane wattle; if so, the preserved slabs of daub in Structure 7 represent only one side of the walls.

The preserved partition walls in Structures 4 and 7 tell us a great deal about the spatial configuration of these features:

1. The compass orientation of partition walls parallels structure orientation.
2. Partitions extend from the outer structure wall to the edge of the central floor sector.
3. Some partitions are located opposite roof support posts and extend inward to those posts. They divide the outer floor space along one wall into three cubicles of approximately equal size.
4. Some partitions are located closer to the center of the exterior wall and divide the outer floor space into two cubicles. They are apparently supported on their proximal end by a post that is either freestanding or attached to a roof support beam.
5. The southwestern corner of Structure 4 where the entrance passage is located is enclosed by two partitions (see Figure 5.7). Structure 7 has only one preserved partition in the southwest corner where its entrance is located. However, a layer of daub fragments located in the southern portion of the structure basin may represent the collapsed remains of a second partition that would have enclosed the entrance area as in Structure 4.

Polhemus reports one domestic structure at Toqua as having preserved partitions. Structure 39b had three such walls: one apparently extending to a roof support post and two located closer to the center of exterior walls and terminating at a post located on the edge of the central floor area. Lewis and Kneberg Lewis (1995:503, Figures 28.4 and 28.6) report preserved fired clay partition walls in one domestic structure (Structure 16) at the Mouse Creeks site. Structures at 9DO39 and 9DO45 each had several collapsed wattle-and-daub partitions (Poplin 1990). Most appear to have extended to interior roof support posts and divided outer floor spaces into three compartments, but each structure also had one partition located in the center of an exterior wall. Both structures also had partitions that enclosed the corner floor sector where the entrance passage was located.

King site Structures 4, 7, 9, and 14 had fired-daub deposits located in their outer floor sectors that represent portions of collapsed partition walls. Deposits on the western side of Structure 4 correspond in location to preserved walls (Appendix A, Figure A.8). Daub deposits in Structure 7 were not carefully ex-

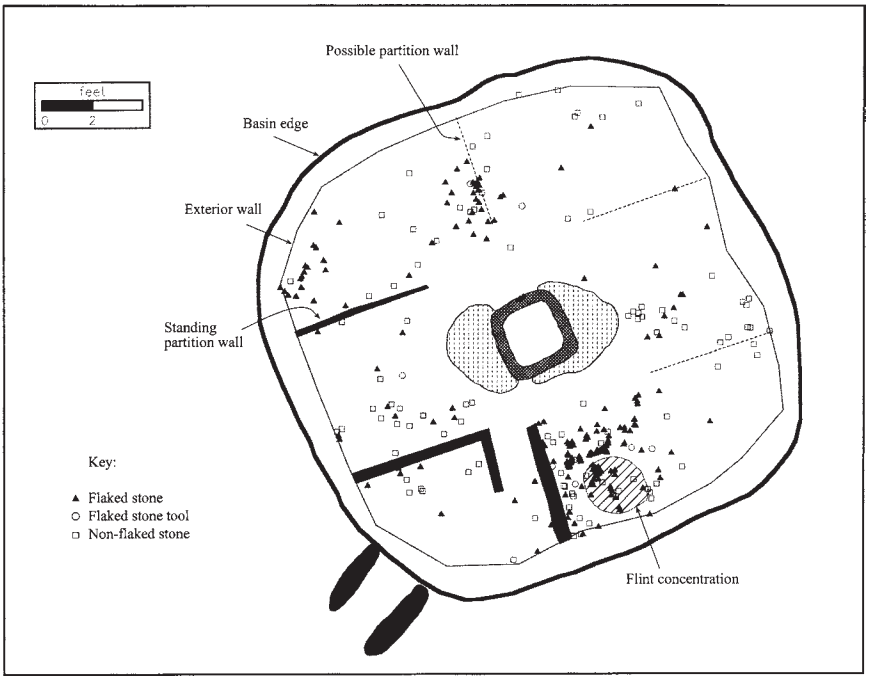


Figure 5.7. Plan view of Structure 4, showing partition wall remnants and the distribution of piece-plotted lithic artifacts on the floor of Structure 4.

posed and mapped as a result of time constraints, but field notes indicate that they overlay much of the southern part of the structure. In this location, they would have derived from partitions located in the structure's southeastern and southwestern corners (Appendix A, Figure A.14).

Structure 9 had two daub deposits located in the south-central exterior floor space (Appendix A, Figure A.18). They may be remnants of a partition originating from the structure's southern wall.

Daub deposits are located in the outer floor sectors on the northwestern, northeastern, and southwestern sides of Structure 14 (Appendix A, Figure A.26). Overbank erosion may have reduced the size of these deposits and destroyed deposits along the southeast side altogether. The extant deposits, nevertheless, indicate that there were at least four partitions in the structure: one near the center of the northwestern wall, one extending to the northern roof support post, one extending to the eastern roof support post, one extending to the western roof support post, and possibly one located near the center of

the southwestern wall. There are no postholes for support posts in the last location, suggesting that this small daub deposit is part of the partition in the western corner.

Structure 5.1 was not destroyed by fire and as a result has no deposits of fired daub. However, a 5.5-foot-long strip of unfired clay in the southeastern corner of the structure may represent the base of an unfired partition wall or a collapsed portion of one (Appendix A, Figure A.10). Its location and orientation indicate that the partition extended to the southeastern roof support post.

The daub evidence supports several of the observations concerning preserved partitions that were made above. It also can tell us something about the height of partition walls. Assuming that partitions fell to one side or the other at the time structures burned, the width of the resulting daub deposits may approximate wall height. Daub deposits along the southwestern wall of Structure 4 and the northwestern wall of Structure 14 are 3 feet and 4.5 feet wide, respectively. Polhemus (1987, 1998) reports comparable heights for partitions represented by fallen walls at Toqua and Loy. One fallen wall deposit in Structure 1 at Leake (Patton 1990:24) is 4.75 feet wide. These data indicate that partitions stood to a height of 5 feet or more.

Partitions undoubtedly played an important role in constraining the spatial location of domestic activities within PDS. Such constraints should be reflected to some degree in the spatial distribution of primary and de facto refuse on preserved house floors (Figure 5.7). The preserved floors of Structures 4, 7, 8.2, and 23.4 yielded a sufficient number of artifacts to permit meaningful observations concerning the spatial relationship between partition location and artifact distribution. This information is reviewed in a later section dealing with artifacts recovered from house floors.

Partitions would have required some form of support to hold them upright and in place. The available evidence indicates that the distal ends of partitions were attached to structure walls and that the proximal ends of many were attached to a roof support post. Partitions located near the center of exterior walls, however, would have required a separate post to support their proximal end, as in the case of the partition in the east-central floor sector of Structure 7. It is also possible that partitions required additional support along their length. Postholes located beneath or adjacent to standing partitions in Structures 4 and 7 may have held such posts. We may anticipate, then, that the location of partitions will be marked by postholes and that the distribution of the latter may form identifiable patterns.

Eight structures (Structures 4, 7, 9, 11, 14, 21, 22, and 23) have sufficient

evidence in the form of standing walls, daub deposits, artifact distributions, and suggestive posthole alignments to allow partitions to be identified with some confidence. These are illustrated on the maps accompanying descriptions of PDS in Appendix A.

Roof Construction

We have little direct evidence for what the above-ground architecture of PDS looked like in spite of the fact that the lower portions of wall posts and roof support posts were often preserved in buildings that had been destroyed by fire. Superstructure elements such as roof support beams and rafters were seldom preserved in large enough sections to be identifiable as such. Time constraints in the field, furthermore, made it difficult to identify and record these elements in any detail. As a result, we have little understanding of what the roofs of PDS were like.

Posthole patterns demonstrate that PDS were square in plan with rounded corners and that they typically had four posts arranged in a square near the center of the structure. On the basis of general architectural principles we can infer that the four interior posts supported one or more tiers of horizontal beams laid in a square pattern (Figure 5.3). We can also infer that rafters were supported by wall plates attached to the exterior wall and by the beams running between the four interior posts. Given the spatial configuration of exterior walls and interior support posts, it is most likely that roofs were hipped or pyramidal in shape rather than gabled.

Adair's mid-eighteenth-century description of "winter" houses fits this reconstruction: "To raise these, they fix deep in the ground a sufficient number of strong forked posts, at a proportional distance in a circular form, all of an equal height, about five or six feet above the surface of the ground. . . . Then in the middle of the fabric they fix very deep in the ground, four large pine posts, in a quadrangular form, notched a-top, on which they lay a number of heavy logs, let into each other, and rounding gradually to the top. Above this huge pile, to the very top, they lay a number of long dry poles, all properly notched, to keep strong hold of the under posts and wall-plate" (Williams 1930:451).

Partial confirmation of this arrangement is provided by impressions of architectural elements in fired daub from Structure 1 at the mid-sixteenth-century Leake site on the Etowah River. Several dozen fragments from the central daub deposit have one or more log impressions. In approximately 70 percent of the cases, these impressions are round in cross section and smooth, indicative of a log that has been stripped of its bark. In most of the remaining cases, the impression is flat and bears evidence of wood grain, indicative of

a split pole. Thirteen of the fragments have impressions of two elements, oriented at right angles to one another and touching. One of these impressions is invariably round and smooth and probably represents the horizontal beams that lie on top of the four interior posts. These elements average .52 feet in diameter and have been debarked. The second element is represented by both round and flat impressions in approximately equal numbers and averaging .3 feet across. These impressions probably represent rafters lying on top of the beams. To judge by their diameter, they were typically made from split poles.

One large piece of daub bore the impression of a 1.5-foot-long segment of support beam and impressions of at least five rafters. The latter were spaced only .2 feet apart. It seems doubtful that rafters were placed over the entire roof at this close interval. More likely they were spaced at intervals of approximately 1 foot.

If daub fragments with support beam and rafter impressions can be oriented in their original plane, the angle or slope of the rafters can be calculated. Ten of the Leake site daub fragments have support beam and rafter impressions as well as a hand-smoothed surface that may represent the underside of the support beam/rafter assemblage and as such provide a way to orient the daub fragments in three-dimensional space. Unfortunately, the surface in question is sometimes uneven and therefore difficult to orient in a horizontal plane. Estimates of the angle between the hand-smoothed surface and the rafter impressions are as follows: 32, 39, 52, 53, 57, 63, 65, 67, 69, and 80 degrees. Although there is considerable variation, the majority of angles fall in the range of 50–70 degrees.

One large daub fragment contains a fourth impression that appears to represent a vertical post, presumably one of the four interior support posts. Using it to orient the fragment produces a rafter angle of 53 degrees from the horizontal. This figure compares favorably with the roof angle of 54 degrees that can be calculated from DeBatz's 1732 drawing of an Acolapisa "chief's cabin" in Louisiana (Bushnell 1927:Plate 1). While it is not known whether DeBatz actually measured the roof angle on this structure, it is probable that he did try to portray it accurately as he was an architect or engineer, according to Bushnell (1927:1). That DeBatz was concerned with accuracy and architectural detail is evidenced by the measurements he provides for the two buildings illustrated in Plate 1 and by the fact that the buildings were drawn to scale.

Roofs made with cane matting or thatch must be steeply angled in order to effectively shed rainwater. Roofs of late prehistoric domestic structures such as at King and Leake may have been covered with bark sheets, but even with this material, a steeply angled roof would help to ensure rainwater runoff. It seems

likely, then, that roofs of PDS at King were angled at least 45 degrees from the horizontal and probably were steeper than that.

No roofing material was recognized and recorded during excavations of the PDS at King or Leake. Elvas and Beidma agree that structures in Florida and southern Georgia had thatch roofs while those to the north were different (Robertson 1993:75; Worth 1993a:228). Garcilaso describes these more northern roofs as being made with "mats of cane" (Shelby 1993:298); Elvas (Robertson 1993:75) seems to be saying the same thing when he describes them as being made of "canes in the manner of tile." Late eighteenth- and early nineteenth-century descriptions of Creek structures by Wight (Calder 1967), Swan (Swanton 1946:394), Bartram (Waselkov and Braund 1995), Hawkins (1848:71), and an unidentified army officer (Swanton 1946:391–392) all identify roofs as being constructed of shingles or of pine or cypress bark.

Whether the difference between the sixteenth-century and eighteenth-century accounts reflects an actual shift in roofing materials is not known. Widespread use of shingles may have required the introduction of the iron axe, but bark can be obtained in large sheets from trees such as elm, oak, chestnut, pine, and hemlock with simple stone and wooden tools (Nabokov and Easton 1989). Bark was widely used as roofing material across the Midwest and Northeast in the late nineteenth century (Nabokov and Easton 1989) and presumably was so used in precontact times.

Thatch is reported in association with superstructure elements from one burned structure at Toqua (Polhemus 1987:283), multiple burned structures at the Rymer and Mouse Creeks sites (Lewis and Kneberg Lewis 1995:503), and Structure 1 at 9DO39 (Poplin 1990:137). Lewis and Kneberg Lewis (1995:503) report finding thatch on the floors of structures at the Rymer and Mouse Creeks sites. Because the thatch in these structures was buried by daub from the roof and not associated with the heavier timbers of roofs and walls, Lewis and Kneberg Lewis speculate that it was part of furnishings such as beds and not roofing material. In contrast, Poplin reports that thatch in the 9DO39 structure overlay the rafters.

Thatched roofs require large quantities of thatch—1 to 4 acres of grass (Kennedy and Sawyer 2005; Wagner 1987). Multiply this by 20 or more structures and it seems unlikely that many towns the size of King would have had sufficient grasslands readily available to allow all PDS to have thatch roofs. Given the ethnohistorical evidence and the feasibility of using bark, it seems likely that many, if not most, PDS at King would have been roofed with cane mats or sheets of bark.

Over the years, a number of archaeologists have argued that Mississippian

structures in at least some parts of the Southeast were constructed as earth-lodges, that is, with earth-covered roofs (Fairbanks 1946; Linton 1924; Rudolph 1984; Sears 1958; Williams 1975). Most recently, Williams and Evans (1993) have proposed that structures at the Middle Lamar period Bullard Landing site on the Ocmulgee River in central Georgia were earth covered. Their proposal is significant because Bullard Landing has never been plowed and as a result, the collapsed superstructures of the approximately 24 houses at the site are still intact. Profiles through the ring-shaped mounds of earth overlying two structures reveal square buildings with single-set post exterior walls and earth embankments placed against their outer surface. Strata overlying the structure floors are thickest in the vicinity of the exterior walls and decrease in thickness toward the center of the structure. Williams and Evans (1993:70) interpret the latter deposits as the remains of earth-covered roofs, the covering being thick at the edge of the structure and tapering toward the central smoke hole. Roofs were covered with earth, they argue, in order to protect structures from fire arrows shot at them by attacking enemy warriors.

It is difficult to evaluate the stratigraphic evidence for this interpretation since Williams and Evans do not specifically identify which strata in the two tested structures represent floor surfaces, fallen roof material, and sterile soil deposited prior to structure rebuilding. Nevertheless, their observation that strata overlying house floors are thickest at the outer edge of the floor area does suggest an alternative explanation. Following abandonment, the vertical face of the 2- to 3-foot-high earth embankments surrounding structure walls would have collapsed and eroded into the house basin. The resulting deposits would have been thickest adjacent to the embankment and tapered toward the center of the basin. Some of the material overlying the central part of the floors, furthermore, probably was derived from the clay daubed on the underside of their roofs.

The earliest European accounts describing native Southeastern houses are, unfortunately, somewhat ambiguous and contradictory and as a result do not solve the question of whether domestic structures were earth covered or not. Beidma's statement (Worth 1993a) that houses were like "caves below the ground" may be referring primarily to the subterranean nature of the structures as well as the earth embankments placed against their exterior walls. Or, as Williams and Evans argue, it could be referring to structures that were completely covered with earth.

Anunciacion's description (Priestley 1928) seems less ambiguous: houses were "all covered with earth, and they sow whatever they like over them." Nevertheless, it is possible that he is referring to the archaeologically docu-

mented practice of daubing the underside of roofs with clay and noting that vegetation was encouraged to grow on the earth embankments and roofs. With a layer of clay partially encasing the rafters and an overlying layer of organic roofing material such as thatch, cane, or bark, it is possible that weedy types of vegetation were able to grow on roofs, especially as they began to decay with age.

As noted above, Elvas and Garcilaso state that structures in the Piedmont and presumably elsewhere in the Appalachian uplands had roofs made with cane or cane mats. It is possible that they are describing alternative ways to construct roofs and that sites like King had some domestic structures with earth covers and others with bark, thatch, or cane mat covers. It is also possible that each observer saw the same kind of construction but emphasized different aspects of it in his description. Elvas's and Garcilaso's informants may have neglected to mention earth embankments and depressed floors. Beidma and Anunciacion may have been struck by the practice of banking earth against exterior walls and the tendency for certain kinds of vegetation to grow on older roofs, and they may have neglected to mention the actual roofing material. My opinion is that the available archaeological evidence and all the ethnohistorical descriptions, including those of Adair and Hawkins, can be accommodated by the combination of depressed floors, earth embankments, plaster on the underside of rafters, and roof covers of thatch, bark, and cane mats.

On the basis of the preceding arguments and evidence presented in earlier sections, I believe that the superstructures of PDS at King had the following architectural characteristics. Exterior walls probably rose 5–6 feet above house floors, which means they extended 3–5 feet above the surrounding ground level. They were usually constructed with a layer of closely spaced cane attached to the outside surface of wall posts or woven between them and, in some cases, may have been daubed. Earth, derived from the excavated basin, was banked against the outer side of exterior walls, probably to a height of 2–3 feet. Roofs had a 45- to 55-degree pitch and were covered with thatch, sheets of bark, or cane mats. A portion of the underside of the roof, that lying between the smoke hole and the interior roof support posts, was coated with several inches of clay. The artist's reconstruction in Figure 5.3 illustrates these features.

PDS Construction Cost Estimation

King site PDS range in size (floor area) between 306 square feet and 1,079 square feet. Possible reasons for this variability are discussed in Chapter 8.

Construction costs, reviewed here, may have been a major factor affecting people's decisions regarding how large a house to build. Construction costs include the cost of procuring building materials and the cost of actually constructing the building. Building materials would have been available locally and would have included wood for wall posts, purlins, interior roof support posts and beams, and rafters; split cane for wall wattle; bark, cane, or thatch for roofing; clay for daubing partition walls and roof interiors; and animal hide and plant fiber for lashing materials. Access to these materials may have been restricted by individual or group ownership, but given their natural abundance in the area and the fact that ethnohistoric and ethnographic sources make no reference to such ownership, this seems unlikely. The cost of acquiring building materials then was probably exclusively one of labor—the labor required to find, harvest, transport, and process them. Construction costs, of course, would also have been exclusively labor costs.

Labor costs for procurement and construction can be estimated accurately only with the aid of detailed ethnographic observations and experimental studies. There are a number of relevant experimental studies (Abrams 1994; Blanton 2005; Callahan 1995; Hammerstedt 2005; Hansen 1959; Reed 2005) but relatively few ethnographic descriptions (Abrams 1994; Knuffel 1973) and no ethnohistorical descriptions of aboriginal Southeastern construction costs. Abrams's (1994) ethnoarchaeological study of peasant house construction in Honduras is probably the most useful for our present needs. Abrams queried native informants about the total time required to procure building materials and construct their houses. On the basis of information from 10 wattle-and-daub structures constructed in the Copan, Honduras, area in recent times, Abrams (1994) and Gonlin (1993) developed a regression formula that projects construction costs from a structure's floor area. To the extent that this formula accurately projects the relative cost of constructing buildings of different sizes with locally available natural materials, it should be applicable to King site PDS.

Table 5.3 presents data used in estimating construction costs for King site PDS along with the estimates of those costs. Only single-stage structures and the first construction stage of multistage structures are included in the table. This is because these are the only structures that would have required excavation of a basin. Later-stage structures make use of some of the basin space excavated for their predecessors. Column 6 contains estimates of the volume of soil excavated for house basins. Basins are assumed to be 1.5 feet deep and to extend 1 foot beyond structure walls. Estimates of the number of hours required to excavate each basin are presented in Column 7 and are derived from

Table 5.3. Estimated construction costs for primary domestic structures

	Exterior Structure Dimension	Exterior Structure Dimension	Basin Dimension	Basin Dimension	Basin Volume	Person-days	Structure Area	Structure Area in Meters	Person-days	Total Person-days
Str. 4	17.5	17.5	19.5	19.5	570.3	6.2	306	28.4	38.2	44.4
Str. 20	18.5	19.7	20.5	21.7	667.3	7.3	364	33.8	48.1	55.4
Str. 18	18.8	19.4	20.8	21.4	667.7	7.3	365	33.9	48.3	55.6
Str. 24	19.6	19.8	21.6	21.8	706.3	7.7	388	36	52.1	59.8
Str. 6.1	20.1	20.7	22.1	22.7	752.5	8.2	416	38.6	56.9	65.1
Str. 28	21	21	23	23	793.5	8.6	441	41	61.3	69.9
Str. 7	20.8	21.3	22.8	23.3	796.9	8.7	443	41.2	61.6	70.3
Str. 19	21.5	21.5	23.5	23.5	828.4	9.1	462	42.9	64.8	73.9
Str. 2.1	21.5	21.6	23.5	23.6	831.9	9.1	464	43.1	65.1	74.2
Str. 8.1	23	23.8	25	25.8	967.5	10.5	547	50.8	79.2	89.7
Str. 9	23.6	24.3	25.6	26.3	1,009.9	11	573	53.2	83.6	94.6
Str. 31	23.9	24	25.9	26	1,010.1	11	574	53.3	83.8	94.8
Str. 10	23.9	24	25.9	26	1,010.1	11	574	53.3	83.8	94.8
Str. 11	24.3	24.4	26.3	26.4	1,041.5	11.3	593	55.1	87.1	98.4
Str. 26.1	25	25.5	27	27.5	1,113.8	12.1	638	59.3	94.8	106.9
Str. 22	24.9	25.8	26.9	27.8	1,121.7	12.3	642	59.6	95.3	107.6
Str. 14	25.6	26.1	27.6	28.1	1,163.3	12.7	668	62.1	99.9	112.6

Str. 21	25.7	26.6	27.7	28.6	1,188.3	12.9	684	63.5	102.5	115.4
Str. 25.1	26.8	27.3	28.8	29.3	1,265.8	13.8	732	68	110.7	124.5
Str. 23.1	27.1	27.4	29.1	29.4	1,283.3	14	743	69	112.6	126.6
Str. 29	29.8	30	31.8	32	1,526.4	16.6	894	83	138.2	154.8
Str. 27	30.1	30.8	32.1	32.8	1,579.3	17.2	927	86.1	143.9	161.1
Str. 15.1	30.7	31.1	32.7	33.1	1,623.6	17.7	955	88.7	148.7	166.4
Str. 1.1	32.6	33.1	34.6	35.1	1,821.7	19.8	1,079	100.2	169.8	189.6
Str. 16	20	20	22	22	726	7.9	400	37.2	54.3	62.2
Str. 17	47.7	47.8	49.7	49.8	3,712.6	40.4	2,280	211.8	374.2	414.6

Note: Measurements in feet, except where noted.

Erasmus's (1965) calculation of the amount of earth that can be excavated with a digging stick (2.6 m^2/5-hour working day).[1] Superstructure construction costs derived from the Abrams/Gonlin formula are listed in Column 10 for a 5-hour working day, and total labor costs are listed in Column 11. Cost estimates range between 44.4 person-days for the smallest structure to 183.6 person-days for the largest PDS. The average-size structure, measuring 612 square feet, would have required approximately 102.1 person-days to build.

These figures must be used with caution. King site PDS tend to be larger than Copaneco houses, although there is considerable overlap in size range. Gonlin (personal communication 1997), furthermore, cautions that the formula is less reliable for structures larger than 700 square feet (65 m^2) because of limitations in the original structure sample. King site PDS probably had bark, thatch, or cane mat roofs, and their structural frameworks were made with different species of wood, which would have differed in availability and processing characteristics. More important, few if any of the King site structures had wattle-and-daub walls and 10 of the 14 structures in Abrams's sample had metal or tile roofs rather than thatch.

Labor costs are also available for the experimental construction of a number of Early Mississippian structures. Errett Callahan (1995, personal communication 1997) reconstructed an Emergent Mississippian structure using aboriginal tools and techniques at the Cahokia site in East St. Louis in 1982. He maintained detailed records of the quantities of material used and the labor costs associated with procurement and construction. The structure had a floor area of 180.65 square feet and was erected in a 3-foot-deep pit having a volume of 727 cubic feet. The floor area of the structure is less than one-third the size of the average King site structure fitted to the Abrams/Gonlin formula, and pit volume is only half as large, yet the total number of hours estimated (924) to construct the building is almost twice as great (185 vs. 102 person-days). A number of factors contributed to the large size of this figure, including the fact that the builders were not following a well-known, tried-and-true construction plan and the fact that most of the laborers were unskilled in the use of aboriginal tools and construction techniques. Nevertheless, the discrepancy between the Callahan and Abrams/Gonlin figures suggests that there are problems with both estimates. Abrams's informant estimates are too low, and Callahan's efforts were too time consuming. The true labor costs are probably somewhere in between.

Artifact Distributions within Primary Domestic Structures

Six PDS, Structures 4, 7, 8.2, 9, 14, and 23.4, had intact or partially intact floor surfaces in 1974. As described in Chapter 4, these floors were excavated with a

combination of piece plotting, systematic flotation sampling, and dry screening. The spatial distribution of the artifactual material recovered in this manner has the potential to provide insight into the use of space inside PDS. With one exception, however, only preliminary analyses of piece-plotted items have been conducted to date. In this section, I will describe the spatial distribution of piece-plotted artifacts of the following types: whole pottery vessels, pottery sherds, flaked stone (chert) debitage, flaked stone (chert) tools, non-flaked stone, animal bone, and freshwater mussel shell.

The nature of house floor deposits is determined as much by site formation processes (Schiffer 1972) as by the kinds of domestic activities that produced them. In the case of the King site PDS, floor deposits would have been affected by the rapidity with which a structure was abandoned, whether or not it was destroyed by fire, the season of the year when abandonment occurred, the kinds of activities that were being carried out at the time of abandonment, the duration of structure occupancy, and the thoroughness with which floors were cleaned (Hally 1981, 1983). At this stage in the analysis we can identify the effect of only three formation processes with certainty. All six structures appear to have been destroyed by fire. The presence of whole pottery vessels and a variety of non-flaked stone tools in Structures 4, 7, and 14 indicate that these structures were abandoned rapidly and with little or no foreknowledge. The other structures may have been abandoned in a similar manner, but the evidence is inconclusive. Central floor sectors were kept clean, possibly by sweeping, but there is no evidence that the outer floor sectors were also cleaned systematically.

Artifact distributions will be described only for Structure 4, which had standing partition walls. Comparisons with artifact distributions in the other structures will be made where appropriate. Structure 4 has very little material in its central floor sector (Figures 5.7–5.9). There is a moderately heavy concentration of flaked stone debitage and tools in the south-central sector and two smaller concentrations in the north-central and northwest corner sectors. Non-flaked stone—mostly in the form of debitage and small fragments of possible tools—is lightly scattered across all outer floor sectors but is most densely concentrated in the south-central sector. Pottery is lightly scattered across all outer floor sectors except the east-central and southeast corner sectors. Its densest concentration seems to be in the south-central sector. There was a Dallas Plain jar in the northeast corner sector and a Lamar Plain bottle in the southeast corner sector. Animal bone is lightly scattered across the south-central, west-central, and northwest corner sectors. It too is most common in the south-central sector. The absence of shell and animal bone from the southern corner sector suggests that the entrance area was not used for normal

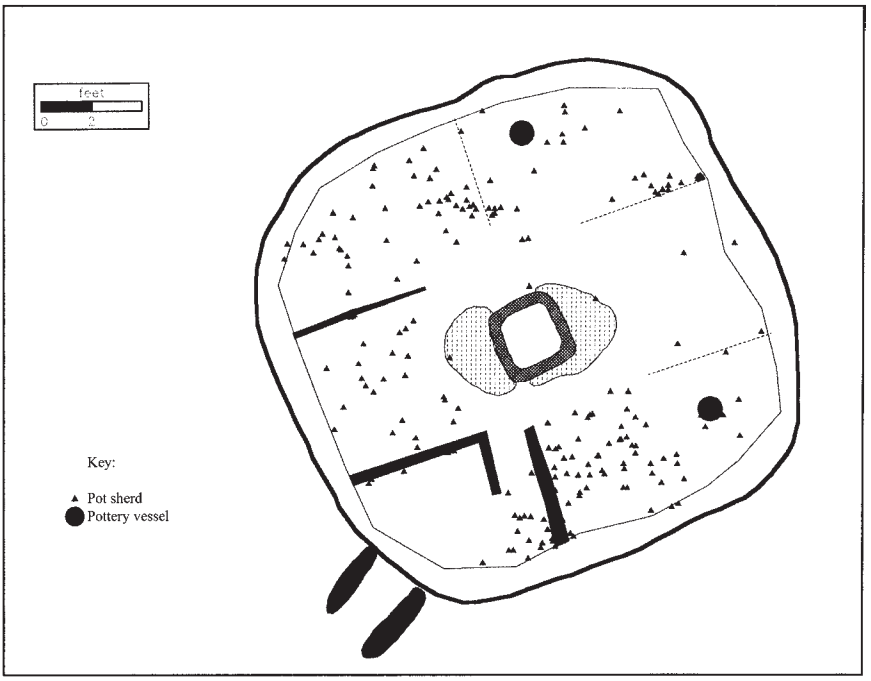


Figure 5.8. Distribution of piece-plotted pottery on the floor of Structure 4.

household activities. The east-central floor sector also appears to have a distinctive activity profile, given the low frequency of pottery, shell, and animal bone.

The partition preserved in the south-central floor sector appears to have restricted the distribution of activities involving flaked stone debitage and tools, shell, animal bone, and possibly pottery. The uneven distribution of flaked stone debitage and tools and pottery sherds indicates that another partition existed in the middle of the northern wall. The pottery distribution also indicates the existence of a partition at the northern end of the eastern wall. In Structure 7, artifact distributions are clearly confined by the standing partitions in the southeast and southwest corners, but they do not support the identification of a second partition along the southern wall near the building's entrance (Appendix A, Figure A.14).

Artifact distributions in Structure 4 indicate that several different activities occurred in the south-central floor sector. These include flintknapping, production or use of non-flaked stone tools, pottery vessel use leading to breakage, and some phase of food preparation. Cooking and some other household

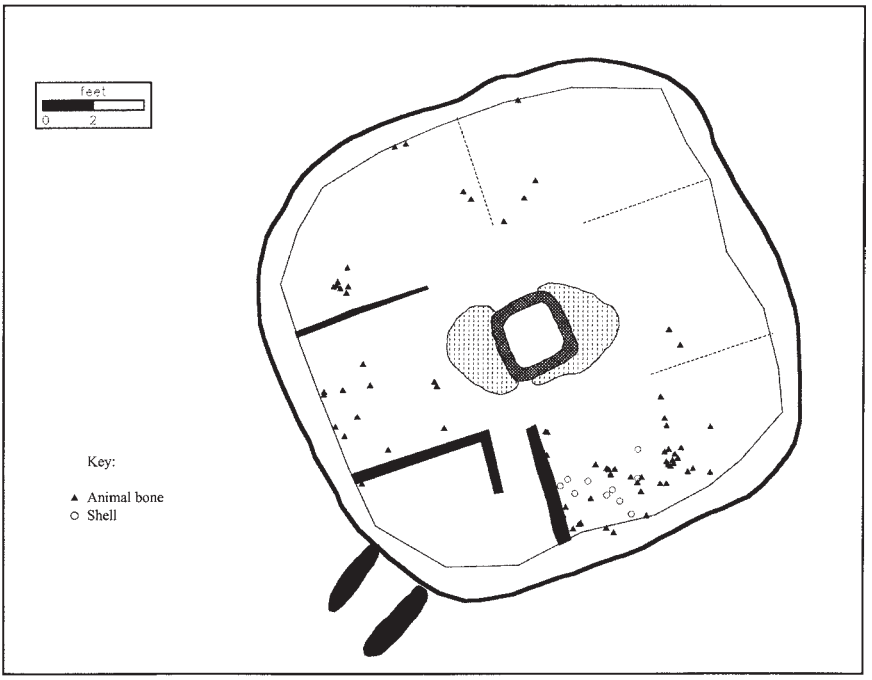


Figure 5.9. Distribution of piece-plotted animal bone and shell on the floor of Structure 4.

activities must have occurred in the central floor sector around the hearth, but any resulting debris appears to have been removed.

All six PDS have a concentration of flintknapping debris located in the south-central, southeast-central, south corner, or southeast corner sectors. In Structures 8.2, 9, 14, and 23.4, these concentrations were visually recognizable at the time of excavation, measured as much as 5 feet across, and contained thousands of flakes. The excavators of Structure 4 did not record a visible debitage concentration, but the density of piece-plotted material in the south-central floor sector indicates that one was there. Structure 7 had very little flaked stone debris on its floor and had no visually distinct concentration, but approximately 60 percent of the debitage recovered by screening is from the south-central floor sector.

The entrance passages for Structures 4 and 7 are located in the southwest corner adjacent to the sector containing the flint concentration. In Structure 8.2, the entrance passage is located in the south-central sector but, again, immediately west of the sector containing the flint concentration. If this is a common configuration, then we can anticipate that the entrances for Structures 9

and 23.4 are located in the southwest corner and the entrance for Structure 14 is located in the south corner sector. The spatial relationship of Structure 9 to its contemporary neighbors also suggests that this structure's entrance was at the southwest corner.

All five of the well-preserved PDS excavated at Little Egypt (Gougeon 2002), Potts Tract (Hally 1970), and Leake (Patton 1990) had large, dense concentrations of flaked stone debitage. In all cases, the feature was located in a mid-wall sector and, with one exception, along the southeast or southern wall. In Structure 1 at Little Egypt, the concentration is on the north side of the building, a difference that may be related to the building's location on a terrace on the southeast side of Mound A. Given the ubiquity of flint concentrations and the uniformity in their location among 11 structures at four different sites, it seems safe to conclude that flintknapping was a common activity inside PDS and that widely shared preferences or prescriptions determined where it took place.

Ruggiero (2000:64–68) has analyzed the flaked stone material recovered by piece plotting and flotation from Structure 8.2. On the basis of a variety of criteria, including average flake size and condition, lipped and low-angle striking platforms, and dorsal flake scar frequency, he concludes that most flint debitage is the result of late-stage biface production using soft-hammer percussion. The occurrence of crushed and cortical platforms on some flakes indicates that early-stage reduction with hard-hammer percussion, possibly involving bipolar cores, was also taking place inside the structure.

Beverly Connor (1985; Connor and Hally 1980) has analyzed the material from flint concentrations in the three structures excavated at the Little Egypt site. She found that the three concentrations contained the same kinds of debitage in approximately the same frequencies and concluded that they were produced by the same lithic production activities. Using criteria slightly different from those of Ruggiero, she proposes that the concentrations contained material representing primarily the later stages of tool production and tool resharpening and rejuvenation. Primary reduction activity (core preparation) was also represented in the three concentrations, but not with great frequency.

We may conclude from these studies that flintknapping inside PDS involved primarily the manufacture of tools from preforms that may have been prepared elsewhere and the resharpening and rejuvenation of worn out or broken tools. Although most such activity took place in the immediate vicinity of flint concentrations, Ruggiero's (2000:113–114) analysis of flotation lots from across the floor of Structure 8.2 indicates that some tool production and main-

tenance also occurred elsewhere in the structure. Light scatters of lithic debitage across the floors of Structures 4, 7, and 23.4 at King and Structures 1–3 at Little Egypt indicate a similar situation in these structures as well (Connor 1985).

Since flaked stone concentrations are such an invariant feature of King and other Barnett phase PDS, it is possible that other types of activity areas, such as food preparation, food storage, and sleeping, also had regularly assigned locations in these structures. Unfortunately, the evidence for spatial patterning in other mapped artifact classes is not very strong. Non-flaked stone, pottery sherds, and animal bone tend to be more widely and evenly distributed than flaked stone debris in all of the structures. In Structures 8 and 9, the heaviest bone concentration is located in the northern or western floor sectors, opposite the flaked stone concentration. Bone, however, is present in the floor sector containing the flaked stone debitage concentration in all structures, and in Structures 4 and 7 it is more heavily concentrated there than anywhere else. Pottery is most heavily concentrated in the northern and eastern sectors of Structures 8.2 and 9, but, again, in Structures 4 and 7 it is most heavily concentrated in the sector containing the greatest amount of flaked stone. Non-flaked stone is invariably very common or most common in the floor sector containing the flaked stone concentration.

Gougeon (2002) has analyzed artifact distributions from Structures 1–3 at Little Egypt. Of the three PDS, Structure 1 had the clearest evidence for discrete artifact distributions. He identifies a male work area involving flintknapping and perhaps other kinds of tool production in the central floor sector on the northeast side of the structure; a food preparation area located on the opposite side of the structure; storage areas in three corner sectors; and sleeping benches in the central floor sectors along the northwestern, southwestern, and southeastern walls. Structure 2 yielded a rather similar picture with flintknapping and the manufacture of other kinds of tools occurring in the southeast-central floor sector; food preparation areas on the opposite side of the structure and in the southwest-central floor sector; storage in two corner sectors; and sleeping benches along the three walls opposite the flintknapping area. The spatial data from Structure 3 are not as reliable as those from the other two structures. Nevertheless, there is some evidence for a flintknapping area in the southeast corner; a food preparation area on the opposite side of the structure in the west-central sector; and sleeping benches in the north-central, west-central, and south-central floor sectors.

Structures 2 and 3 at Loy (Polhemus 1998:290–302) present a somewhat

more complex spatial distribution of human activities. Corner sectors are considered to be used primarily for storage, while the central floor sectors along walls opposite and to each side of the entrance area are for sleeping. Food preparation occurs in the left-rear portion of the central floor space, while flintknapping occurs in the rear portion of the central floor space and the sleeping compartment behind it. Heavy tool manufacturing and food preparation activities occur in the right-front portion of the central floor space near the entrance.

The distribution of piece-plotted artifacts in the six King site structures does not resemble very closely the space-usage patterns reported by either Gougeon or Polhemus. This is not to say that similar patterns do not exist in King PDS. Rather, many of these patterns may just be too subtle to detect solely on the basis of piece-plotted artifacts and without analysis of individual artifact type distributions.

Rectangular Structures (RS)

Compared with primary domestic structures, relatively little is known about the architectural form and function of rectangular structures. They probably served primarily as storage facilities for corn and other plant foods and were probably raised above the ground surface on posts to prevent rats and other vermin from gaining access to their contents. They may have been elevated sufficiently to provide shaded work space for household members. The question of RS function will be considered in greater depth at the end of this section.

Figure 5.10 illustrates a typical RS; all known examples of the structure type are illustrated in Appendix B. Rectangular structures are more difficult to identify in the archaeological record than PDS. Because they were constructed on the aboriginal ground surface, their floor surfaces and associated features such as hearths and wall posts are vulnerable to destruction by erosion and plowing. RS construction, furthermore, required fewer posts, with the result that posthole alignments are more difficult to differentiate among the large number of miscellaneous postholes that occur throughout the habitation zone.

Comparison of clearly delineated rectangular structures from a number of sites—Town Creek in North Carolina (Boudreaux 2005:Figure 3.76; Coe 1995); Sugar Creek, Sweetgum, and Carroll Village on the Oconee River in central Georgia (Hatch 1995, personal communication 1998); and King—reveals a number of architectural features that are characteristic of the structure type. These include the following:

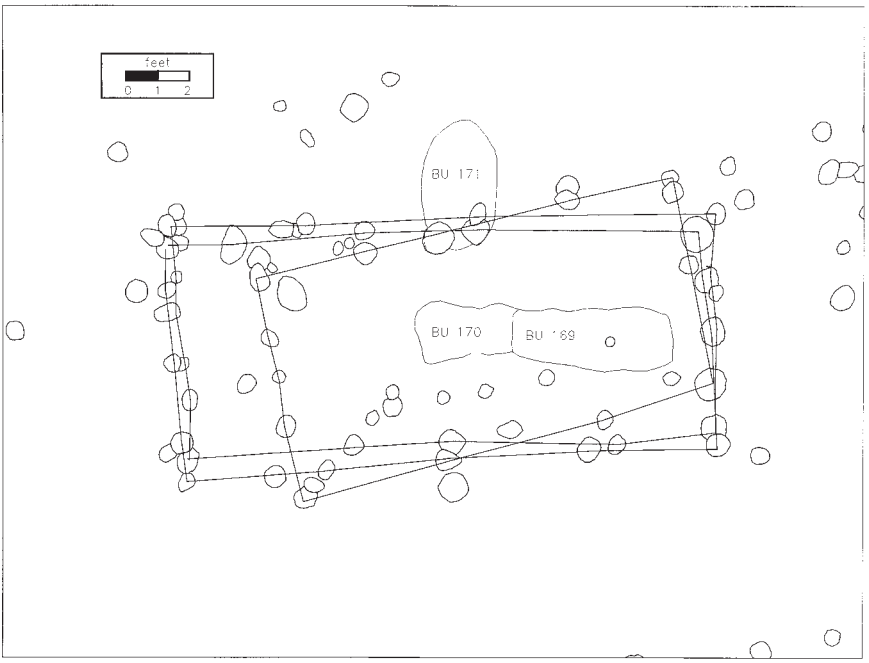


Figure 5.10. Architectural configuration of RS 1.

1. Rectangular floor plan, with length exceeding width by a margin of approximately two to one.
2. Relative uniformity in length and width.
3. Corners marked by relatively large postholes.
4. Postholes making up end walls generally spaced less than 2.0 feet apart.
5. Side walls marked by more widely spaced postholes, typically 2–3 in number.
6. Occurrence of burials with matching compass orientations inside or adjacent to RS.
7. Tendency to be rebuilt in the same location.

The single most diagnostic feature of RS is the presence of closely spaced postholes forming the end walls. These alignments are especially obvious in those cases in which structures have been rebuilt one or more times with little lateral displacement. In such cases, overlapping end walls may be marked by a half dozen or more postholes that are spaced a foot or less apart. Almost all rectangular structures distinguished at King were initially identified using this characteristic. As analysis proceeded, the tendency for RS to have compass ori-

entations that correspond to those of nearby PDS emerged as another important distinguishing characteristic.

Fifteen rectangular structures and at least 21 construction stages have been identified within the excavated habitation area at King (Figure 5.11). Unfortunately many of these structures possess only a few of the characteristics listed above and in some cases may be incorrectly identified as RS. I feel confident that RS 1–RS 6 are rectangular structures; I am less certain that RS 7–RS 15 are.

All rectangular structures and construction stages, along with the evidence used to identify and reconstruct them, are individually described in Appendix B. Most of the architectural information about these structures that is useful for comparative analysis is summarized in Table 5.4. Several architectural characteristics presented in the table require explanation.

Orientation—Structure orientation is measured from the most well-preserved wall post alignment and is converted into degrees east of north.

Number of postholes in side walls—The number of postholes (not counting corner posts) in each wall paralleling the long axis of the structure.

Number of postholes in end walls—The number of postholes (not counting corner posts) in each wall paralleling the short axis of the structure.

Average posthole spacing in side walls—Determined by dividing the length of both side walls by the number of spaces between postholes that make up those walls. In the few cases where there is a large gap between posts in a wall, the length of the gap is subtracted from the total length of side walls.

Average posthole spacing in end walls—Determined for end walls in the same manner as for side walls except that no provision is made for large gaps between recorded postholes.

Average corner post size—The average diameter of corner posts for each RS construction stage.

Interior burials—The number of burials that are located within the walls of an RS and that are considered to have been interred while the structure was in use.

Exterior burials—The number of burials that are located beneath a structure wall or immediately outside an RS.

Adjacent PDS—Lists the PDS that are located close to an RS, have approximately the same compass orientation as the RS, and probably faced toward the RS.

PDS orientation—The compass orientation of the adjacent PDS.

Distance to PDS—The distance between adjacent PDS and RS.

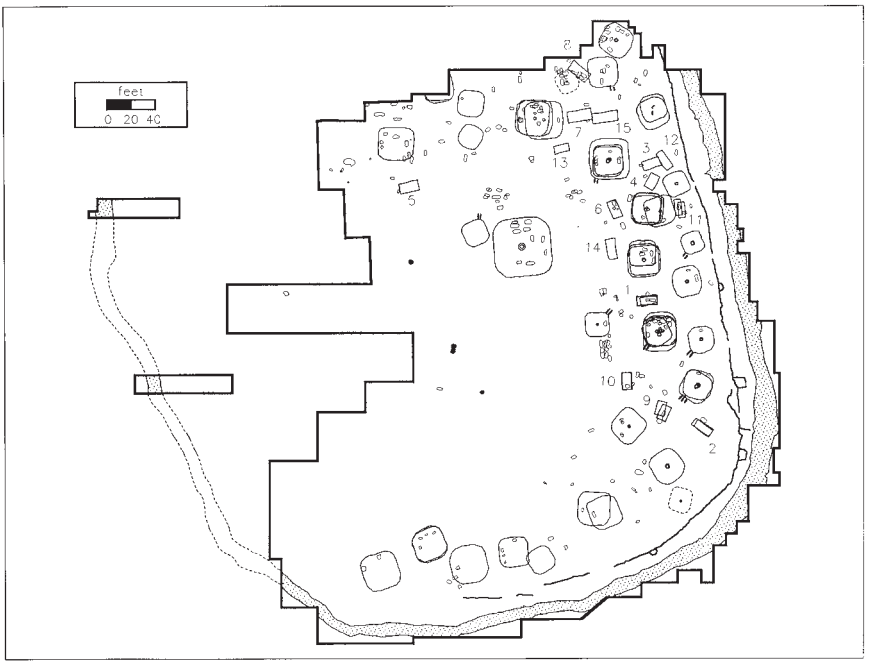


Figure 5.11. Location of rectangular structures.

General Characteristics of King Site Rectangular Structures

The 21 RS construction stages that have been identified in the King site habitation zone exhibit a fair degree of architectural uniformity. Structure length ranges between 11.4 and 21.5 feet, but 17 of the RS have lengths ranging between 12.3 and 17.3 feet. Average length is 15.2 feet. Width ranges between 5.3 and 9.0 feet, but 16 of the RS have widths ranging between 7.1 and 9.0 feet. The average width is 7.4 feet. Length/width ratios range between .37 and .67 and average .49. Floor space ranges between 65 and 179 square feet, but 14 of the RS have floor spaces ranging between 90 and 140 square feet. The average is 112 square feet. On average, rectangular structures have about one-fifth the floor area of primary domestic structures.

Not counting corner posts, the side walls of RS tend to have 2–3 posts, while end walls tend to have 2–4 posts. Deviations from these numbers probably reflect the loss of postholes as a result of erosion or intrusive burials in most cases, although errors in field identification cannot be ruled out. Spacing between wall posts tends to be fairly uniform within a structure, but there

Table 5.4. Architectural characteristics of rectangular structures

	RS 1.1	RS 1.2	RS 1.3	RS 2.1	RS 2.2	RS 3	RS 4	RS 5	RS 6	RS 7
Compass orientation	86	86	77	34	38	72	28	78	67	81
Length	17.2	17.3	13.6	15.4	17.1	14.9	12.5	16.1	12.3	19.9
Width	7.1	7.1	6.9	6.8	6.3	7.4	8	8.6	7.3	9
Length/width ratio	0.41	0.41	0.51	0.44	0.37	0.5	0.64	0.53	0.59	0.45
Floor area	122	123	94	105	108	110	100	138	90	179
Number of postholes—side walls	3, 3	2, 3	2, 2–3	2, 2	2, 2	2, 2	2, 3	3, 1	2, 2–3	1, 0
Number of postholes—end walls	3, 3	3, 3–4	2, 3	4, 4	2, 3	2–3, 3–4	2–3, 4	2, 1	3, 0	3, 3
Average posthole spacing—side walls	3.3	3.9	3.9	4.4	5.7	5	3.1	—	4.1	—
Average posthole spacing—end walls	1.8	1.8	1.7	1.4	1.8	1.9	1.6	—	1.8	2.3
Average size of corner posts	0.8	0.8	0.8	1.2	1	0.8	0.9	0.7	0.7	0.6
Inside burials	0–2	0–2	0	0	0	0	0	0	3	0
Outside burials	0–1	0–1	0–1	0–2	0–2	1	1	1	0	3
Adjacent PDS	2.1–2.3, 24	2.1–2.3, 24	9	8.2	8.2	6.1	—	30	5.1	11
PDS orientation	85–89, 84	85–89, 84	77	32	32	72	—	0?	77	85
Distance to PDS	16–24, 25	16–24, 25	16	12	12	23	—	18	19	17

	RS 8	RS 9.1	RS 9.2	RS 10.1	RS 10.2	RS 11.1	RS 11.2	RS 12	RS 13	RS 14	RS 15
Compass orientation	39	13	25	0	0	82	85	56	76	81	82
Length	18.3	11.4	12.7	13.5	14.2	12.9	12.3	15.8	12.7	17.1	21.5
Width	8.9	7.6	8	7.9	8.1	5.3	5.3	6.0–6.3	6.3	8.1	8.3
Length/width ratio	0.49	0.67	0.63	0.58	0.57	0.41	0.43	0.39	0.5	0.47	0.38
Floor area	163	87	102	107	115	68	65	96	80	139	178
Number of postholes—side walls	2, 2+	2, 2–3	2, 2–3	1, 2	1, 2	1, 2–3	3, 0	2, 2–4	1, 2	3, 3	2, 1
Number of postholes—end walls	3, 4	3, 3	2, 0	2–3, 3–4	1+, 2+	3, 0	2, 3	2, 2	3, 1	1, 2	1–2, 2
Average posthole spacing—side walls	—	3.8	4.2	4.5	4.5	—	3.1	—	—	4.3	7.2
Average posthole spacing—end walls	—	1.9	2.7	—	—	1.3	1.5	2.1	1.6	2.7	2.1
Average size of corner posts	0.7	0.9	0.8	0.7	0.7	0.6	0.4	0.9	0.5	0.8	0.7
Inside burials	4	0	1	0–1	0–1	2	0	0	0	0	0
Outside burials	1	0–4	0–4	0–1	0–1	0–1	0–1	0	0	0	1
Adjacent PDS	14	8.1	8.2	23.1–23.3	23.1–23.3	5.2–5.4	5.2–5.4	6.2	—	5.2–5.4	15.1, 11
PDS orientation	31	12	32	86–88	86–88	2–6	2–6	67	—	2–6	87, 85
Distance to PDS	23	13	13	23	23	10–13	10–13	19	—	22	24, 20

Note: Compass orientation listed as degrees east of north; measurements in feet. Dashes indicate no data available.

are cases where this is not so. RS 1.1, 1.2, 4, and 9.2, which appear to have well-preserved posthole patterns, each has a gap of 6–8 feet in one side wall. Whether this is an architectural feature characteristic of some RS or a problem in the data is not known.

Average posthole spacing in side walls ranges between 3.1 and 7.2 feet and averages 4.3 feet. Without Structure 15, the range is reduced to 3.1–5.7 feet. Average posthole spacing in end walls shows approximately the same relative range of variation: 1.3–2.7 feet. Average spacing for end walls is 1.88 feet.

Burials may have been interred beneath the floor of six or seven RS. Only in the case of RS 1 and RS 2, however, is it likely that burials and RS are contemporary. Burials are located beneath the wall or immediately outside 11 RS representing 17 construction stages.

Most rectangular structures have spatial relationships with one or more PDS that suggest they are contemporary and part of the same household architectural complex (Table 5.4). In such cases, RS and PDS are separated by between 10 and 25 feet and have relatively similar compass orientations, and the rectangular structure appears to be located in front of the PDS. This kind of spatial relationship cannot be demonstrated for RS 4 and RS 13. Sixteen PDS, furthermore, have no RS located nearby. All of the latter except Structures 1, 4, 7, and 13 are located in the northwestern and southwestern portions of the site where evidence of RS has been destroyed by erosion. The spatial relationships that RS 4 and RS 13 and Structures 1, 4, 7, and 13 have with other structures are considered in greater detail in Chapter 8 in the context of multistructure households.

Comparison with Rectangular Structures at Other Sites

A number of Mississippian sites in Georgia, North Carolina, and Tennessee have yielded archaeological evidence for rectangular structures that are similar to King site RS. Many of these structures are clearly delineated and as a result have been useful in defining the structure type.

Boudreaux (2005; Coe 1995) describes four rectangular structures at the thirteenth-century Town Creek site in North Carolina. Three of these closely resemble King site RS in shape, size, and construction. Their average dimensions are 12.6 × 7.9 feet. End walls are constructed with several closely spaced posts while side walls have fewer and more widely spaced posts. Each appears to have been rebuilt one or more times.

Rodning (2004:182) identifies one structure at the seventeenth-century Coweeta Creek site in North Carolina as a ramada. Structure 16 has all the architectural characteristics of a King site RS. It measures 15 × 8 feet, contains a

burial with what appears to be approximately the same compass orientation, has multiple closely spaced posts in its end walls, and appears to have been rebuilt at least one time. There are posthole alignments elsewhere in the excavated site area that may represent additional examples of the structure type (Rodning 2002:Figure 5.1).

Hatch (1995, personal communication 1997) has excavated a number of rectangular structures at several Middle and Late Lamar period upland farmsteads in the Oconee River basin of central Georgia. Similarities among these sites—Sweetgum, Carroll Village, Sugar Creek, and Lindsey—suggest that farmsteads typically consisted of a single large circular structure (26–34 feet in diameter) and one or more rectangular structures. The former is the local architectural equivalent of the King site PDS. At Sugar Creek, two circular structures were erected at different times. Each was accompanied by three rectangular structures that were arranged around three sides of a small square courtyard, with the circular structure located on the fourth side. Several of the former are clearly delineated and range in length between 11.8 feet and 15.3 feet and in width between 7.9 feet and 9.8 feet. Side and end walls generally consist of 3–4 postholes. Burials were located within or adjacent to three structures and appear to parallel the structures in compass orientation. Several of these characteristics—structure size and proportion, inside burials, and multiple construction stages—are also found at Carroll Village, Sweetgum, and Lindsey.

Gerald Ledbetter (personal communication 2001) has excavated a number of rectangular structures at three other upland Lamar period sites—9GE901, 9GE103, and 9GE1760—in the Oconee River basin. The 11 structures he describes are somewhat shorter and wider than those reported by Hatch, and they appear to be constructed slightly differently. Almost without exception, these structures have large corner posts, a single post in the middle of one end wall, two equally spaced posts in the other end wall, and a large post in the middle of each side wall. In most cases, there are two additional smaller posts in each side wall.

The only obvious difference between the Oconee River basin structures and King site RS is that the former tend to occur with greater frequency relative to the number of circular structures. For the most part, it is difficult to identify more than one rectangular structure per PDS or household at King. Whether the multiple rectangular structures at sites in the Oconee River basin had similar or different functions cannot be determined from the available posthole data. In either case, the interesting question is why there are so few RS relative to PDS at King.

Polhemus (1987:241, 1998) distinguishes small shedlike structures at the Toqua and Loy sites in Tennessee that appear to be equivalent to the King site RS. Designated as structure Type 5a at Toqua, they are rectangular, range in length between 9 and 20 feet and in width between 7 and 14 feet, have relatively large-diameter postholes, and enclose burials and patches of fired floor surface. Unfortunately, Polhemus generally does not delineate the actual posthole alignments that form structure walls, and as a result it is not possible to identify patterns in posthole number and spacing. Structure 38 (Polhemus 1987:Figure 5.41) is the clearest example of the type. It measures 11.6 feet × 9.3 feet and has corner posts and two regularly spaced postholes in end and side walls. Surface fired areas and burials are also present. To the extent that Structure 38 is representative of Type 5a structures, the type differs from King site RS in being squarer, not having end walls with closely spaced posts, and having surface fired areas.

Sullivan (1987) identifies two types of domestic structures at Mouse Creek phase sites in Tennessee: "winter" houses, which resemble King site PDS, and "summer" houses. The latter, according to Sullivan, are located immediately in front of the winter houses, are square in outline, are approximately the same size as the winter structures, and are bounded on three sides by burial clusters and on the fourth side by the winter structure (Sullivan 1987:Figure 7). An inspection of the published Mouse Creek site maps (Sullivan 1987:Figures 2–5) leads me to believe that Sullivan is correct regarding the existence of posthole concentrations and burial clusters in front of winter houses. I am not convinced, however, that she has correctly reconstructed the architectural configuration of the summer structures. There are no obvious posthole alignments for the exterior walls of these structures, and Sullivan does not outline any.

There are, however, several posthole alignments suggestive of small rectangular structures visible on the Rymer and Mouse Creeks site maps. They tend to have compass orientations similar to nearby winter houses, and some do enclose burials. Unfortunately, the question of what Mouse Creek phase summer houses look like will probably be resolved only when all architectural features from the Mouse Creek phase sites have been digitized and analyzed using geographic information systems (GIS), a technology that was not available at the time Sullivan did her work.

It is clear from this review that small rectangular structures were a common type of structure across much of the Southern Appalachian region in late prehistoric times. Evidence in the form of posthole patterns and spatially associated features, furthermore, demonstrates that there was considerable architectural uniformity in the structure type. Typically, such structures were found in

spatial proximity to larger, more substantially constructed buildings that can be identified as the primary residential structures in households.

The Role of PDS and RS in Domestic Life at King

The available ethnohistorical descriptions of domestic structures in the Southern Appalachian region date primarily to the mid-sixteenth century and late eighteenth century. In both periods, observers distinguished three structure types: winter houses, summer houses, and granaries or corn cribs. Winter houses are generally described in the greatest detail, probably because they were the most substantial and in some respects the most unusual structures from a European's perspective.

Elvas (Robertson 1993:75) and Anunciacion (Priestley 1928:239) both refer to the existence of "summer" houses in the mid-sixteenth century but provide no details of their appearance or construction. Early descriptions of winter houses by Beidma (Worth 1993a:228), Elvas (Robertson 1993:75), Fray Anunciacion (Priestley 1928:239), and Martinez (Hudson 1990:320) characterize these structures as being subterranean, of wattle-and-daub construction, and earth covered. The type of structure these observers are referring to is almost certainly that which I have been calling the primary domestic structure—a square building with subterranean floor, earth-embanked walls, and steeply pitched roof of thatch, cane, or bark that is plastered on its underside with clay.

Following the mid-sixteenth-century Spanish explorations, there are no European accounts of aboriginal domestic architecture in the Southern Appalachian region until the latter part of the eighteenth century. The earliest descriptions of Creek structures are those of Bartram (Waselkov and Braund 1995) and Wight (Calder 1967) dating to the 1770s. At this time, summer and winter houses were being constructed, but both were rectangular in form. Wight gives dimensions of 27 × 15 feet for these structures, and Bartram describes them as being frequently arranged around a square courtyard. Exterior walls were made with single-set posts and wattle and daub, but it is not clear whether this construction technique was characteristic of both types of structures or only the winter house. There is no indication that any structures had subterranean floors or earth-embanked walls. Almost 20 years later, Swan (1855) describes similar structures, but with the addition of an exterior chimney.

The earliest European descriptions of Cherokee domestic structures date to the 1757–1762 period. DeBrahm (DeVorsey 1971:110) and Timberlake (Wil-

liams 1927:84) describe Cherokee summer houses as being rectangular and of single-set post construction with wattle-and-daub walls. These measured 12–16 feet wide and 20–70 feet long. Roofs were gabled, and some buildings had two stories.

Winter or "hot" houses, according to DeBrahm, were circular in plan, around 30 feet in diameter, and had a conical roof 15 feet tall and a central hearth. Of interest is his statement that "these houses they resort to with their children in the winter nights," which suggests that the winter house was not a regular domestic structure but rather functioned only as a place to sleep in cold weather.

In 1775, Bartram observed rectangular Cherokee houses with exterior walls made with logs laid horizontally one above the other and covered with a clay plaster (Waselkov and Braund 1995). Schneider (Williams 1928) observed similar structures in 1784 but with the addition of an external chimney. Both individuals mention that families also had a smaller winter or "hot" house, circular in plan and covered with earth, that was located adjacent to the rectangular structure. They do not say what these structures were used for, but by referring to the rectangular buildings as "dwelling houses" and "habitations" they imply that the "hot" house had a different or more restricted use.

Accounts by Louis-Philippe (Schroedl 1978) in 1797, Steiner and De Schweinitz (Williams 1928) in 1799, and Joseph Williams (Williams 1925–1926) in 1825 continue to describe rectangular structures of horizontal-log construction. Williams's statement that the houses were constructed "so they would be warm and comfortable in the winter" (Williams 1925–1926:111) implies that the rectangular structure served as the primary domestic building throughout the year.

Finally, writing in 1825, Evans (1979:12–13) describes the hot house as small, low, and earth-covered, and he complains of the heat and smoke that accumulated in them during use. In addition to contrasting them to "dwellings," Evans implies that they were used primarily in the winter to escape the cold.

I believe these accounts demonstrate that both the Creek and the Cherokee had, for the most part, stopped building square, semisubterranean, earth-embanked houses by the middle of the eighteenth century. Instead, both people were using rectangular, ground-level structures as their main dwelling. The Creeks constructed one for winter residence and another for summer residence. The Cherokee used one building for year-round residence but also had a small earth-covered, subterranean "hot" house for sleeping on cold nights. Unfortunately, what is missing in these historic accounts is any indication of what summer houses looked like and how they were constructed at the time of earliest European contact in the sixteenth century.

Descriptions of the third common domestic structure, granaries, are few in number and, in the eighteenth century, pertain to several different tribes: Choctaw, Chickasaw, Upper Creek, Cherokee, and Santee.

> They have barbacoas in which they keep their maize. This is a house raised up on four posts, timbered like a loft and the floor of cane [Elvas in Robertson 1993:75].

> [B]ut their corn is in a building by itself raised at least eight feet from the ground [Mease in Swanton 1946:401].

> Their habitations at home consist of three buildings, a summer house, a corn house, and a winter house, called a hot house; the two first are oblong squares [Romans 1999:127].

> The habitations of the Muscogulges or Upper Crick Towns consist of Little Squares or four oblong square houses, encompassing a square area . . . Wealthy citizens, having large Families, generally have Four Houses; and they have a particular use for each of these buildings. . . . [the] Granary, or Provision House . . . is commonly two Stories high and divided into two apartments transversely—the lower story of one end being a potato house & for keeping such other roots & fruits as require to be kept close or defended from cold in Winter—The chamber over it is the Corn Crib [Bartram in Waselkov and Braund 1995:180].

> [T]heir Corn Houses are built in the same manner, but raised upon four Posts, four and some five feet high from the Ground; its Floor is made of round Poles, on which the Corn-worms cannot lodge, but fall through, and thus the Indians preserve their Corn from being destroyed by the Weevils a whole year [DeBrahm in DeVorsey 1971:110].

> These Santee Indians . . . make themselves cribs after a very curious manner, wherein they secure their corn from vermin . . . These pretty fabrics are commonly supported with eight feet or posts about seven feet high from the ground, well daubed within and without upon laths, with loam or clay, which makes them tight and fit to keep out the smallest insect, there being a small door at the gable end which is made of the same composition, and to be removed at pleasure, being no bigger than that a slender man may creep in at, cementing the door up with the same earth when they take corn out of the crib [Lawson in Swanton 1946:379].

Although these accounts span 200 years and an area extending from Mississippi to the Carolinas, the buildings they describe share a number of important characteristics. They are separate buildings distinct from the winter and summer house, and they are elevated above the ground. In two cases, they are described as being rectangular in floor plan. Support posts number either four or eight. Unlike summer and winter dwellings, corn cribs appear to have changed little during the historic period and to vary little from tribe to tribe.

Having reviewed the available ethnohistorical sources describing domestic structures in the Southern Appalachian region, we must now attempt to identify how the different structure types at King were used. The first point to note is that there is no evidence at King for structures other than the PDS and RS. I have systematically searched the habitation zone, looking for posthole configurations that are distinct from those of the PDS and RS and that occur with some frequency. I first searched for postholes larger than .9 feet, then postholes larger than .8 feet, and finally postholes larger than .7 feet. Other than the corner posts of RS and the interior roof support posts of PDS, which are consistently .7 in diameter or larger, I found no distinctive patterning for these larger posts. The great majority of postholes in the habitation zone are .5–.6 feet in diameter. No patterns other than the exterior wall alignments of primary domestic structures are evident in this size range.

In light of the consistent ethnohistorical references to three distinct domestic structures—winter house, summer house, and corn crib—the absence of a third recognizable structure type at King presents an obvious problem. Primary domestic structures, with their sunken floors and earth embankments, are clearly the winter houses referred to in the early records. But were the rectangular structures summer houses, corn cribs, or a combination of the two?

One possibility is that the posthole patterns identified as rectangular structures represent both summer houses and corn cribs. This interpretation gains some support from the fact that King site RS are somewhat variable in size and proportions. It suffers, however, from the fact that there are fewer RS than PDS. In the least eroded eastern portion of the site where RS are preserved, there are 19 primary domestic structures and only 15 RS. If the latter represent both summer houses and corn cribs, we should expect to find perhaps twice as many of them. Of course, it is possible that multiple-family households, with members residing in two or more PDS, shared a single communal granary and a single summer house. This explanation, however, does not account for the fact that two of six multistructure, multiple-family households identified in Chapter 8 have only one RS that can be assigned to them with any certainty. The relatively small number of RS, of course, may be due to the fact

that they are more difficult to recognize in the archaeological record and are more readily impacted by erosion and plowing.

The lack of evidence for a third type of structure and the relatively small number of recorded RS force us to consider the possibility that rectangular structures served as both summer house and corn crib. Polhemus (1987:241, 1243) has proposed that corn cribs at Toqua were raised high above the ground and the space beneath them was used for domestic activities during the summer. Such an arrangement would be possible if the corn crib was elevated 5 feet or more above the ground as reported by Mease, DeBrahm, and Lawson. Bartram (Waselkov and Braund 1995:180) may be referring to this kind of arrangement when he describes Upper and Lower Creek corn cribs as occupying the second floor of a two-story building.

Corn cribs, especially when filled with freshly harvested maize, must have been fairly heavy buildings. The posts that supported them above the ground, especially if they were few in number, would have had to be fairly substantial. The average diameter of postholes forming the corners of rectangular structures at King is .75 feet. This is comparable to the interior roof support posts—also averaging .75 feet in diameter—in primary domestic structures and significantly larger than the postholes forming the exterior walls of PDS. Polhemus (personal communication 2001) notes that the structures he identifies as summer houses/corn cribs at Toqua were also constructed with large posts.

While we do not know what summer houses looked like in the sixteenth century, presumably they were not as substantial in construction as primary domestic structures. They may have consisted of little more than a roof supported on four posts that offered protection from summer rain and heat. The large size of RS corner posts seems more appropriate for supporting a corn crib than a lightly constructed summer house.

The major problem with identifying RS as combination corn cribs/summer houses is that it is difficult to reconcile with the sixteenth- and eighteenth-century references to separate summer houses and corn cribs in the Southern Appalachian region. A way out of this dilemma, however, exists. Archaeological evidence (Hally 1994; Rudolph 1994) indicates that the aboriginal settlement pattern throughout much of the Southern Appalachian region during the Mississippian period was a dispersed one, characterized by scattered farmsteads and hamlets. Habitation space in these settlements would have been essentially unlimited, allowing households to build and use a variety of functionally distinct domestic structures. The Spanish chroniclers would have seen this kind of household arrangement first when they entered the Piedmont

from the Gulf and Atlantic Coastal Plains. In contrast, the compact, often fortified towns of the Valley and Ridge Province would have had limited habitation space. At sites like King and Toqua, space limitations may have necessitated that summer residences and corn cribs be combined in a single building. Given the limited reference made to domestic structures in the Spanish chronicles, failure to mention regional variation in building types is not unexpected. By the late eighteenth century, all communities in the Southern Appalachian region were utilizing a more dispersed kind of settlement pattern, and separate summer houses and corn cribs may have been ubiquitous.

Although I am not completely satisfied with the interpretation of King site RS as combination summer houses/corn cribs, it does have stronger support in the available evidence than do the alternatives. Throughout the remainder of this study, RS will be considered to be multistory summer houses and corn cribs.

Note

1. Hammerstedt (2005) has also conducted an earth excavation experiment. His labor estimate of 2 m^3/7-hour work day is lower than Erasmus's, but he used college student labor, dug with a hafted stone hoe blade, and worked in more compact soil than did Erasmus. I have used Erasmus's estimate because I think it better matches conditions at King. King site house basins were excavated into relatively lightly compacted sandy loam alluvium; aboriginal laborers were probably better conditioned for the specific type of work involved; and there is no archaeological evidence for the use of stone hoes in northern Georgia.

6
Public Architecture

The architectural features described and analyzed in Chapter 5—primary domestic structures (PDS) and rectangular structures (RS)—functioned primarily in the domestic realm and were probably constructed and maintained largely by people acting as individuals or as members of households. The architectural features described and analyzed in the present chapter—the plaza, Structures 16 and 17, large post pits, the palisade, and the defensive ditch—functioned primarily in the community's social and political realm. They were probably conceived and planned by community leaders, constructed and maintained by communal work parties, used by large segments of the community population, and in the long run served to benefit the entire community.

One of the most striking aspects of the King site settlement plan is the contrast between the habitation zone, with its dense concentration of burials, postholes, and structures, and the plaza, the large area in the center of the site where postholes and burials are uncommon and a number of unusual features occur (Figure 6.1). Drawing on ethnohistorical and archaeological evidence from the Southeast, we can infer that this latter area is where many community activities of a social, political, and religious nature took place. Architectural features located within this area include Structure 16, a small building resembling a PDS; Structure 17, a large building that probably served as a council house; a possible open pavilion attached to Structures 16 and 17; and three pits or large postholes (Features 11, 45, and 64). A cluster of 11 burials (Burials 30–40) located north of Structures 16 and 17 and within the possible pavilion and 10 burials (Burials 100–109) located within Structure 17 probably also

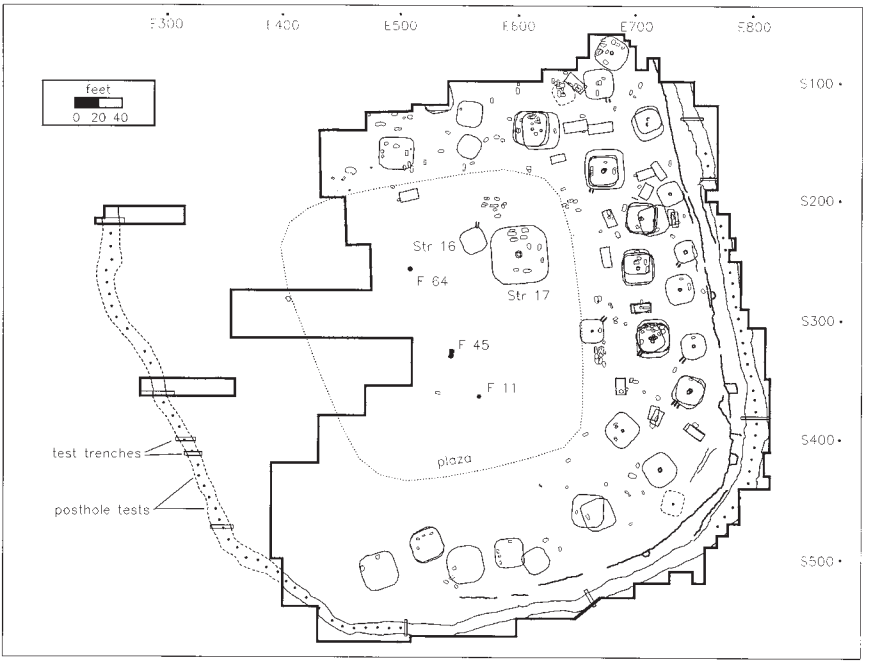


Figure 6.1. Site plan showing plaza structures and features and defensive perimeter.

have significance at the community level. One isolated burial (Burial 194), located 30 feet southwest of Feature 45, rounds out the inventory of plaza-area features.

A second striking aspect of the King site settlement plan is the defensive perimeter, consisting of a palisade and a ditch. Considerable effort and resources went into constructing the former, although it is not unusual for a community the size of King to have such a facility. The ditch, on the other hand, is unusual because of its size. Not many Mississippian towns and administrative centers have defensive ditches, and virtually no non-mound towns have ditches as large as that at King.

Plaza

Plazas are a common feature of large Mississippian sites. They are most commonly reported for sites with mounds, the plaza being defined as the level area bounded on two or more sides by mounds or lying in front of a single mound (Kidder 2004). Plaza identification is more difficult for sites lacking mounds.

In such cases, the presence of a plaza and its configuration can only be determined by extensive excavation or the systematic collection of artifacts from plowed surfaces or shovel tests. Only a handful of large non-mound Mississippian settlements have been excavated sufficiently and reported in enough detail to reveal the presence of plazas: Ledford Island (Sullivan 1986, 1987), Coweeta Creek (Rodning 2002, 2004),[1] Rucker's Bottom (Anderson and Schuldenrein 1985), Marshall (Hatch et al. 1997), Morris (Rolingson and Schwartz 1966), Incinerator (Heilman and Hoefer 1981), Southwind (Munson 1994), Snodgrass (O'Brien and Perttula 2001), and Moon (Benn 1998).

Among these nine sites, plazas are usually characterized by an absence of domestic structures and fewer postholes than in adjacent habitation areas. When artifact distributions are reported (Marshall, Ledford Island, Incinerator, and Moon), density drops off considerably in the plaza, as is also the case for burials in sites that have them (Ledford Island, Coweeta Creek, Morris, and Incinerator). Plazas are usually centrally located within the site boundaries, although this is not the case at Moon or Snodgrass. At least three sites (Ledford Island, Incinerator, and Southwind) have one or more large post pits located in the plaza. A large public structure faces onto the plaza at Ledford Island and Coweeta Creek and possibly at Morris as well. Ledford Island also appears to have burial clusters flanking the plaza on two sides.

The plaza at King has most of these characteristics: it is centrally located within the town, it has no domestic structures, it has relatively few burials, and it contains a large post pit (Figure 6.1). There are no reliable data on variation in artifact density because of the destruction and redistribution of occupation deposits by erosion. Two public buildings are located on the northern side of the plaza, but unlike at Ledford Island and Coweeta Creek, they appear to be located within the plaza rather than on its margin. Posthole density in the plaza is relatively low compared with that in the habitation zone on the eastern side of the site (Figure 6.2). It is about the same as that in the habitation zone on the northern and southern sides of the site where erosion has destroyed many architectural features and postholes.

The probable boundaries of the plaza are delineated in Figures 6.1 and 6.2 by a dotted line. This boundary has been drawn to exclude domestic structures such as Structure 24 and outside burials and burial clusters such as Burials 1–8 that belong to households. The eastern plaza boundary line is located approximately 120 feet from the defensive ditch on that side of the site. This distance was used to locate the boundary line on the southern and western sides of the site where erosion and plowing have destroyed most domestic structures and burials. The fact that Structure 24 and a small number of burials

Figure 6.2. Density of postholes in the plaza and habitation zone.

on the eastern and northern sides of the plaza appear to intrude on the plaza space suggests that the boundary between habitation zone and plaza may not have been clearly and rigidly demarcated. King may have had a specially prepared plaza surface, such as the clay and sand surface reported at Coweeta Creek (Rodning 2004) and the pebble surface reported at Chattooga (Schroedl 1993), but all evidence for it probably would have been destroyed by erosion and plowing.

The plaza, as outlined in Figures 6.1 and 6.2, is almost square, measuring 247 feet north–south and 244 feet east–west at its widest point. This symmetry is violated by the fact that the Feature 45 post pit is not centered within the plaza and Structures 16 and 17 are restricted to the plaza's northeast quadrant. If the habitation zone south of the plaza was approximately 120 feet wide as it is to the east, it is immediately apparent that a substantial number of PDS, RS, and burials have been lost to erosion at the southern end of the site. We should not rule out the possibility, however, that all PDS in the southern habitation zone have been recorded and that the plaza actually extended some 40–50 feet

beyond the southern boundary shown in Figures 6.1 and 6.2. Such a configuration would center the Feature 45 post within the plaza.

French accounts of the Natchez in the late seventeenth and early eighteenth centuries and Bartram's late eighteenth-century accounts of the Creek are the best sources we have regarding the kinds of activities that took place in plazas. The Natchez plaza was bounded at each end by mounds, one bearing the chief's residence and the other a temple. Political and religious rituals intended to promote the well-being of the Natchez polity were held in the plaza. These included receiving and entertaining foreign dignitaries, reenactments of important mythological events in which the Great Sun participated, and the funerals of the Great Sun and certain members of his matriline. Ceremonies related to warfare, including preparation of warriors for departure on raids and the torture of war captives, were also held in the Natchez plaza, as were social dances and the chunkey game (Swanton 1911:111–140).

The late eighteenth-century Creek chunkey yard was a level area bounded on two sides by earth embankments. The latter were constructed from soil scraped up at the time the yard was leveled and served as seats for spectators. A 30- to 40-foot-tall "chunkey pole" was placed in the center of the yard and was surmounted by an object that was used in target practice. According to Bartram (Waselkov and Braund 1995:155) the chunkey yard was "designed for a place of publick exhibition of shows and games." The chunkey game was presumably played here, and a single-post variant of the ball game may have been as well (Swanton 1946:682).

The chunkey yard apparently also had an association with warfare. Two "slave posts," 12 feet tall, were located in two corners of the yard. War captives were bound to them for torture and the scalps of slain enemies were hung on them (Waselkov and Braund 1995:154–155).

Because of its status as a subordinate town in a larger chiefdom, polity-level ceremonies are unlikely to have been held in the King site plaza. Instead, ritual activity probably focused on reinforcing community identity and integration and promoting community well-being. There were probably harvest festivals such as the Green Corn ceremony and ceremonies related to the departure and return of war parties and the torture of war captives. Social dances and various games including chunkey probably also took place in the King site plaza. The Feature 45 and Feature 11 post pits may have held posts similar in function to the "chunkey post" and "slave post" described by Bartram, although the presence of the smaller Feature 11 post would seem to be incompatible with the use of the larger post in any sort of ball game. Some or all of the plaza may

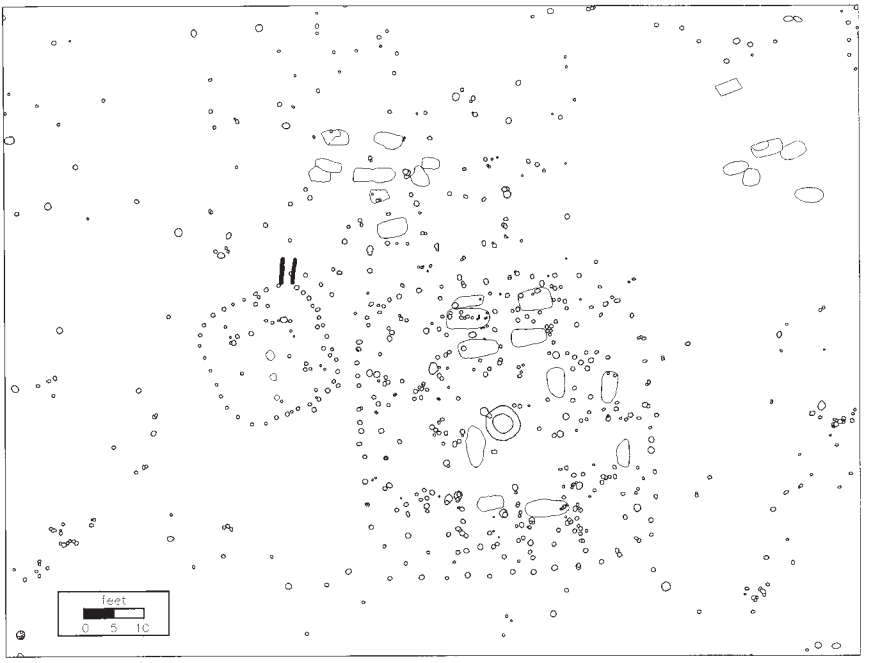


Figure 6.3. Posthole patterns for Structures 16 and 17.

have been bordered by earth embankments, but all evidence of these would have been destroyed by erosion and plowing.

Structure 17

Structure 17 is represented by postholes, a hearth, one pit feature, and 10 burials (Figures 6.1 and 6.3). Except for Structure 16 to the west and a light scattering of postholes to the north, the structure is spatially isolated from other architectural features. This, together with the fact that there is only one construction stage, has resulted in an exceptionally clear posthole pattern.

As reconstructed, Structure 17 is oriented 86 degrees east of north and measures 47.7 × 47.8 feet for a total floor area of 2,280 square feet (Figure 6.4). There are eight roof support posts. Seven of these are represented by large postholes that are spaced uniform distances from the exterior walls and hearth and from each another. There are 3–4 smaller postholes in the area where the west-central roof support post should be. Based on its location, one of these is more likely to be the actual roof support post, but we cannot rule out the pos-

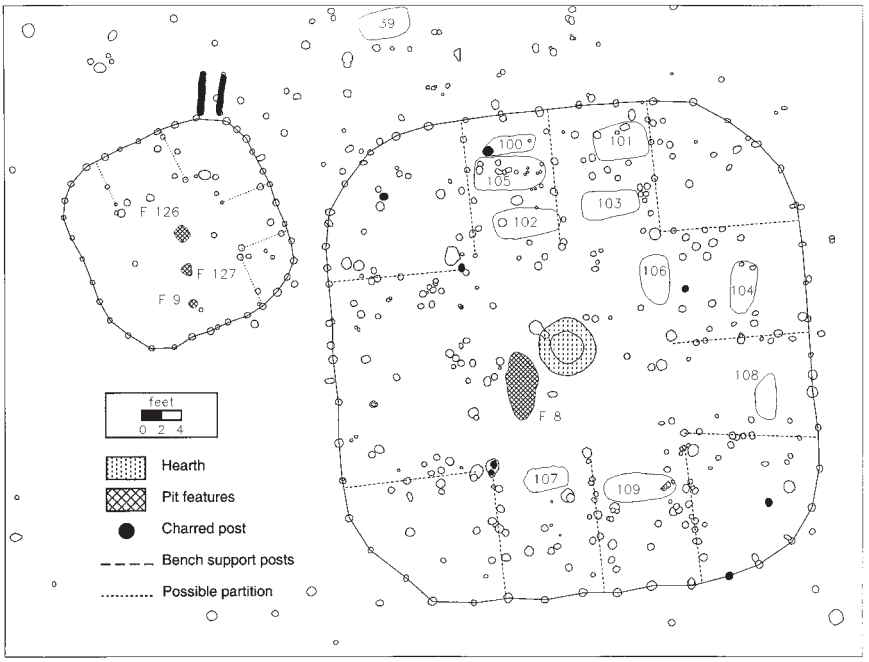


Figure 6.4. Reconstructed architectural characteristics of Structures 16 and 17.

sibility that others were involved as roof support posts as well, perhaps as replacements for the original post as it weakened with age.

The area enclosed by roof support posts measures 21.3 × 21.6 feet and includes 458 square feet of space. This represents 20 percent of the total floor space in the structure. The exterior floor sectors average 13.2 feet in width.

A total of 65 postholes are located along the exterior wall alignments of Structure 17 depicted in Figure 6.4. Forty-five of these postholes are evenly spaced an average of 3.76 feet apart and almost certainly represent the original wall posts. The remaining 20 postholes probably represent posts that were added later in the life of the structure as reinforcments or replacements. Some may also be field recording errors. The range of variation in the spacing of the 45 "original" posts ($s = .302$) is smaller than that for any other structure at the site and may be considered indicative of the care that went into constructing the building.

In Chapter 5, we saw that the numbers four and seven and possibly eight were sacred numbers among the Southeastern Indians in the eighteenth and nineteenth centuries. We also saw that the great majority of PDS were con-

structed with four walls that appeared to contain either seven or eight posts. These numbers held even though PDS ranged in size between 306 and 955 square feet and average posthole spacing ranged between 2.5 and 3.8 feet. The conclusion that can be drawn from these figures is that the inhabitants of the King site were purposefully constructing their PDS with 28 or 32 wall posts and were doing so because of the symbolic cosmological associations of the numbers four, seven, and eight (see Chapter 8).

The straight sections of exterior wall on the northern, eastern, and western sides of Structure 17 each contain eight evenly spaced postholes, while the section on the southern side contains nine postholes. The rounded corners of the structure each contain three postholes. Although the posthole alignment forming the southern wall is clear-cut and posthole spacing is quite regular, it is possible that the wall originally contained eight posts rather than nine. This would bring the number of postholes in the structure's outer walls to 44, a number that matches the count in Structure 1.1, the largest PDS at King, and that is the sum of the products of 4×4 and 4×7. We cannot know exactly how the King site inhabitants conceptualized the straight and rounded wall sections of their buildings. They may have assigned posts to straight and corner sections the same way I have above, or they may have considered each curved wall section to include a post from one of the adjoining straight wall sections. Viewed this way, Structure 17 would have had four straight walls with seven posts each and four corners with four posts. Given the importance of sacred numbers in domestic structures, it is not unreasonable to conclude that Structures 17 and 1.1 both had 44 exterior wall posts and that the number is a reflection of cosmological symbolism.

Nine postholes contained charred post remnants. One is located in the exterior wall in the southeast corner and three are adjacent to the northwest and southwest corner roof support postholes. Together, these charred posts indicate that Structure 17 was ultimately destroyed by fire.

The central hearth is represented by a circular deposit of hard-fired clay measuring approximately .1 foot thick and 3.3 feet in diameter and a larger zone of red fired sandy loam measuring as much as .3 feet thick and almost 6 feet in diameter. The former apparently represents the base of the hearth basin and suggests that the basin was round with a flat bottom. The larger feature represents the zone of soil beneath the hearth that has been discolored by heat from hearth use. The upper portion of the hearth, including its rim, has been destroyed by plowing and erosion. Assuming that there is some spatial correspondence between the zone of red fired soil and the overlying hearth, we may speculate that the rim was round in plan and almost 6 feet in diameter.

There is no direct evidence for how many construction stages the hearth had. The fact that the fired soil zone forms a nearly perfect circle, however, suggests that there was not a second horizontally displaced hearth stage.

As indicated by the absence of additional spatially offset exterior walls and hearths, Structure 17 was apparently constructed in only one stage. This is somewhat surprising in view of the likelihood that the structure was probably in existence for most of the time the King site existed as a formal town. While we cannot identify the number of years the site was occupied, the fact that several primary domestic structures were completely rebuilt one or two times suggests that occupancy must have extended over more than two decades. Given the impact of termites and other forms of decay on wooden structures in the southeastern United States, Structure 17 must have required some maintenance and repair toward the end of its life span. Indeed, there is evidence for this in the form of supernumerary postholes in the exterior walls and adjacent to roof support posts.

Postholes representing the original exterior walls of Structure 17 have been identified by their uniform spacing and regular alignment. In 12 instances, one or more posts have been placed immediately adjacent to or overlapping these postholes (Figure 6.4). In several of these instances, soil color and texture differences within post mold fill is suggestive of later posts intruding into earlier postholes. In eight other instances, posts have been placed between the original wall posts, usually at distances of only 1 or 2 feet. Both situations—overlapping postholes and closely spaced postholes—can be found in a number of primary domestic structures at King, but it is only in the clear, uncluttered posthole pattern of Structure 17 that they are readily distinguishable. They almost certainly represent the addition of new posts either as reinforcements or as replacements for decayed wall posts.

The original roof support posts have been identified by their uniform spacing from one another and from exterior walls and the central hearth. In several instances, additional postholes overlap or are located adjacent to the original roof support postholes. Presumably, some of these held posts erected to reinforce or replace decayed roof support posts. In the northwest and southwest corners, three of these "extra" postholes contained charred posts at the time of excavation. Presumably these posts were serving as roof supports at the time of structure abandonment.

Several lines of regularly spaced postholes extending from the exterior walls to roof support posts can be identified in the exterior floor sectors: two on the northern side and one on the southern and eastern sides of the building (Figure 6.4). Additional posthole clusters exist in comparable locations on all

four sides of the building but are not as clearly linear or do not extend all the way from exterior wall to roof support post. Nevertheless, it is possible that there were at least 11 posthole alignments, three on each side of the structure except the west. The existence of these alignments is supported by the distribution of burials in the outer floor sectors, in particular the arrangement of burials in two rows on the north side of the structure.

These posthole alignments may have supported partition walls that divided the exterior floor space into as many as 12 cubicles or they may have supported benches that spanned the exterior floor space. They may also have done both. Individual alignments tend to have five posts that are relatively large (average posthole diameter of .61 feet) and spaced close together (2.8 feet). Exterior wall posts in Structure 17, by comparison, are .65 feet in diameter and spaced 3.8 feet apart. We may conclude from the large size and close spacing of posts that the interior posthole alignments in question were designed to bear fairly heavy loads and that they functioned primarily as bench supports.

The large structures identified as townhouses at the eighteenth-century Cherokee sites of Chota-Tanasee (Schroedl 1986), Tomatley (Baden 1983), and Chattooga (Schroedl 1993) have interior alignments of large, closely spaced postholes similar to those seen in Structure 17. Numerous ethnohistorical sources—for example, Bartram (Waselkov and Braund 1995), Hawkins (1848), and Timberlake (Williams 1927)—describe Creek rotundas and Cherokee townhouses as having tiers of benches surrounding a central open area with a hearth, while only Calderon (Swanton 1946:407) and Louis-Philippe (Schroedl 1978) refer to cubicles. The historic-period evidence, then, supports the inference that benches occupied most of the exterior floor space of Structure 17.

Structure 17 probably had a wall-trench entrance located in its northern wall, although there is no direct evidence for such. Earth-embanked walls, which may have been present, would have required an entrance passage, and council houses at Ledford Island (Sullivan 1987) and Coweeta Creek (Rodning 2002) have them. Erosion and plowing may have destroyed Structure 17's wall-trench entrance. It should be noted, however, that Structure 16, located immediately to the west, still has wall trenches.

Three lines of evidence indicate that the entrance to Structure 17 was located on its north side. Structure 16, which like Structure 17 almost certainly had public and/or ceremonial functions, has its entrance on the north. Second, the northern wall of Structure 17 is in line with the northern corner of Structure 16 along an east–west axis, suggesting that the two buildings faced in

the same direction. Third, there is a scatter of postholes that may represent a lightly constructed pavilion located on the north side of the two structures. Long, shedlike buildings are located in front of large structures on the summit of the Late Dallas phase mound at Toqua (Polhemus 1987) and the Middle Lamar period Dyar mound in north-central Georgia (Smith 1994). Most of the known seventeenth- and eighteenth-century Cherokee townhouses also had entrances leading into long rectangular buildings. Structure 17 may have as well.

Ten burials are located within the walls of Structure 17. All appear to have been interred from the floor of the structure: their compass orientations, ranging between 81 degrees and 90 degrees, parallel that of the structure; nine of them are located in the outer floor zone between the lines of bench support posts; and all have pits deeper than 1.5 feet.

A large, oblong pit (Feature 8), measuring 3.2 × 6 feet, lies less than 2 feet southwest of the central hearth. The pit is oriented north–south and parallels the structure's compass orientation. Pit walls slope inward at approximately 45 degrees, giving the feature a triangular cross section and a depth of approximately 1.4 feet. The pit was filled with charcoal-stained soil, charred wood, daub, and fragments of pottery (27), flint flakes (7), rock (23), animal bone (3), and freshwater mussel shell (2). The presence of daub and charred wood suggests the pit was open at the time the structure burned. The remaining contents are similar to what is recovered from plow zone and burial pit fill across the site. The feature resembles a burial pit in horizontal shape and size, although its outline is somewhat less regular than most burial pits. The pit cross section, together with the absence of human bones, however, indicates the feature is not a burial pit. The function of this feature is unknown. No comparable feature is reported from the council houses at Fusihatchee, Chota-Tanasee, Mialoquo, or Coweeta Creek.

Although no stratigraphic evidence of a basin has survived, it is probable that Structure 17 was erected in a shallow basin. Plowing and erosion have lowered the ground surface in the vicinity of the structure at least .5 feet more than is the case in the habitation zone to the east where preserved structure basins range in depth between .1 and 1.0 feet. Average elevation of pit base for the 10 burials located inside Structure 17 is 96.0 feet. This is significantly deeper than the average (97.5 feet) for the five burials containing individuals older than 7 years at death that are located immediately north of Structure 17 and the average (97.7 feet) of burials (Burials 23, 73, 87, 117, 118, 157, 166, 167, and 169) located to the east and north in the habitation zone. Given the impact of ero-

sion and plowing across the site, it seems highly unlikely that even the base of the Structure 17 hearth would have been preserved had the structure been erected on the contemporary ground surface.

Soil excavated from the basin was probably piled against the outer walls of the Structure 17 as is shown stratigraphically at Toqua (Polhemus 1987) and Dyar (Smith 1994). Structure 16 probably also had earth piled around its walls. The earth embankments surrounding the two structures probably merged at the point where they are separated by less than 4 feet, giving the impression of a single building.

Comparison and Interpretation

Structure 17 was almost certainly a public building, that is, a building that was used by a segment of the community larger than a single household for activities that in some way were of interest to or benefited the community as a whole. It is located in the plaza. It is unique among all structures at the site in being twice as large and in having eight interior roof support posts and benches throughout most, if not all, of its exterior floor sector. As we will see in later chapters, it is also unique in having burials located in its southern exterior floor sector and in having what may be exclusively adult male interments. Finally, Structure 17 has a number of architectural similarities to prehistoric and historic public buildings at other sites in the region.

Public buildings that may provide insights into the architectural characteristics and functions of Structure 17 have been reported from a number of sites. One structure is known from Ledford Island, an approximately contemporary non-mound habitation site on the Hiwassee River in eastern Tennessee. Several additional structures are known from non-mound habitation sites (Fusihatchee, Chota-Tanasee, Tomatley, Mialoquo, Chattooga, Coweeta Creek, and San Luis de Talimali) that date to the seventeenth and eighteenth centuries. In the paragraphs that follow, each of these structures will be characterized and used to evaluate the role of Structure 17 in the King site community.

The Mouse Creek phase Ledford Island site in eastern Tennessee is the only non-mound town in the region that is roughly contemporary with King and has yielded evidence of a plaza and associated large structure. Unfortunately, the structure in question (Feature 36) was rebuilt as many as four times, and the resulting array of postholes is difficult to interpret (Lewis and Kneberg Lewis 1995:529–530; Sullivan 1987). What we can say about the structure is that it was constructed in a basin, was square with rounded corners, had a central hearth and wall-trench entrance, and measured approximately 43–44 feet square. Interior roof support posts are difficult to isolate, but a case can be

made (Sullivan 1987:Figure 6) that at least some of the construction stages had eight posts enclosing an area approximately 24 feet square. To the extent that these characterizations are correct, the structure matches Structure 17 at King fairly closely, differing only in the absence of burials. This suggests that Structure 17 is not unique to the King site but rather is an example of a type of structure that may have been present at all or most late prehistoric/early historic non-mound towns in the region.

Eighteenth-century Creek towns had three important public structures: a rotunda, a square ground, and a chunkey yard. The latter is probably the eighteenth-century equivalent of the King site plaza. The square ground consisted of four arborlike buildings enclosing a small open area and was used in the warmer months of the year for community religious rituals and political activities. The rotunda is usually described as being circular in floor plan (DeBaillou 1967; Hawkins 1848; Sheldon 1990; Swan 1855; Waselkov and Braund 1995), although Taitt (1916) reports in 1772 that the rotunda at Tukabatchee was square with rounded corners. Taitt gives external dimensions of 30 feet, while dimensions of approximately 40 feet can be calculated from information that Hawkins (1848) and Hitchcock (Foreman 1930) provide. Hawkins reports that rotundas had eight interior roof support posts, while the three published versions of a drawing by Bartram (Waselkov and Braund 1995:Figures 23–25) show six, seven, and eight roof support posts, respectively. Hitchcock describes the nineteenth-century Tukabatchee rotunda in Oklahoma as having 12 roof support posts. Almost all observers describe the floor space between roof support posts and outer wall as being filled with benches, sometimes arranged in tiers ascending in height toward the outer wall.

The Creek rotunda was used primarily during winter months. According to eighteenth-century observers (Hawkins 1848; Taitt 1916; Waselkov and Braund 1995), Creek men tended to spend their evenings in the rotunda drinking black drink, smoking, singing, and dancing. References to seating arrangements that were determined by one's social and political position in the community suggest that these gatherings had a certain degree of formality inherent in them. Bartram (Waselkov and Braund 1995:149) says that women were never allowed into the rotunda, while Swan (Swanton 1928a:182) states that destitute old women could sleep there on cold nights. Whether or not women were totally excluded from the rotunda, there is little mention of them being present in the building and there were times when they were specifically excluded. Visitors, the elderly, and the poor were permitted to sleep in the rotunda, especially on very cold nights.

Along with the square ground, the rotunda was the locus of government de-

cision making. During the colder months of the year and when there were important matters requiring secrecy, the town chief or *mico* met in the rotunda with a council composed of lesser officials and the community elders or "Beloved Men" (Hawkins 1848; Swanton 1928a; Waselkov and Braund 1995). The rotunda probably also had some religious functions. Bartram (Waselkov and Braund 1995:149) states that the "Eternal Fire was kept in the Great Rotunda which is guarded by the priests," but he may have been describing Cherokee practices rather than Creek.

The best archaeological evidence we have for the Creek rotunda is from the Fusihatchee site located on the Tallapoosa River in south-central Alabama. Sheldon (1990) identifies five structures as rotundas, four dating to the late sixteenth- to early seventeenth-century Atasi phase and one dating to the mid-eighteenth-century Tallapoosa phase. The earlier structures, designated Structures 12, 11, 10A, and 9, represent construction stages of a single structure that was rebuilt three times. They were built in a basin, were square with rounded corners, and had a central hearth. Entrance passages can be identified for at least two construction stages. These extend several feet beyond the structure's exterior walls and are defined by parallel rows of individually set posts enclosing an inclined ramp. Three construction stages have external dimensions ranging between 49 feet and 51 feet, while the fourth (Structure 9) is considerably smaller at 39 feet. All have eight interior roof support posts, and these enclose a central floor space measuring 22–23 feet square. The ratio of central floor space to total floor space is around 21 percent in two of the larger structures and 37 percent in the smaller Structure 9.

These structures resemble Structure 17 at King in overall size, floor plan, basin construction, number of interior support posts, and absolute as well as relative size of central floor space. They differ in having entrance ramps, a greater number of exterior wall posts—70–80 vs. 45—and no identified interior partitions or bench support posts. These differences may be more apparent than real. Erosion probably destroyed the entrance passage at King, and the greater number of wall posts in the Fusihatchee structures may represent repair and replacement posts added after the structures were built. In fact, given the confusing array of postholes present within the confines of the overlapping structures, it is possible that the Fusihatchee structures started out with the same number of exterior wall posts as did Structure 17. Finally, interior bench supports or partitions may have been present in the Fusihatchee structures but cannot be readily distinguished in the welter of recorded postholes.

The one feature that clearly sets Structure 17 and the Fusihatchee structures apart is the absence of inside burials in the latter. This difference is paralleled

in the winter houses at the two sites: King site PDS have burials while Atasi phase winter houses at Fusihatchee do not (Sheldon 1997:14).

Structures 9–12 almost certainly predate any eyewitness accounts of Upper Creek settlements and, more specifically, Fusihatchee. As a result, we cannot say with certainty that these structures actually functioned like historic Creek rotundas. The fact that some eighteenth-century rotundas were square in floor plan and some had eight interior roof support posts, however, does support the argument that Structures 9–12 had equivalent uses and meaning to the inhabitants of seventeenth-century Fusihatchee.

The Tallapoosa phase council house at Fusihatchee, designated Structure 17, is quite different from the earlier structures. It is round, measures 42 feet in diameter, and has 10 interior roof support posts. There is no evidence of a central hearth, an entrance passage, basin construction, or bench supports. Plowing has presumably destroyed these features. If this is so, it suggests that the structure was not erected in a basin.

Apalachee and Guale council houses are described in the sixteenth and seventeenth centuries as being round, ranging up to 200 feet in diameter, and having a large opening in the center of the roof measuring 15–20 feet across (Shapiro and McEwan 1992:8–14). Historic accounts emphasize the formal seating arrangements within council houses and describe ceremonies celebrating the return of successful war parties. Enemy scalps were apparently displayed within or near the council house.

Apalachee council houses are known from three archaeological sites (Shapiro and McEwan 1992). The council house at the late seventeenth-century mission town of San Luis de Talimali was round and measured 120 feet in diameter. Eight roof support posts were arranged in a circle measuring 18 feet in diameter. There was a central hearth and posthole evidence for two sets of benches: one placed against the outer wall and one forming a circle spaced between the roof support posts. Benches were approximately 8 feet wide. Late prehistoric council houses excavated at the Borrow Pit site (8Le170) and the Patale mission site were also round but measured just 39 feet in diameter. The council house at 8Le170 was unique among the three structures in having seven burials located within its walls.

Eighteenth-century Cherokee towns appear to have had two important public structures: a townhouse and a pavilion (Schroedl 1986). The townhouse appears to have been used in much the same way Creek rotundas were. Governmental meetings were held there and men commonly spent long evenings talking, smoking, and dancing (Klinck and Talman 1970; Waselkov and Braund 1995; Williams 1927, 1930). Seating was arranged by rank. In contrast

with the Creek, women were permitted into the town house and, at least on some occasions, participated in council meetings (Perdue 1998:55). The pavilion was an open-sided shedlike structure located in front of the townhouse. It was apparently used during the warmer months for some of the same kinds of activities the townhouse was used for in winter.

The architectural characteristics of historic Cherokee town houses are known primarily from archaeological excavations, although historical accounts do provide limited information (DeBaillou 1967; Evans 1979; Klinck and Talman 1970; Schroedl 1986; Sturtevant 1978; Waselkov and Braund 1995; Williams 1928, 1930). Of the known archaeological structures, four are square with rounded corners, while four are round or octagonal.

Square structures are known from Toqua (Polhemus 1987:242), Coweeta Creek (Rodning 2002, 2004), and Chattooga (Schroedl 1993). The two Toqua examples, Structures 73 and 75, are single-stage constructions. They have rounded corners, a central hearth, and four interior support posts. Both measure approximately 50 feet square and have 30 percent of their floor space enclosed by the interior roof support posts. Posthole alignments in the outer floor area of both structures are interpreted by Polhemus as representing supports for benches that filled this space. Schroedl (personal communication 1999) dates these structures to the early eighteenth century.

The Coweeta Creek structure was rebuilt at least five times during the late sixteenth and early seventeenth centuries (Rodning 2002, 2004). Each stage appears to have had rounded corners, a central hearth, and wall-trench entrances. Stages 1–4 measure 48 feet square, while the later two stages measure 52 feet square. All construction stages are said to have had four roof support posts, but the map for stage 2 (Rodning 2004:Figure 4.5) appears to show eight. The Coweeta Creek structure is unique among all known historic townhouses in that fill deposited after each building was dismantled and burned has resulted in a low mound approximately 4 feet high being formed. Burials were interred within the structure.

The fully excavated structure at Chattooga (Townhouses 2–5) was rebuilt three times (Schroedl 1993). The first two stages measure 46–49 feet square, have round corners, and four roof support posts. The later two stages are similar in shape but measure 52–56 feet square and have eight roof support posts. The fourth construction stage had interior posthole alignments that were probably bench supports.

Four Cherokee townhouses have been excavated and reported from the Chota-Tanasee, Tomatley, and Mialoquo sites on the Little Tennessee River (Baden 1983; Polhemus 1987; Russ and Chapman 1983). They are round or

octagonal and measure 50–60 feet in diameter. Earlier stages in the multi-construction-stage townhouses at Chota-Tanasee have four interior roof support posts while later stages and the two townhouses at Tomatley and Mialoquo have eight (Schroedl 1986). Central floor space accounts for 18 percent of total floor area in the four-post structure at Chota-Tanasee and between 32 and 38 percent in the eight-post structures. Interior bench support posts can be identified in the later eight-post townhouses at Chota-Tanasee and may be present in the earlier four-post townhouses as well.

The historic-period structures reviewed above exhibit some variability in shape, number of interior roof support posts, and amount of central floor space. Some of this variability may reflect change through time. Eight–support post structures, for example, appear to succeed four–support post structures in both the Creek and Cherokee regions some time in the first half of the eighteenth century (Schroedl 1986, personal communication 1999). Square structures predate round/octagonal ones at Fusihatchee and in the Little Tennessee River valley where both types of structures are represented. There is also some evidence that central floor area increases through time both in absolute terms and relative to total floor space. Some variability, on the other hand, is probably regional in nature. The Apalachee and Guale public structures, for example, are larger overall and appear not to have been completely roofed.

One characteristic shared by all of these structures is their large size. While dimensions range between 39 and 120 feet (1,521 and 11,304 square feet) most have dimensions on the order of 48–52 feet (2,300–2,700 square feet). As such, they are almost twice as large as the largest reported mound summit structures at sites like Toqua (Polhemus 1987), Dyar (Smith 1994), and Little Egypt (Hally 1980). The relatively small size of the latter is in keeping with their reported role as elite residences and mortuary temples as opposed to public gathering places. One would not expect that large numbers of people would have access to these kinds of structures. Mound summit location, in fact, may have been a way to restrict such access. Eighteenth-century Guale, Apalachee, Creek, and Cherokee council houses, on the other hand, functioned primarily as gathering places for large numbers of people. Their location on the ground probably made them more accessible, at least in a symbolic sense, and their large size allowed them to accommodate large numbers of people. With dimensions of 48 feet (2,280 square feet), Structure 17 at King falls well within the size range of the historic council houses.

Another characteristic shared by most historic townhouses, as well as Feature 36 at Ledford Island, is construction in multiple stages. Fusihatchee, Coweeta Creek, and Chattooga town houses were rebuilt at least three times,

while Chota-Tanasee Structure 2, to judge from the number of postholes, was probably rebuilt at least one time. Hearth construction stages in the Feature 36 structure at Ledford Island indicate that it was reconstructed at least one time and possibly as many as four times. King is unusual then in having only one construction stage.

The benches characteristic of eighteenth-century Creek rotundas and Cherokee townhouses apparently occupied most of the outer floor space between roof support posts and exterior walls and were used by people for sitting, lounging, and even sleeping. Although benches were probably present in all of the archaeological examples, interior posthole alignments identifiable as bench supports are clearly visible only in the Toqua, Chattooga, and Chota-Tanasee town houses and at San Luis de Talimali.

Structure 17 at King is unusual in comparison with most of the historic structures in that it has subfloor burials. We will describe these individuals in greater detail and attempt to identify who they were and why they were interred in the council house in Chapters 7, 11, and 12.

Given the evidence reviewed here, I think it is reasonable to conclude that Structure 17 at King functioned as a community meeting house where men and perhaps women congregated and participated in social, ceremonial, and political activities. I cannot demonstrate that Structure 17 at King was the functional equivalent of the later Creek and Cherokee council houses, but its similarity to those structures in size, number of roof support posts, and presence of benches does suggest that it and other contemporary structures in the region like it probably were ancestral to them.

The King site community was one of several towns belonging to a politically centralized polity located along the Coosa River and administered from the Nixon mound site located at the junction of the Etowah and Oostanaula rivers. This polity was probably led by a chief who was considered to be divine and who wielded a fair amount of political power. In this context, the presence of Structure 17 at King raises interesting questions about the nature of leadership at the community level. Specifically, the large public structure with its raised benches suggests that some degree of formal political power and decision-making ability at King was held by a group consisting of many if not most adult males residing in the town. The village chief may have had some political power, but his ability to rule may have been constrained to a significant degree by a town council.

The almost universal occurrence of council houses with multiple construction stages indicates that this kind of structure was typically rebuilt after a period of time and rebuilt in the same location. Why this was done is not

known. Structures may have been rebuilt when they became unfit for use, perhaps as a result of decay, vermin infestation, or accidental fire. Alternatively, structures may have been rebuilt on the occasion of a regular calendrical event or the death of the village chief. Rodning (2004) reports that all five stages of the Coweeta townhouse were partially dismantled and burned. This suggests that the destruction and rebuilding of townhouses was a ritually important event and not just a necessary response to an accident or decay. The fact that Structure 17 was not rebuilt suggests that it had not been in existence for very long. Since we do not know why rebuilding occurred, we cannot accurately estimate how long these structures were used on average between rebuilding stages. The rate at which wooden posts decayed in the ground, however, probably set the outer limits for this period. This means that, even with some repair work, Structure 17 was probably not in existence for more than 20 years.

Structure 17 carries at least one additional important implication for King site interpretation. The presence of several charred construction posts indicates that the structure was destroyed by fire. If I am correct in my assumption that formally established communities needed to have a council house (see Chapter 8), the fact that Structure 17 was not rebuilt after this fire indicates that the town was formally abandoned at this time. The burning of Structure 17 may have been accidental or intentional. The former seems unlikely since rebuilding should have occurred unless the decision to abandoned the King site was by coincidence made at the same time. Alternatively, the council house was intentionally burned either as part of the ceremonial closing of the town or as a result of military attack.

Structure 16

Structure 16 is represented by postholes, a wall-trench entrance passage, and three pit features (Figures 6.1 and 6.3). The structure has only one construction stage, which measures 20 feet square and is oriented 66 degrees east of north (Figure 6.4). Postholes representing three of the four interior roof support posts are located in the west, north, and east corners of the structure. They are situated equal distances from adjacent exterior walls, and their compass relationship is similar to that of the structure. The three postholes are spaced 8.8 feet and 9.2 feet apart and would have enclosed an inner floor zone containing approximately 81.0 square feet. The ratio of inner floor space to total floor space is .202.

Thirty-seven postholes fall along the exterior wall alignments of Structure 16. All but three of these are quite regularly spaced at an average distance

of 2.05 feet. The three exceptions, located in the northwestern and southwestern walls, probably represent replacements for decayed wall posts. This being the case, Structure 16 may have been originally constructed with 34 wall posts.

Feature 126, a circular layer of dark soil mottled with charcoal, ash, and fired-daub flecks, is located in the exact center of the structure floor. The layer measures 1.5 feet in diameter and less than .1 foot thick. The most reasonable interpretation of the deposit is that it represents the contents of a flat-bottomed pit that has been almost totally destroyed by erosion and plowing. Small circular deposits of ash, charcoal, and daub, measuring about .05 feet in diameter, occur in sterile subsoil beneath the layer and were probably produced by cicadas and earthworms burrowing down through the pit's contents.

Given the architectural similarity of Structure 16 to the PDS at King, we should expect to find a hearth where Feature 126 is located. There is, however, no fired clay surface or fired soil in the area. Erosion and plowing may have destroyed the hearth, as aboriginal ground surface in the vicinity of Structure 16 has been lowered at least 1.5 feet, but that does not account for Feature 126. It is possible that Feature 126 intruded through the hearth and that its fill contains material from that feature. The question then becomes, why was the pit excavated through the hearth? No other examples of such pits have been recognized at the site.

A wall-trench entrance passage is located on the north corner of the structure and is oriented 5 degrees east of north. The axis of the entrance passage passes just to the east of Feature 126 but is essentially oriented so as to diagonally bisect the structure. Measured from the inner edge of the wall trenches, the passage is 1.3 feet wide. The two trenches are 4.4 feet long.

There are many more interior postholes in the northeastern half of Structure 16 than in the southwestern half. This may be due to erosion since the destructive impact of erosion and plowing increases fairly rapidly across this part of the site. The location of several postholes near the northwest, northeast, and southeast corners of the structure suggests that some held support posts for partitions.

A small pit (Feature 9) located in the south-central floor sector of the structure contained an incomplete shell-tempered vessel. The pit is slightly oval in outline, measuring .8 × .6 feet at the base of plow zone and extends .8 feet into subsoil. Only the bottom half of the vessel is present, and this was intact at the time of excavation. The vessel appears to have been a small jar or bowl with a rounded bottom and maximum diameter of .45 feet. It rested in an upright position on the bottom of the pit and was at least .5 feet below the base of plow

zone. Because of its depth, the pot could not have been damaged by plowing. Rather, it appears to have been incomplete at the time it was placed in the pit. Given its location inside Structure 16, the feature is probably contemporary with the building, although there is no stratigraphic evidence for this.

Feature 127, an irregularly shaped dark soil stain measuring 1.3 × 1.1 feet, lies 3.5 feet south of Feature 126 in a line between that feature and Feature 9. It was identified as a posthole in the field and, therefore, was not excavated. Seen in the context of other PDS, the shape, size, and location of the feature suggest that it is not a posthole. Unfortunately, there is no information on depth, cross-section shape, or fill.

Comparison and Interpretation

In many respects—size, shape, presence of entrance passages, presence of interior roof support posts—Structure 16 resembles primary domestic structures in the habitation zone. It is distinctive from them, however, in a number of ways. At 400 square feet, it is smaller than all but four PDS. The proportion of floor space devoted to central floor area, on the other hand, is greater than that of all structures except Structure 17 and Structures 15.1 and 1.1. The latter are the two largest PDS in the excavated site area and, as discussed in Chapter 8, were two of the first structures to be erected at King.

Structure 16 also is distinctive in having more exterior wall posts than any structure except Structures 17 and 1.1 and in having the closest spaced wall posts of any structure. Variation in the spacing of exterior wall posts ($s = .34$), furthermore, is the lowest on the site with the exceptions of Structures 17 ($s = .302$) and 18 ($s = .323$). The figure for the latter structure is not very reliable because it is based on measurements for only 18 postholes. The relative lack of variability in wall-post spacing indicates that Structure 16, like its neighbor to the east, was constructed with considerable care. Finally, Structure 16 is distinctive in not having a central hearth. Feature 126, located at the center of the structure appears to have held the residue of fires but was not itself a hearth.

The number of postholes making up the exterior walls of Structure 16 is unexpected. Given the likelihood that PDS were usually constructed with either 28 or 32 posts and the likelihood that these numbers had symbolic significance, I would have expected Structure 16 to have 32 posts. It is possible that the original number of posts was 32 and that the walls contain five replacement posts rather than three. The spacing of all 34 postholes, however, is so uniform that I cannot identify two additional replacement posts. Removal of any of the 34 posts leaves gaps of 4 feet or so in the walls.

Table 6.1. Pit features in primary domestic structures and Structure 16

Structure	Feature	Pit Dimensions	Distance to Hearth (measured center to center)
14	2	1.6 × 1.4 × .8	3.0
22	12	1.35 × 1.0 × .8	1.8
21	43	2 × 2.5 × .7	4.0
16	127	1.3 × 1.1 × —	3.5

Note: Measurements in feet.

Structure 16 is one of two buildings at King known to contain a small pit containing a fragmentary pottery vessel. Feature 10, located in the northeast corner sector of Structure 20, appears to have been a shallow pit measuring at least .4 feet in diameter and containing portions of a large shell-tempered plain jar. The sherds appear to have been lying in the bottom of the pit, the upper pit walls and an unknown amount of the pot having been destroyed by plowing. Unlike Feature 9 in Structure 16, the sherds that represent portions of the neck, body, and vessel bottom lay in no order, suggesting that the vessel was highly fragmented at the time it was placed in the pit.

Three PDS, Structures 14, 21, and 22, had a small pit located near the central hearth (Table 6.1). The fill of each pit consisted of large daub and charcoal fragments that probably originated from the collapsed superstructure when the building burned. Feature 2 in Structure 14 also contained portions of a large vessel that lay on the edge of the hearth. The nature of fill material indicates that all three pits were open at the time structures burned. This, together with similarities in size and location, indicate that the three pits represent a distinct type of feature. Feature 127 is similar to the three PDS features in location relative to the "central hearth," nature of fill, and known dimensions and may have had a similar function.

Structure 16 differs from all PDS in that it alone is located in the plaza adjacent to Structure 17. The fact that its northern corner is roughly in line with the northern wall of Structure 17 also suggests that it was functionally related to the latter building. Given this location, we may surmise that the structure must have had some role in the public life of the community. The question is, what role?

The Feature 47 structure at the Ledford Island site in Tennessee may have had a function similar to that of Structure 16. Like King, Ledford Island is one of several towns that make up a single chiefdom polity. Feature 47 is located on the northwest edge of the town's plaza immediately adjacent to Fea-

ture 36, a probable council house (Sullivan 1987, 1986). The structure has two hearths and is slightly larger in its east–west dimension, suggesting that it has been rebuilt one time (Sullivan 1987:Figure 5). The structure does not stand out clearly as a public building because, like the council house, it appears to be located on the edge of the plaza rather than in the plaza. Indeed, Lewis and Kneberg Lewis (1995:Table 29.1) identify it as a domestic structure. Two pieces of evidence, however, suggest that Feature 47 was not just another house. Almost all PDS at Ledford Island have interior burials. Structure 47, which appears to have been utilized for a relatively long period of time, has none. Second, the interior floor space of the structure is virtually devoid of postholes, including roof support posts.

Also of interest are two large ash deposits located in front of the structure (Sullivan 1987:Figure 5). Lewis and Kneberg Lewis (1995:530) argue that these latter features may represent the residue of fires that burned in the council house. The fact that they are directly in front of Structure 47, however, would seem to suggest that at least one of them is derived from the hearth in that structure. Knight (1989:283) notes that ash from "annually renewed sacred fires" is deposited in small mounds in Muskogee square grounds in Oklahoma today. We might conclude from this that Feature 47 contained the community's perpetual fire. This interpretation does have problems, not the least of which are that there is some evidence that eighteenth-century Creeks kept the sacred fire in their council house (Waselkov and Braund 1995:149) and that ash deposits are located in front of other domestic structures at Ledford Island (Sullivan 1987:Figure 5).

Feature 47 resembles Structure 16 at King in being relatively small,[2] containing no burials, and having exterior wall posts that appear to be quite closely spaced (Sullivan 1987:Figure 5). Structure 16 also has relatively few interior postholes, but this may be the result of erosion. Feature 47 differs from Structure 16 in that it is not located on the same side of the larger communal structure (Feature 36)—facing the two buildings, it is located to the left of Feature 36—and is not turned at a 45-degree angle.

If Feature 47 is a public building, it is important in demonstrating that sixteenth-century non-mound habitation sites in the region may have commonly had two public buildings of markedly different sizes located in or on the edge of their plazas. Similarities to Structure 16 at King also suggest that the smaller of these public buildings typically had carefully constructed exterior walls and few interior partitions but did not contain subfloor burials. Other than this, Feature 47 does not tell us much about how such a building may have been used.

There are no archaeological examples of buildings resembling Structure 16

known from historic Creek and Cherokee towns. The closest contemporary analogues for it are to be found on the summit of Mound A at Toqua (Polhemus 1987). Each of the latest construction stages (Phases E–H) of this mound has a pair of square structures located on the rear half of its summit. These buildings exhibit many of the architectural characteristics of PDS at King: square floor plan, individually set wall posts, earth-embanked walls, wall-trench entrances, four interior roof support posts, and a central hearth. One structure in each pair, furthermore, was considerably smaller than the other. The latter (Structures 13, 27, and 30) resemble Structure 16 at King in their small size—ranging between 400 and 532 square feet—and, in two cases, lack of interior burials.

Polhemus (1987:1214) identifies the smaller structures as "high status dwellings" on the basis of their size, lack of "interior elaboration" such as clay platforms, and proportionately smaller central floor spaces. Habitation refuse was evidently not common on the floors of these structures, however, because it is not mentioned in the published descriptions. Structure 3, located on a terrace of Mound A, had by contrast, large quantities of plant and animal remains, pottery sherds, and stone, the latter including flintknapping debris, a common feature of PDS at Toqua. I conclude from this that Structures 13, 27, and 30 probably were not domestic habitations. Deposits of bird bone and sheet mica fragments on the floor of Structure 27, in fact, suggest that the structures had ritual uses.

The floor of Structure 16 was destroyed by plowing. As a result, we do not know whether it had clay benches or other interior elaborations or what kinds of artifacts were present as floor refuse. Its similarities to the smaller mound summit structures at Toqua, including spatial proximity to a larger public building, suggest that it may have had much the same function as those structures. Unfortunately, we cannot say much about how the Toqua structures were used other than that the relative absence of burials and significant amounts of occupation refuse suggest they were not involved in mortuary ritual or used as residences.

I propose that Structure 16 and, by extension, Feature 47 at Ledford Island functioned as temples where objects sacred to the town were stored and where some rituals of an esoteric or secret nature were performed. A likely candidate for such usage is the sacred fire. Sacred fire was widely considered to be the earthly manifestation of the sun among Southeastern Indians (Hudson 1976). The Natchez kept it in their temple. The Creeks kept it in the square ground in the summer and possibly in the council house during the winter. From at least the eighteenth century on, Creek communities rekindled it annually dur-

ing the Green Corn ceremony as part of their social and spiritual renewal. Historical references to alliances between towns of the "same fire" and to kindling fire in newly established towns (Hudson 1976; Moore 1988:64) suggest that the sacred fire served as a symbol for the existence of towns and their political independence. The pan-Southeastern importance of the sacred fire and its presence in Natchez culture, furthermore, indicate that these beliefs and usages have considerable antiquity, probably extending well back into the Mississippi period.

Towns like King constituted distinct communities and formal administrative units within Mississippian chiefdoms. To be identified as such, towns probably had to possess one or more items symbolizing that status. Sacred fire, kept in a public building and used in public rituals such as the Green Corn ceremony, was almost certainly one of those items. Plazas and public buildings like those at King and Ledford Island were probably necessary attributes as well. Sacred fire may have been kept in the council house during the cold months of the year as suggested by Bartram in the late eighteenth century (Waselkov and Braund 1995:149), but in earlier times it may also have been kept in a building with more limited access along with other sacred items—a building such as Structure 16.

Structure 16 may alternately have served as the residence for the town chief. If the leaders of chiefdoms resided in structures located on a mound summit or terrace, parallel behavior in the lesser communities would have the town chief residing near other public buildings and the plaza. In the absence of evidence from a preserved and excavated floor surface, we can never be certain that Structure 16 was not an elite residence. The fact that the building has such a small floor space, however, would seem to eliminate this usage. The town chief's authority and power must have been based in part on his preeminent position in the community's social hierarchy. This position almost certainly would have been reinforced by residence in a house that, relative to other PDS, was larger, perhaps more elaborately constructed, and located in a more prominent place. Structure 16 meets the latter criterion, and perhaps the second criterion, but not the first.

Possible Pavilion

Several lines of evidence suggest that there may have been a lightly constructed building or pavilion located immediately north of Structures 16 and 17. A number of sites in the Southern Appalachian region dating to the sixteenth to eighteenth centuries have pavilion-like structures located in front of large

public buildings. A review of what is known about these structures can provide evidence for what a pavilion at King might have looked like.

Two late fifteenth- and early sixteenth-century sites have evidence for pavilions on the summits of mounds. Stage H of Mound A at Toqua has four structures on its summit (Polhemus 1987:Figure 3.40). As described earlier, a large (Structure 11) and a small (Structure 13) square structure—the latter reminiscent of Structure 16 at King—are located at the rear of the summit. A long rectangular structure (Structure 87) containing burials lies in front of Structure 11, and a small square structure (Structure 88) lies in front of Structure 13. An entrance passage leads from Structure 11 to the rear of Structure 87. According to Polhemus (1987:352), Structure 87 measures 40 × 19.5 feet and was rebuilt two times. The building is constructed of single-set posts but does not have a depressed floor or earth-embanked walls. Its rear wall and at least one end wall were constructed with closely spaced posts. The side facing the front of the mound and the plaza was apparently constructed of widely spaced posts, although the number of these and their spacing is not known. Three pairs of roof support posts are spaced evenly along the length of the structure. Much of the floor area had been fired, and as many as 10 "high status" burials were interred beneath it. These included adult males and females and at least one subadult 12 years old. Buildings similar in size, shape, and location to Structure 87 apparently existed on the summits of mound stages E–G as well, but they are not described in as much detail as Structure 87.

The last summit of the Dyar site mound (9GE5) has a somewhat similar arrangement of structures: two earth-embanked square buildings located on the rear half of the mound and a long rectangular building located on a lower terrace in front of them (Smith 1994:Figure 14). The latter structure was not completely exposed, but it measures at least 40 feet long and 26 feet wide. The building was constructed of single-set posts, but evidently did not have a sunken floor or earth-embanked walls. The back wall is constructed of numerous closely spaced posts. Evidence is lacking for how the other three sides were enclosed. No subfloor burials or obvious roof support posts were present, but there were at least two hearths located along the midline of the structure.

The Feature 36 structure at Ledford Island has a concentration of postholes in front of it that could be the remains of one or more buildings (Sullivan 1987:Figure 5). These appear to have had the same compass orientation as Feature 36. Hearths are present within the posthole concentration, but there are no burials. These features may be part of an oblong, lightly constructed building, but its exact configuration and dimensions cannot be reconstructed with the information collected at the time of excavation.

Four historic Cherokee sites have yielded archaeological evidence for pavilions. The early seventeenth-century Coweeta Creek site has a pavilion located immediately southeast of the multistage square townhouse (Rodning 2002, 2004). The wall-trench entrances of the latter extend to the rear wall of the pavilion. The pavilion was constructed in multiple stages, possibly as many as five. As a result, structure size is difficult to measure accurately, but appears to be approximately 40 × 20 feet. Ten burials were interred within the walls of the structure. These tend to be oriented at right angles to the structure's long axis and include adult males and subadults (Rodning 2004:Table D.2).

At the eighteenth-century Cherokee site of Chota-Tanasee, a cluster of postholes located in front of Townhouse 2 marks a rectangular building measuring approximately 84 feet long and 23 feet wide. Schroedl (1986:Figure 4.2, 233) identifies this building as a summer townhouse or pavilion of the type described by Steiner in 1801 as "a long, open shed roof with clapboards adequately provided with benches and other seats" (DeBaillou 1967:28). A large number of postholes resulting presumably from multiple construction stages define the building but make it difficult to distinguish architectural details. Gaps of 4–5 feet between some postholes that apparently form the exterior walls indicate that the building did not have solid walls. The Townhouse 2 entrance passage extends to the rear wall of the pavilion. There are no obvious roof support posts in the building. Hearths or fired floor surfaces are also absent, but these could have been destroyed by plowing, especially if the building was erected on the original ground surface. Subfloor burials are absent with one possible exception. Burial 10, the interment of a historically known leader of the Cherokee, is located at the northern end of the building. Schroedl notes, however, that the pavilion may not have been in existence at the time of his interment (Schroedl 1986:233).

A pavilion has also been identified at the eighteenth-century Cherokee site of Tomatley (Baden 1983:Figure 5.1). Located approximately 10 feet from the circular townhouse, this structure (Structure 29) is represented by a sparse cluster of postholes forming the outline of a rectangular building. Unlike the pavilion at Chota-Tanasee, Structure 29 seems to have only one construction stage, and as a result details of its architecture are potentially somewhat clearer. Erosion and plowing, however, may have destroyed a number of postholes. The structure measures approximately 44 feet long by 21 feet wide. Wall posts are widely and fairly uniformly spaced along the back and front walls at intervals of around 10 feet. No hearths or burial pits are present. Postholes distributed down the midline of the structure may represent roof support posts and/or bench supports.

A pavilion has been partially exposed and mapped at the Chattooga site in northeastern Georgia (Schroedl 1993). The structure is located immediately south of Townhouses 2–5 and is oblong. The building is distinctive in being oriented with one end toward the square town house. Closely spaced postholes suggest heavily constructed walls, and hearths are present within the structure.

The Creek equivalent of the summer pavilion in the eighteenth and nineteenth centuries may be the square ground, which consisted of four rectangular structures built at right angles to one another around a courtyard. These buildings appear to have been constructed in more or less the same way Cherokee pavilions were, with open walls on the side facing the courtyard and more substantially constructed back and side walls. The dimensions of these buildings are reported by Hawkins (Swanton 1928a:181) to be 40 × 16 feet; by Taitt (Swanton 1928a:185) to be 40 × 10 feet; and by Campbell (1930) to be 45 feet in length.

The buildings described above exhibit a surprising degree of architectural similarity given their wide distribution in time and geographic space and their occurrence among groups with different cultural traditions and ethnic identities. They are all surface structures. They are rectangular in shape and have dimensions of approximately 40 × 20 feet. Rear walls tend to be constructed with closely spaced posts, while front walls have widely spaced posts. All are located in front of one or two public buildings that are more heavily constructed and that in some cases had depressed floors and earth-embanked walls. The earlier mound sites have two buildings located behind the pavilion, while historic Cherokee and Creek sites have only one. Most pavilions were rebuilt at least one time. Hearths or fired floor surfaces were present in some structures and could have been destroyed by plowing in the others. Subfloor burials are known from structures at three, and possibly four, sites.

At King, the location of the Structure 16 entrance passage and the east–west alignment of Structures 16 and 17 on their northern sides indicate that the two buildings faced north. Further evidence for this orientation is provided by the cluster of 11 burials located immediately north of the two structures. If these burials have the same relationship to Structure 17 as the burials associated with Structure 11 at Toqua and the townhouse at Coweeta Creek, Structure 17 should be facing north.

Figure 6.5 illustrates the distribution of postholes in the plaza north of Structures 16 and 17. Burials have been deleted from the map in order to make the posthole distribution easier to see. There is clearly a slight concentration of postholes immediately north of the two structures. There is a sharp drop-

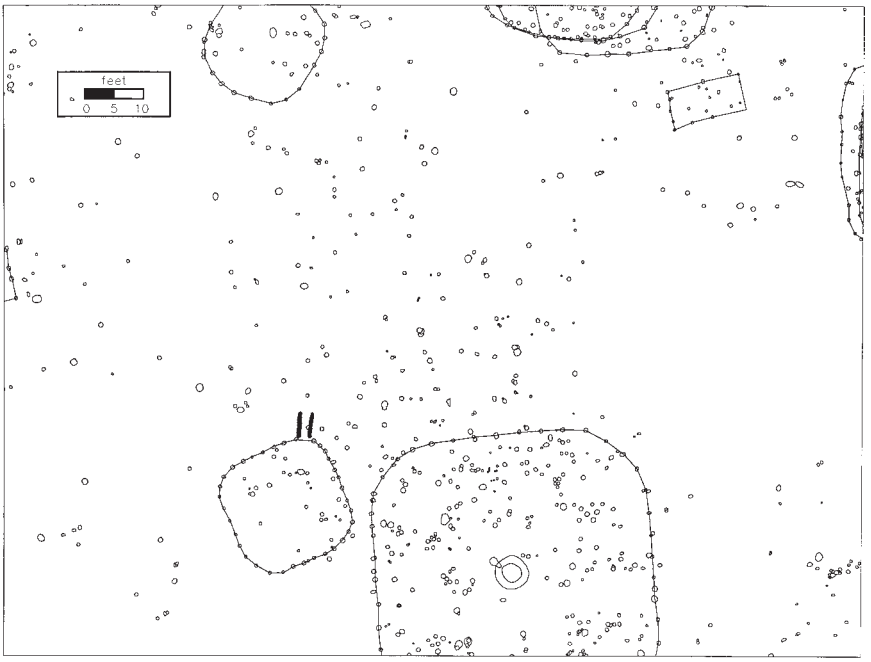


Figure 6.5. Postholes in the plaza north of Structures 16 and 17.

off in posthole density to the east and a slightly less dramatic decrease to the west. The boundary situation is more ambiguous to the north, where there are few postholes immediately southwest of Structure 15 but a fair number south of Structure 18.

Figure 6.6 illustrates posthole alignments for a structure that conforms to the general characteristics of pavilions outlined above. The building measures approximately 58 feet east–west and 23 feet north–south and is oriented 84 degrees east of north. The latter conforms to the orientation of Structure 17 (86 degrees) and to the orientation of most burials in the cluster, seven of which range between 79 and 90 degrees. Four postholes in the rear wall alignment are spaced 10.5, 13.5, and 13.0 feet apart. A gap at the western end of the alignment is 21 feet across, which would allow for an additional post spaced 10.5 feet from its neighbors. Two postholes in the eastern wall are fairly evenly spaced as well. Other than this, however, posthole distributions provide little support for the reconstruction. There is no northeast corner post and only a few irregularly spaced postholes in the northern and eastern walls. Erosion and plowing have removed more than a foot of soil in the area, and this may have

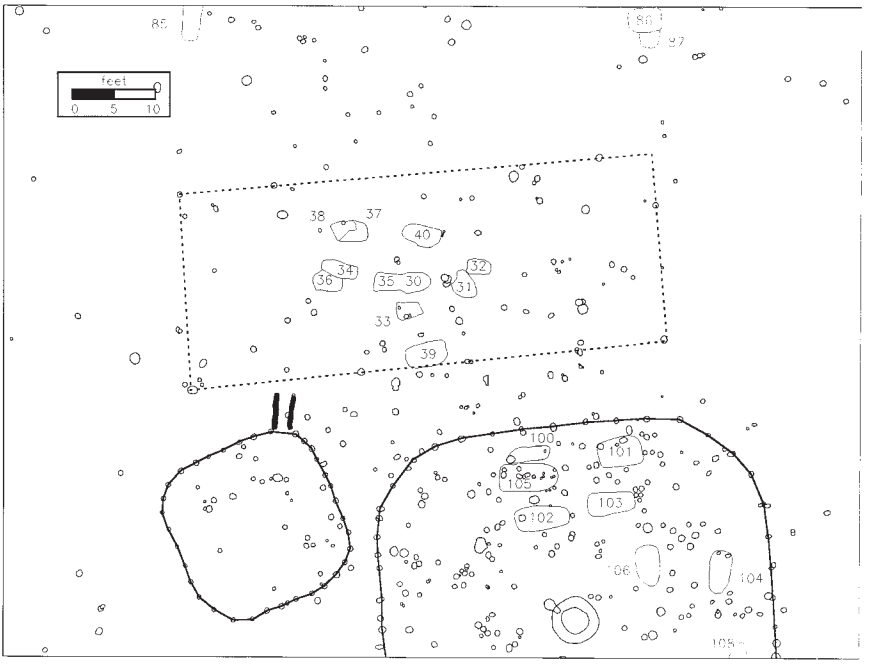


Figure 6.6. Architectural configuration of possible pavilion.

been enough to obliterate postholes belonging to a structure erected on the aboriginal ground surface.

Interpretation of Possible Pavilion

The pavilions at Chota-Tanasee, Tomatley, Chattooga, and Coweeta Creek were apparently used as a council house during the warm months of the year (Schroedl 1986:219–224). The eighteenth-century Creek made a similar distinction between winter and summer council houses, the structures in question being the rotunda and square ground. In both cases, the two structures were placed in close spatial proximity to one another and, in fact, can be said to have opened directly onto one another (Schroedl 1986:Figure 4.2; Waselkov and Braund 1995:Figures 23–25). The fact that Structure 17 was probably constructed in a basin with earth-embanked walls indicates it was intended to be used in cold weather. This being so, we can expect that a warm-season counterpart also existed at the site. If a lightly constructed building did indeed exist immediately north of Structure 17, it probably functioned as the warm-season council house.

Several factors argue against the posthole and burial concentration north of Structures 16 and 17 being a summer council house. To begin with, there is little direct architectural evidence for such a structure. Second, the building is not located where I would expect it to be given the extensive plaza area south of Structures 16 and 17. Only about 30 feet separate the pavilion and the northern edge of the plaza. South of Structures 16 and 17, however, there is almost an acre of open space and a large post, marking the geographic center of the town. Given the configuration of public facilities at the other sites reviewed above, I would expect Structures 16 and 17 to face southward and for the pavilion to be located immediately south of them. Of course, whether there is a pavilion or not, the fact remains that the 11 burials located immediately north of Structures 16 and 17 and the entrance passage for Structure 16 indicate both structures faced northward, away from the main plaza.

A third factor to consider is the likelihood that additional public architecture may have existed in the northwest quadrant of the plaza. Structures 16 and 17 are located well east of the site's north–south midline. To the extent that the town's layout was governed by considerations of symmetry, we can expect that public buildings, including a possible summer council house, may have existed in the plaza west of Structure 16. Other than Feature 64, a large pit, located 50 feet west of Structure 16, however, there is no posthole evidence of structures in that area. Erosion removed at least 2 feet of soil from this portion of the site and probably destroyed any architectural evidence for structures, especially structures erected on the aboriginal ground surface.

One final point to be considered is the role of the rectangular buildings on the summits of Mound A at Toqua and the Dyar mound. I have used the architectural characteristics of these buildings, along with historic Cherokee and Creek pavilions, to argue for the existence of a pavilion at King, but the validity of using the mound structures as analogues ultimately depends on whether these mound summit buildings functioned in the same way as historic council houses and pavilions. If they did not, their value as architectural analogues is diminished considerably.

Most later construction stages of Mound A at Toqua had two structures located on the back half of the mound summit. The smaller of these, Polhemus (1987:1221) identifies as an elite residence, but other evidence favors a more ritually oriented use. The larger members of each pair—Structures 11, 14, and 20, for example—he identifies as "public buildings," but he provides no indication of what kinds of activities took place inside them. With exterior dimensions ranging between 27 feet and 33 feet, it is clear that they did not have the same function as Structure 17 at King and the Creek rotunda and Cherokee

townhouse, that is, as a men's house and council house open to all or most adult male members of the community. The buildings are not large enough to accommodate such numbers, they were not packed with benches, and their location on the mound summit seems designed to restrict public access. A more reasonable reconstruction is that these buildings functioned as a place where the elite of the community and the larger polity met in council to participate in government decision making. This role, it seems to me, differs only in degree from that of the historic council house and could be ancestral to it. In this case, rectangular buildings like Structure 87, located on the front half of the Mound A summit, can reasonably be identified as the place where community and polity elite met during the summer.

This interpretation of mound-summit architecture does not include space for the chief's residence. Structure 3 on Mound A at Toqua and Structure 1 on Mound A at Little Egypt both have abundant evidence of use as habitations and both are located on terraces at the edge of the mound (Gougeon 2002; Polhemus 1987). A somewhat similar situation exists at the Natchez Grand Village where the Great Sun is said to have lived on a second mound across the plaza from the mound bearing the temple (Swanton 1911:111).

Given the evidence available, we cannot say with certainty that there was or was not a pavilion located north of Structures 16 and 17. The burial cluster supports the existence of such a building, but in the absence of comparative data from other late Mississippian settlements we do not know that all plaza-area burials occur within structures. Indeed, there appear to be outside burial clusters on the margins of the plaza at Ledford Island (Sullivan 1987).

Feature 45

Feature 45 consists of two large pits that overlap slightly along one edge (Figures 6.1 and 6.7). The deeper pit is roughly circular in outline and extends 4.1 feet below the base of plow zone. Walls are vertical but taper inward slightly near the base of the pit. At the base of plow zone, pit diameter measures approximately 3.5 feet. The bottom of the pit is flat, circular in outline, and measures 2.8 feet in diameter. The second pit is located immediately to the south but is only 2.5 feet deep. It is more rectangular in outline but has vertical walls and a flat base like the deeper pit. It measures approximately 3.6 feet across at the base of plow zone.

The deepest stratum in both pits is a .2- to .4-foot-thick layer of soil identified in the field as light brown sandy loam. Most of the remaining fill in both pits is a darker sandy loam containing charcoal flecks. A posthole-shaped de-

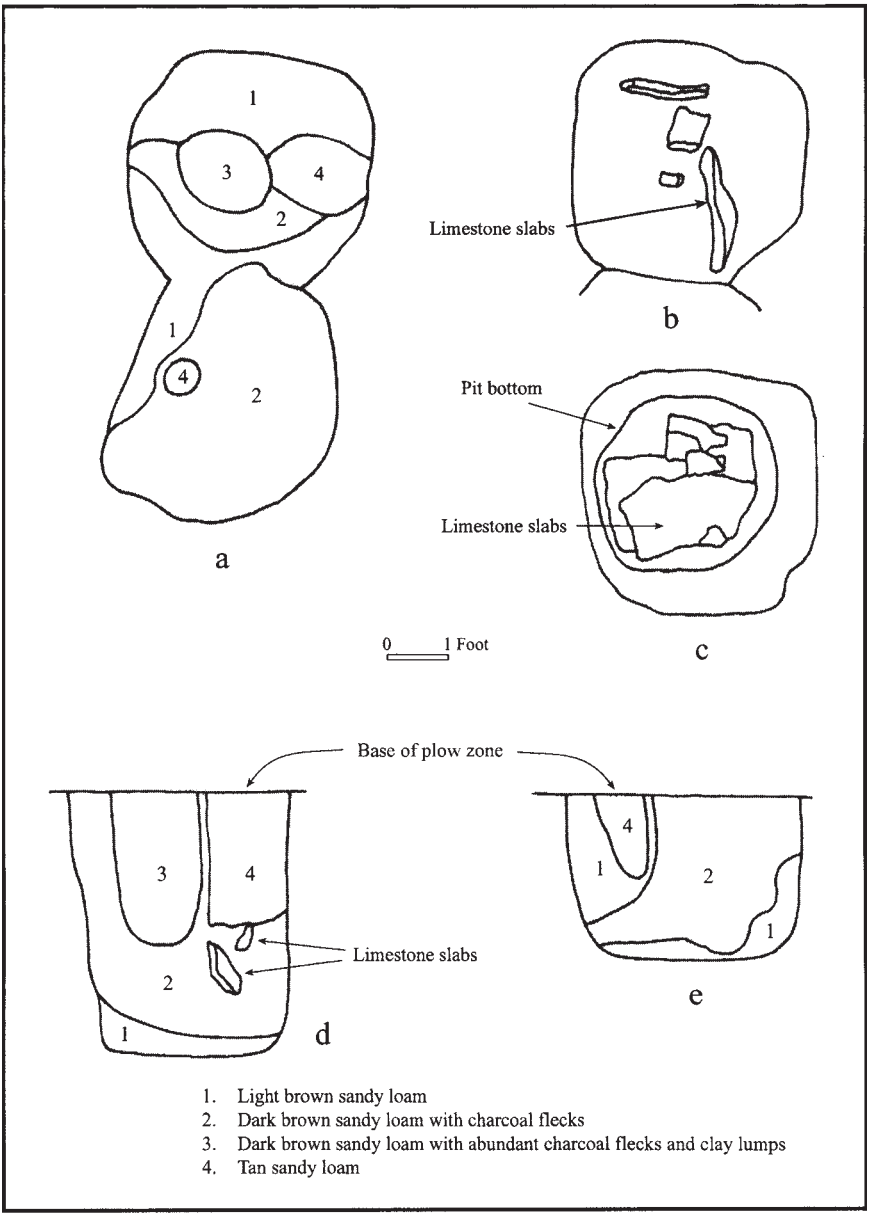


Figure 6.7. Feature 45 plan views and profiles: a, plan view at base of plow zone; b, plan view of deep pit at 1.7 feet below base of plow zone; c, plan view of deep pit at 3.9 feet below base of plow zone; d, east–west profile through deep pit; e, east–west profile through shallow pit.

posit of dark sandy loam with abundant charcoal flecks extends downward from the base of plow zone near the center of the deep pit. It is 1.5 feet in diameter and 2.4 feet deep.

Large slabs of limestone were present in the deep pit. Four lay on the bottom of the pit in a roughly circular arrangement measuring a little over 2 feet across. The three largest slabs measured almost 2 feet in their longest dimension and were .2–.3 feet thick. Four other slabs were located higher in the pit fill 1–2 feet below the base of plow zone. Two of these measured almost 2 feet across and were oriented almost vertically.

Erosion has removed at least 2 feet of soil from the site surface in the vicinity of Feature 45. This means that the two pits were originally at least 6.1 feet and 4.5 feet deep, respectively. If the smaller posthole-shaped feature in the large pit extended to original ground surface, it would have had a total depth of at least 4.4 feet.

Feature fill was dry screened through 1/4-inch wire cloth. Recovered artifacts include 32 sherds, 2 flint flakes, 41 pieces of rock, and one small daub fragment. Except perhaps for the relative paucity of material, there is nothing unusual about this collection; burial pit fill typically yields a similar array of items. No large fragments of wood were preserved in the pit at the time of excavation.

Feature 45 is almost certainly the posthole for a very large post. Given the dimensions of the deeper pit, we can infer that the post must have been 2 to 3 feet in diameter at its base and 20–40 feet tall. The flat-lying limestone slabs in the bottom of the pit probably served as a footing for the post, while the slabs located higher in the pit fill presumably served as chocks to steady the post in its raised position.

Large post pits have been reported at a number of Mississippian sites across the Southeast. In some cases the posthole consists of only a cylindrical pit; in others, it has a trenchlike extension excavated off to one side, the bottom of which slopes downward from ground surface to close to the bottom of the posthole. This latter type of posthole is sometimes referred to as a "post pit" and "bathtub pit" in the literature (Wittry 1969). Their lateral extensions are referred to as "erection," "insertion," or "slide" trenches and are usually identified as assisting in the raising of the pole (Coe 1995; Schnell et al. 1981; Wittry 1969).

Simple cylindrical postholes occur at the Rucker's Bottom site on the Savannah River in South Carolina (Anderson and Schuldenrein 1985:490) (Table 6.2). A cluster of five postholes occurs near the center of the plaza of the thirteenth-century Beaverdam phase village. They originate from two larger

Table 6.2. Physical characteristics of large post pits at various Mississippian sites

Site	Phase	Pit Diameter	Pit Depth	Trench Length	Number of Post Replacements
Rucker's Bottom[1]	Beaverdam	1.4–2.5	2.4–3.6	—	1–2
Cahokia					
Tract 15A[2]	Stirling	2.2	4+	7.0	—
Murdock Mound[3]	—	3.0	—	12.0	—
Moundville	Moundville I				
Mound E[4]	I	3.9–5.2	6.7–7.5	12–14	—
Sixtoe[5]	Etowah	2.1	—	3.6	2?
Mitchell[6]	—	3.5+	10+	—	—
Town Creek[7]	Pee Dee	1.5–2.0	2.5–4.5	6–9	3–5
Knoebel[8]	—	1.5	—	3.5	2
Bridges[9]	—	1.3	4.3	11.2	3?
Incinerator[10]	Ft. Ancient	1.9	4.0	4–4.5	1
King	Barnett	2.8	6.1	3.6	1?
Cemochechobee[11]	Rood	2.0	2.6	2.0	—

Note: Measurements in feet. Dashes indicate no data available.

1. Anderson and Schuldenrein 1985.
2. Wittry 1969.
3. H. Smith 1969.
4. Ryba 1997.
5. Kelly et al. 1965.
6. Porter 1969.
7. Boudreaux 2005; Coe 1995.
8. Bareis 1976.
9. Hargrave et al. 1983.
10. Heilman and Hoefer 1981.
11. Schnell et al. 1981.

pits measuring approximately 5 feet across and 1 foot deep. These latter may have functioned as slide trenches, but they lack most of the physical characteristics described above. All features are filled with large slabs of rock.

Post pits with lateral trenches are known from at least 10 sites located across the Southeast. They occur in three distinct kinds of architectural contexts: in large circular arrangements, within large public buildings, and in plazas. Circular arrangements of post pits are at present known only from the Tract 15A area west of Monks Mound at Cahokia (Pauketat 1994; Wittry 1969). Here, posts measuring around 2 feet in diameter were erected in a series of at least five large circles with diameters ranging up to 480 feet (Table 6.2).

Post pits were arranged in a line down the center of large rectangular structures at Cahokia and Moundville. At Cahokia, such structures occurred on the

summit of the Murdock and Monks mounds and at ground level in Tract 15A west of Monks Mound (Pauketat 1994; Smith 1969). At Moundville, three post pits with lateral trenches were evenly spaced along the midline of a structure erected on the summit of Mound E (Ryba 1997). In the Monks Mound and Moundville cases, structures were rebuilt and posts replaced at least one time. Post pits in all three mound summit structures are interpreted as roof support posts (Ryba 1997).

Kelly (Kelly et al. 1965) reports finding a number of large post pits with lateral trenches in association with a large rectangular wall-trench structure on the summit of the platform mound at Sixtoe Field in northwestern Georgia. It is not possible to determine from the reported information how many of the five listed posts had lateral trenches, the dimensions of each feature, or whether any were architecturally part of the structure. One post, Feature 18, appears to have been replaced two times.

Post pits with lateral trenches occur in the plazas of five sites. At Mitchell in the American Bottom east of St. Louis, a single large post pit located near the center of the plaza contained a bald cypress post measuring 2.5 feet in diameter and 10 feet in length (Porter 1969). Three to five large post pits with lateral trenches are clustered in an approximately 10-foot-diameter area in the center of the plaza at Town Creek in the North Carolina Piedmont (Boudreaux 2005:195). Large rocks were present in the fill of at least some of these pits. Three overlapping post pits with lateral trenches were present in the plaza of the late Mississippian Knoebel site in Illinois (Bareis 1976). One large post pit with between one and five lateral trenches extending outward from it was present in the plaza of a small Mississippian hamlet at the Bridges site in Illinois (Hargrave et al. 1983). Finally, a single large post pit with two lateral trenches is located in the center of the plaza of the Ft. Ancient Incinerator site in Ohio.

A single post pit with a lateral trench occurred in the pre-mound midden beneath Mound B at the early Mississippian Cemochechobee site on the Lower Chattahoochee River (Schnell et al. 1981:34–35). Whether this feature was located in a plaza at the time it was erected is not known.

Most of the features reviewed above held posts of substantial size. Raising a post 2–2.5 feet in diameter and 20–40 feet in length would have been a difficult undertaking. Lateral trenches probably assisted these efforts by serving as guides and by reducing the above-ground height of the pole as it was raised.

Lateral trenches probably also played a role in post removal. Lifting a large post out of a hole 5 feet or more deep would have been difficult, if not impossible, with the equipment available at the time. A lateral trench would have made the job much easier by permitting the post to be tipped onto its side,

thereby lifting its base out of the hole. Direct evidence of this technique may be present in the post pit at the Bridges site where the pit wall opposite the lateral trenches has been undercut by approximately 1 foot (Hargrave et al. 1983:95, Figure 26). As this post was pulled down onto its side, the elevated edge of the lateral trench appears to have caused the base of the post to rotate upward and into the side of the pit, gouging away some of its wall.

The shallow portion of Feature 45 at King, lying south of the deep pit, does not resemble the lateral trenches found at other sites listed in Table 6.2, but it most likely was excavated for this purpose. This interpretation is supported by the fact that it is located immediately adjacent to the deeper pit and extends down to within 1.5 feet of the bottom of that pit. We will never know what the upper wall of Feature 45 looked like because of the loss of some 2 feet of soil in the area as a result of erosion. The upper wall of the shallow pit may have sloped outward to the south, making this portion of the feature longer and more like a trench with a sloping bottom.

Several characteristics of Feature 45 argue against the shallow pit being a slide trench. As preserved at the time of excavation, it forms a trench only 3.5 feet long. There should have been evidence that its lower edge adjacent to the deep pit was crushed under the weight of the leaning pole. We might also expect to see evidence of undercutting in the lower portion of the northern wall of the deep pit. None of these characteristics were noted at the time of excavation. They may not have existed, but it is also possible that they were missed by the excavators working within the cramped confines of the feature.

If the shallow pit was not intended to be used in post placement and removal, why was it constructed? One possibility is that it functioned in rituals associated with the post in the deeper pit. A dedicatory ritual involving the placement of special material in the pit is one possibility.

What function did posts such as the one represented by Feature 45 serve? A large post was placed in the center of chunkey yards in eighteenth-century Creek settlements (Swanton 1928a). These "chunkey poles" stood 30–40 tall and were surrounded at their base by a low mound of earth. Only two uses of the chunkey pole are described by contemporary sources. In one, objects fastened at the top of the pole were shot at with guns and bow and arrows "at certain times appointed" (Waselkov and Braund 1995:154). In the single-pole ball game, male and female teams attempted to hit the pole with a leather ball (Swanton 1928a:467).

There is some danger in using the eighteenth-century chunkey pole as an analogy for poles erected in the plazas of prehistoric Mississippian towns and mound centers. According to Bartram (Waselkov and Braund 1995:154),

chunkey yards in "ancient times" were located in the center of the town between the rotunda and square ground. This central location conforms to that of the typical Mississippian plaza. However, Bartram also reports that the yards varied in size depending on the size and importance of the town and that some were 200 to 300 yards long (Waselkov and Braund 1995:154). Few Mississippian sites have plazas that approach these dimensions. Certainly sites such as King, Little Egypt, Toqua, Ledford Island, Town Creek, and Rucker's Bottom do not.

That the chunkey pole had significance beyond that of a target for games is suggested by the low circular mound of earth Bartram describes as surrounding its base. In early twentieth-century Muskogee square grounds in Oklahoma, these mounds consisted of earth swept from the area surrounding the pole during purification rituals associated with the annual Green Corn ceremony (Knight 1989). This suggests that the pole and surrounding yard were involved in activities of sufficient ideological significance as to require annual purification and renewal. Given the evidence for their prominent locations and periodic replacement at several prehistoric sites and the ethnographic practice of ritually purifying the yard around them, I propose that these posts served as a symbol of community existence and identity. As such, they were probably erected at the time a community was formally established; they were probably ritually replaced periodically as part of a larger ceremonial event; and they may have been removed at the time a community was abandoned. The latter action is suggested by the current practice of Creek Indians in Oklahoma of formally signifying the termination of a town as a community by putting its sacred fire "to sleep" (Bell 1990:339; John Moore, personal communication 1997).

Periodic post replacement as part of a larger community ritual event is suggested by evidence at Town Creek. The mound at this site seems to have had at least four construction stages represented by the "earth lodge," Town House 1, Town House 2, and the disturbed mound fill overlying Town House 2. With between three and five large post pits in the plaza in front of the mound, it is possible that a new post was erected (and the old one removed) each time major construction occurred on the mound. Pauketat (1994:138) has made a somewhat similar suggestion for the large, post-pit circles at Cahokia, proposing that they were rebuilt along with other "monuments" as part of a calendrical ritual cycle. The fact that post pits at Town Creek were not reused suggests that the symbolic emphasis of the event was on setting up a new post, distinct from its predecessor, a theme that can be seen in the practice of covering old mound summits with a mantle of new fill (Hally 1996; Knight 1989).

Feature 45 is located 240 feet from the eastern ditch, 245 feet from the western ditch, 222 feet from the southern ditch and approximately 240 feet from the bank of the Coosa River at the northern end of the site (Figure 6.1). The fact that it is located so close to the exact center of the settlement indicates that it would have been an integral element of any symbolic or cosmological plan used to lay out the town (see Chapter 8). This possibility reinforces the suggestion that large posts centrally located in plazas served as symbols of community identity.

In line with this proposal, we may speculate that the Feature 45 post at King was removed in conjunction with the town's abandonment. We may also speculate that the smaller posthole intrusive into the fill of Feature 45 represents a replacement post. Two problems exist for this latter suggestion, however. There is no evidence for the other public buildings (Structures 16 and 17) being rebuilt, which one might expect to have happened in conjunction with the placement of a new post. The replacement post, furthermore, would have been significantly smaller than the original. A small central post placed in the same pit that held its predecessor might reflect a decline in the community's size and vitality preceding ultimate abandonment, but the lack of matching rebuilding in structures such as Structures 16 and 17 is more difficult to explain away.

It is interesting to speculate why there was not a post remnant in Feature 45 at the time of excavation in 1974. A 2.5-foot-diameter post might have survived intact into the nineteenth century (see Porter 1969). Any attempt to remove it with a team of draft animals at the time of initial Euro-American land clearing may have broken the post at ground level, leaving the basal portion in the ground. Cutting the post down would have had the same result. The absence of preserved wood in Feature 45, then, may mean that the post was removed by the aboriginal occupants of the site, presumably at the time the town was abandoned.

Feature 11

Feature 11 is a large posthole located in the plaza 44 feet southeast of Feature 45 (Figures 6.1 and 6.8). It appeared at the base of plow zone as a 3-foot-diameter deposit of dark brown sandy loam, enclosed on its southern and eastern sides by an irregular deposit of lighter brown soil. Within 1.5 feet of the surface, however, the feature narrows to a diameter of 2 feet and from that point tapers gradually to a diameter of 1 foot at pit bottom. The feature extends to a depth of 3.5 feet but allowing for soil loss was probably originally in excess of 5.5 feet

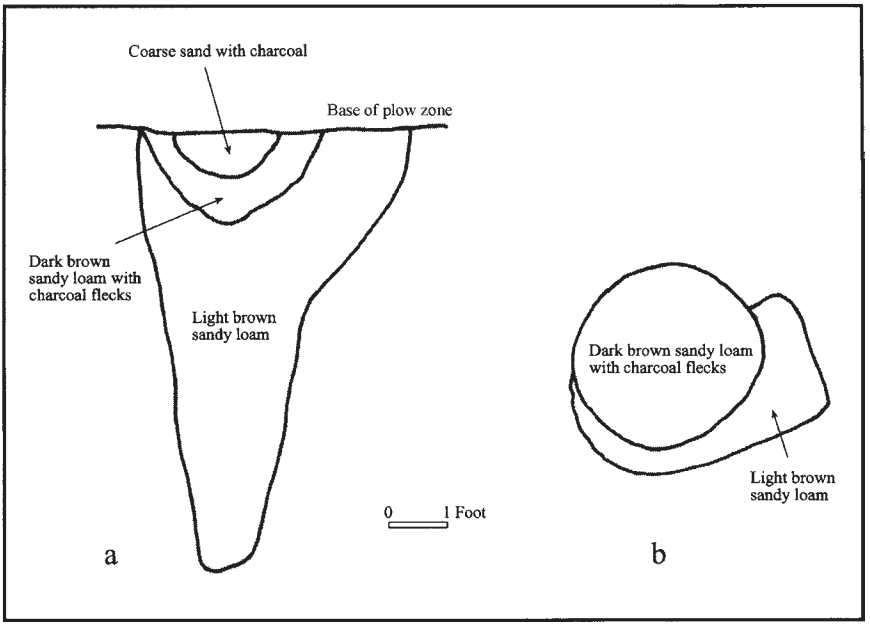


Figure 6.8. Feature 11: a, east–west profile through pit; b, plan view of pit at base of plow zone.

deep. The steeply tapering lateral extension of the feature to the east may represent a slide trench used to erect and/or extract the post.

Pockets of charcoal-rich sand and clay occur at the top of the feature, but below 1 foot, fill is a light brown sandy loam. Dry screening fill through 1/4-inch wire cloth yielded 16 sherds, 19 flint flakes, 50 pieces of rock, and 1 daub fragment. Except possibly for the relatively large number of flakes, this collection is similar to what is typically recovered from the fill of burial pits.

At the time of excavation in 1974, Feature 11 was considered to hold a large freestanding post that functioned in some kind of community activity. Comparison was made in professional papers (Hally et al. 1975) to the "slave posts" described by Bartram (Waselkov and Braund 1995:154) as occurring in eighteenth-century Creek chunkey yards. Because Bartram's slave posts occurred in pairs and because of Feature 11's location 15 feet east of the site's north–south oriented axis passing through Feature 45, we anticipated finding a second matching post in the southwest quadrant of the plaza. No such feature was found in the 1992–1993 excavations. The size and plaza location of Feature 11, nevertheless, indicate that it originally held a tall, freestanding post. How it was used is not clear.

Feature 64

Feature 64 is a large circular pit located in the plaza west of Structure 16 (Figure 6.1). It measures 3.6 feet in diameter at the base of plow zone and 2.6 feet deep (Figure 6.9). Since erosion has removed at least 2 feet of soil in the area, original pit depth must have exceeded 4.6 feet. Walls were vertical along the eastern and southern sides of the pit. The western wall was also vertical but had a steplike ledge about .7 feet wide near the top. The northern wall slopes inward slightly from top to bottom. The base of the pit is circular with a diameter of 2.7 feet and is flat except for a depression near the center measuring .6 feet deep and .8 feet in diameter.

Pit fill was a homogenous dark brown sandy loam containing some charcoal flecks, a small quantity of potsherds and flint debitage, and one triangular point. Small fragments of decayed wood were present in the lower central portion of the pit. The grain in these appeared to have a vertical orientation, suggesting that the piece of wood from which they derived had stood upright in the pit.

The function of Feature 64 is not evident from its physical characteristics or fill. It is approximately the same diameter as Feature 45, but it appears to be considerably shallower and contained no large slabs of rock. The decayed wood recovered from the pit, however, could be the remains of a large post, and the stepped side wall could be the lower end of a slide trench that has been largely destroyed by erosion.

Several pieces of evidence suggest that Feature 64 was an important element in the symbolic and cosmological plan of the town. To begin with, pits other than burial pits and postholes are quite rare at King. This one is located in the plaza and, in terms of the town's compass orientation, almost exactly due west of Structure 17. Site orientation, measured from the eastern and southern palisade lines, is approximately 77 degrees east of north. A line drawn through Feature 64 and the hearth in Structure 17 is oriented 82 degrees east of north. Structure 17 itself is oriented 86 degrees east of north.

The layout of the King site exhibits a certain amount of symmetry. The area enclosed by the defensive perimeter is almost exactly square and the large post pit (Feature 45) is almost exactly centered within this space. Structures 16 and 17 seem to violate this symmetry by being located in the northeast quadrant of the plaza. We might expect, therefore, to find public/ceremonial facilities in other quadrants. Excavations clearly show that there were no complementary buildings located in the southeast corner of the plaza, but erosion has destroyed most evidence for architecture in the remaining two quadrants. Given

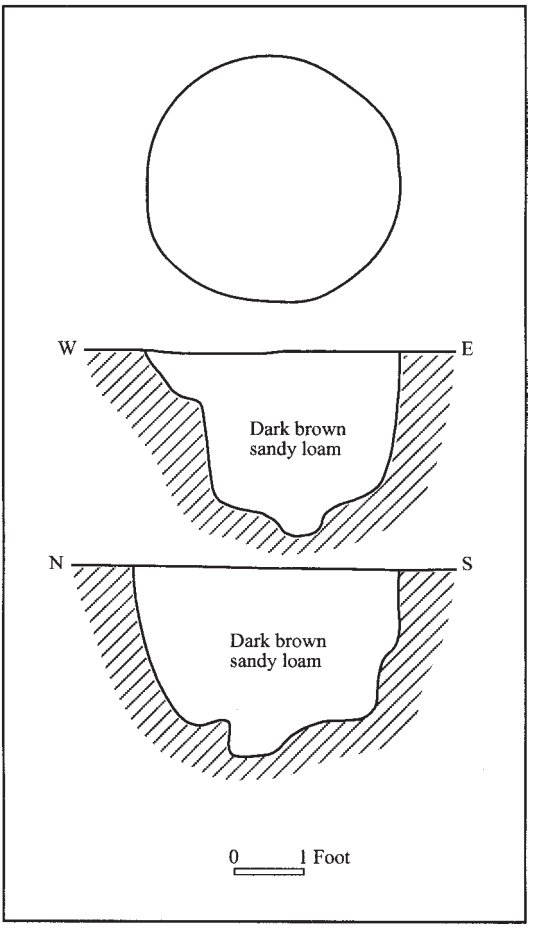


Figure 6.9. Feature 64 plan view and profiles.

the absence of public architecture in the southeastern plaza area, the location that stands in the spatially most symmetrical relationship to Structures 16 and 17 is the northwest quarter of the plaza where Feature 64 is located.

Feature 64's location does not exactly mirror that of the Structure 17 hearth. The latter is located 75 feet east of the site's north–south midline, while Feature 64 is only 17 feet west of the midline. Feature 64, of course, may have been only one element in a larger complex of architectural features, in which case where it falls along the site's east–west axis may not be that important. Postholes were recorded in the vicinity of Feature 64, but they are not common and they do not form any meaningful pattern. Unfortunately, most architectural

features in this part of the plaza have been destroyed by erosion and plowing. Given the evidence that is available, the most that can be said about Feature 64 is that it probably had a public/ceremonial function and may have been part of a larger complex of facilities and buildings located in the northwestern part of the plaza.

Defensive Perimeter

The King site is enclosed by a ditch and palisade defensive perimeter on three of its four sides (Figure 6.1). Approximately two-thirds of the ditch line was exposed in the shovel-shaved portion of the site. The configuration of the western third of the ditch is reconstructed from shovel tests, five trenches excavated across the ditch, and two large shovel-shaved areas. The palisade can be traced as a continuous line along the eastern side of the site for a distance of 470 feet. Segments of the palisade have survived erosion and plow destruction on the southern side of the site, but it appears to have been completely obliterated on the western side.

Palisade

Palisade postholes averaged .805 feet in diameter and were spaced on average 1.54 feet apart (measured center to center). Five postholes chosen at random for excavation from a 25-foot-long section of palisade located east of Structure 9 had depths ranging between 1.4 feet and 1.6 feet. Since this is the area of the site least impacted by erosion, it is likely that these postholes have lost less than 1 foot of their total depth. On the basis of these measurements, we can be fairly certain that palisade posts generally did not extend more than 2.0 feet below the aboriginal ground surface.

The size and shape of the posts making up the palisade are unknown. Of the approximately 315 mapped palisade postholes, only three were recorded as containing fragments of charred wood. The extensive utilization of split posts in PDS construction raises the possibility that split posts were also used in the palisade.

Palisades are reported for a number of Mississippian sites across the eastern United States (Milner 2000). In many cases—Etowah (Larson 1972), Angel (Black 1967), Kincaid (Cole 1951), Warren Wilson (Dickens 1976), Rucker's Bottom (Anderson and Schuldenrein 1985), Moundville (Vogel and Allan 1985), Ocoee, Hixon, Mouse Creeks, Ledford Island (Lewis and Kneberg Lewis 1995), Sellars (Butler 1981), and Lake George (Williams and Brain 1983)—posts were placed in a narrow trench. Sites with palisades constructed of individually set

posts—Aztalan (Barrett 1933), Lamar (Jennings 1939), Woodstock Fort (Caldwell 1957; Fairbanks 1940), Town Creek (Coe 1995), Loy (Polhemus 1998), Gunter's Landing (Webb and Wilder 1951), and Jonathan Creek (Schroeder 2006; Webb 1952)—have much the same distribution in time and space. Some sites—Toqua (Polhemus 1987), Dallas (Lewis and Kneberg Lewis 1995), Lubbub Creek (Blitz 1993), and Morris (Rolingson and Schwartz 1966)—have both types of construction.

Figures for posthole diameter, depth, and spacing for palisades with single-set post construction are listed in Table 6.3. Posthole diameter at King falls within the range represented at these sites, while spacing is somewhat greater. Published figures for posthole depth are probably all on the low side since plowing and erosion have destroyed the ground surfaces from which posts originated at each site. Nevertheless, King falls within the published range.

Preservation of palisade postholes decreases from east to west along the southern side of the site. This area is also marked by a decrease in subsoil surface elevation from 97.0 feet to 96.0 feet, the result of increasingly severe erosion. Presumably palisade posts did not extend much below 97.0 feet, and as a result they are more likely to be obliterated by erosion and plowing as one moves westward.

Exterior wall posthole alignments for the five PDS mapped in the southwestern portion of the site are largely intact, although posthole depth for the westernmost structure (Structure 29) averages only .2 feet. Exterior wall postholes were not excavated as deeply as palisade posts. Where they have been measured, these postholes extend only about 1.0–1.5 feet below the structure floor from which they originated. That they are better preserved than palisade posts in the southwestern part of the site is undoubtedly due at least in part to the fact that structure floors were depressed 1–2 feet below the contemporary ground surface.

Palisade posts at some Mississippian communities—Aztalan (Barrett 1933), Angel (Black 1967), Matthews (Walker and Adams 1946), Lake George (Williams and Brain 1983), Sellars (Butler 1981), and possibly Moundville (Steponaitis 1983) and Kincaid (Cole 1951)—were placed in earthen embankments that stood 3 feet or more above the adjacent ground surface. This practice would have meant that palisade postholes did not have to be excavated as deeply into subsoil because earth piled around the lower portion of posts would have helped to stabilize them. In those cases where a ditch was located adjacent to the palisade, the earth for the embankment was almost certainly derived from the ditch.

Table 6.3. Posthole characteristics of single-set post construction palisades at various Mississippian sites

Site	Diameter	Depth	Spacing
King	.805	1.4–1.6	1.54
Woodstock Fort[1]	.5–.75	—	1.0–1.5
Lamar[2]	.5–1.0	1.0–1.5	1.0
Town Creek[3]	—	—	.94
Toqua[4]			
Perimeter B	.5–.65	—	1.2
Loy[5]			
Palisade I	.7–.95	.4–2.4	1.4
Palisade II	.35–.55	.3–1.6	1.3
Dallas[6]	.7	1.0	—
Lubbub Creek[7]	.8	1.3	1.5
Jonathan Creek[8]	.9	2–3.5	1.29
Gunter's Landing[9]	.35–.9	.9–1.4	1.2
Morris[10]	.45–1.3	.2–1.1	—
Aztalan[11]	1.0	?	1.2

Note: Measurements in feet. Diameter value includes average or range of measurements. Dashes indicate no data available.

1. Caldwell 1957.
2. Fairbanks 1940.
3. Boudreaux 2005; Coe 1995.
4. Polhemus 1987.
5. Polhemus 1998.
6. Lewis and Kneberg Lewis 1995.
7. Blitz 1993.
8. Schroeder 2006; Webb 1952.
9. Webb and Wilder 1951.
10. Rolingson and Schwartz 1966.
11. Barrett 1933.

There is little stratigraphic and no above-ground evidence for an embankment at the King site. That one may have been present in aboriginal times is suggested by the relatively shallow depth of palisade postholes, by the fact that other Mississippian sites with palisade and ditch defensive perimeters had embankments, and by the presence of a silty loam soil in the highest fill layers of the ditch. The latter, described in greater detail in the following section, is probably subsoil excavated during ditch construction that was banked around the base of the palisade and ultimately pushed back into the partially filled ditch in the 1920s.

We are fortunate to have a description by Elvas of the palisade that enclosed

the town of Ulibahali. Since he states that palisades of similar design were seen at other towns visited by the expedition after leaving Ulibahali, it is likely his description is applicable to the King site palisade: "The enclosure, like that in other towns seen there afterward, was of thick logs, set solidly close together in the ground, and many long poles as thick as an arm placed crosswise. The height of the enclosure was that of a good lance, and it was plastered within and without and had loopholes" (Robertson 1993:94).

The comparison to a "lance" suggests that the palisade was 9–12 feet high (Hudson 1997:68). Given the distance between posts, the King site palisade would have provided little protection without a thick coating of clay plaster. Elvas does not describe the palisade as having an earth embankment, but vegetation may have obscured this feature.

Analysis of charred wall and roof support posts from burned domestic structures at King clearly demonstrates that posts do not burn very far, if at all, below the surrounding ground surface. If that ground surface is the top of a 2- to 4-foot-high earth embankment, it is very unlikely that burned post remnants would be found in postholes exposed at the base of plow zone today. Given this situation, the near total absence of charred palisade posts does not mean that the palisade did not burn, only that any record of its burning has been obliterated by erosion and plowing. In this light, it is difficult to interpret the three palisade postholes noted above as containing charred wood. Perhaps charred remnants of these posts collapsed into the hollow post mold created by decay of the unburned post below ground.

The total length of the palisade was approximately 1,240 feet. With an average spacing between posts of 1.54 feet, the number of posts making up the palisade would have been around 800. Using labor cost estimates for cutting, trimming, transporting, and erecting posts provided by Coles (1973), each post would have required 1.17 person-hours to install, and the entire palisade would have cost 936 person-hours or 187 5-hour person-days. Using labor costs estimated by Hammerstedt (2005:227–228), 321 person-days would have been required to construct the palisade. If trunks were split into two or three posts, this cost could be substantially reduced.

The posthole evidence from the eastern side of the site points to just one palisade having been constructed at King. Linear posthole alignments, however, are present in a few locations both inside and outside the identifiable palisade (Figure 6.1). Some of these may represent repairs to the original palisade, but there is no strong evidence that any of them are remnants of earlier or later palisades.

Posthole alignments located adjacent to the ditch at S470 east of Structure

20 and S210 east of Structure 5 could be sections of an earlier palisade that was destroyed when the ditch was excavated (Figures 6.10 and 6.11). There are several problems with this interpretation, however. To begin with, the two alignments differ from one another in average posthole size and spacing. Second, they differ in similar fashion from the main palisade, the alignment east of Structure 20 having more widely spaced postholes and the alignment east of Structure 5 having smaller diameter and more widely spaced postholes. Finally, there are no burials or architectural features identifiable as PDS and RS east of or overlapping the main palisade. If a second palisade once existed where the ditch is today, we should find such evidence of domestic occupation in this zone.

Posthole clusters that could represent the remains of bastions occur in four locations along the exterior of the palisade line: S495 E710, S415 E785, S280 E765, and S350 E780. The first, located southeast of Structure 25, is a small semicircular array of posts that measures 6.2 feet along the axis of the palisade and extends 4 feet out from it (Figure 6.10). The second, located east of Structure 21, is a slightly larger subrectangular arrangement of posts that measures 9.2 × 6.8 feet (Figure 6.12). The third, located east of Structure 9, is a small semicircular array of postholes that measures 6 feet along the axis of the palisade and extends 3.7 feet out from it (Figure 6.11). The fourth, located east of Structure 8, is a large but amorphous array of postholes that extends for approximately 32 feet along the palisade and reaches out to the edge of the ditch, 18 feet away (Figure 6.12). No clear pattern can be identified in these posts, although there is a suggestion of a straight line of posts east of and paralleling the palisade at a distance of 3.8 feet and a rectangular arrangement on the south edge of the larger array. The latter measures 9 × 8 feet and could be a bastion.

Many, but by no means all, palisades known from Mississippian sites have bastions. In most cases, these features consist of rectangular projections of the palisade line. Dimensions range around 8–15 feet on a side (Table 6.4), and spacing between bastions, where it can be determined, generally ranges between 50 and 80 feet.[3] The sole exception to this pattern is found at Town Creek, where only two bastions may exist along the entire site perimeter. These straddle the palisade and enclose a gap in the palisade line. They are rectangular and measure approximately 12 × 14 feet. Unlike the more common bastion form, which seems to have served as a platform from which warriors could defend the palisade curtain, these bastions evidently served only to control access to the town through the entrances located in their lower walls.

The three semicircular and subrectangular posthole arrangements at King

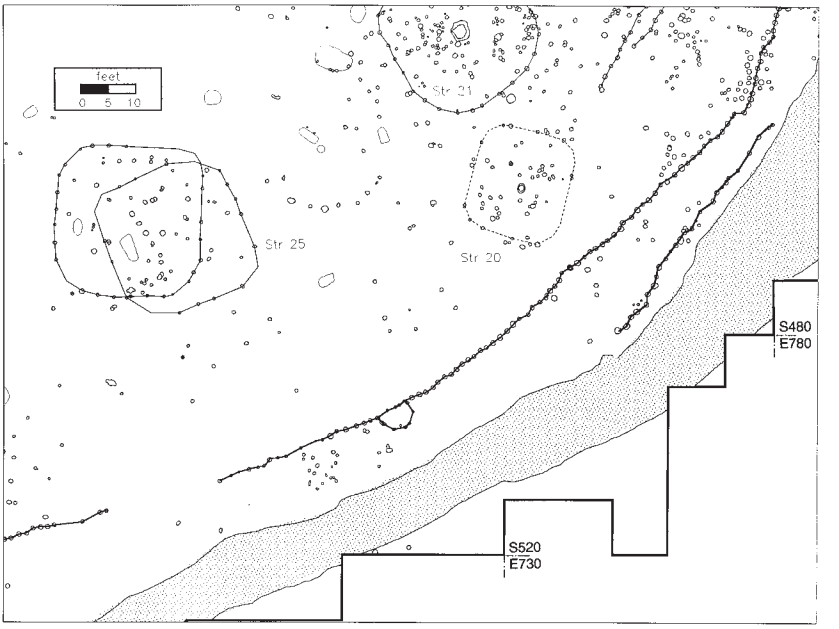


Figure 6.10. Southeastern segment of palisade and ditch.

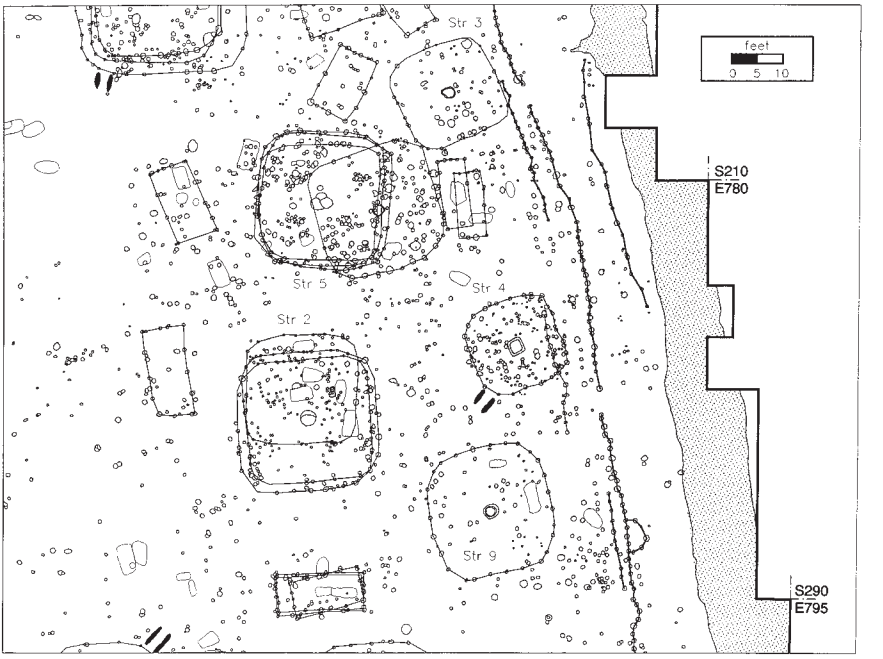


Figure 6.11. Northeastern segment of palisade and ditch.

Figure 6.12. East-central segment of palisade and ditch.

do not resemble any of the bastions described above. Their width is only slightly smaller, but they project outward from the palisade only one-half to one-third as far. Their rounded outline and the fact that the palisade extends across their inner side also sets them apart. Also distinctive of these features is that posthole spacing is rather irregular and greater (1.7–2.4 feet) than it is in the palisade curtain. Finally, the distance between these three features (100 feet and 130 feet) and the curvature of the palisade line between two of them would have prevented defenders from covering all of the intervening curtain wall.

The posthole array at S350 E780 is large enough to accommodate a bastion of the size and shape characteristic of Mississippian bastions (Figure 6.12). Unfortunately, the absence of a really clear rectangular posthole pattern within it and the variability in posthole size and spacing suggest that architectural features other than, or in addition to, a bastion are represented. As discussed below, however, evidence for an entrance only 20 feet to the south does increase the likelihood that a bastion was constructed here.

Palisade gates have been recorded at only a small number of Mississippian and Woodland sites in the Appalachian region: Town Creek (Coe 1995), Jen-

Table 6.4. Architectural characteristics of bastions at various Mississippian sites

Site	Width (perpendicular to palisade)	Length (parallel to palisade)	Spacing
Toqua[1]	8.6–12.9	11–18	58–66
Warren Wilson[2]	10	15	65
Etowah[3]	10	10	—
Loy[4]	8	8	—
Gunter's Landing[5]	5.5–7	11.6–15.5	80
Jonathan Creek[6]	6.5–10.5	5.9–27.6	65–210
Moundville[7]	13	23	115–130
Angel[8]	11	13	120
Town Creek[9]	9–12	14	—
Morris[10]	7.5	7.5	—
Lubbub Creek[11]	—	—	98
Aztalan[12]	22	5.0	61–95

Note: Measurements in feet. Dashes indicate no data available.

1. Polhemus 1987.
2. Dickens 1976.
3. Larson 1972.
4. Polhemus 1998.
5. Webb and Wilder 1951.
6. Schroeder 2006; Webb 1952.
7. Knight and Steponaitis 1998.
8. Black 1967.
9. Boudreaux 2005; Coe 1995.
10. Rolingson and Schwartz 1966.
11. Blitz 1993.
12. Barrett 1933.

rette and Wall (Ward and Davis 1993), Shannon (Benthall 1969), Sloan (Dunnell et al. 1971), Jonathan Creek (Webb 1952), Gunter's Landing (Webb and Wilder 1951), and Ocoee (Lewis and Kneberg Lewis 1995). Two main types can be distinguished: the bastion gate, which has been reported only at Town Creek, and the overlapping entrance. The latter is formed when two sections of palisade overlap, forming a long, narrow passage that parallels the palisade line. Depending upon the configuration of the overlapping palisade sections, we can distinguish two subtypes, a simple overlapping entrance type and a cul-de-sac type (Lafferty 1993). The former is found at the Early Mississippian Woodstock Fort site in Georgia (Caldwell 1957), and the Late Woodland Jenrette and Wall sites in North Carolina, Shannon site in Virginia, and Sloan site in Kentucky. It consists of nothing more than an overlap of two parallel sections of palisade. A person passing through the resulting passage does so without changing direction at either end.

The cul-de-sac entrance is found at the Mississippian culture Jonathan Creek site in western Kentucky, Gunter's Landing site in northeastern Alabama, and Ocoee site in Tennessee. In this subtype, the entrance is a gap in the palisade that is screened by an outer section of palisade wall. The curtain wall extends out from the line of the palisade and turns to parallel it for a distance of 10 feet or more. A person entering the resulting passageway has to turn 90 degrees at the end of it to pass through the gap in the palisade. A bastion is positioned less than 20 feet from the outer end of the passageway at both Jonathan Creek and Gunter's Landing. Whether these are common or necessary components of the cul-de-sac type entrance or are characteristics of these two sites only is not known.

There are a number of gaps in the King site palisade that could mark entrances to the town. Within the 470 feet of continuous palisade, there are 13 locations where 2.5- to 3.5-foot-wide gaps occur. None of these smaller gaps are marked by the kinds of architectural features—bastions, overlapping palisade segments, or screening walls—that we might expect to find at an entrance. All are probably the result of one or two postholes being missed by mapping crews or destroyed by erosion and plowing.

Four larger gaps in the palisade, because of their size, are more likely to represent entrances. One of these, located at S250 east of Structure 4, is the result of failure to excavate a 5-foot-wide baulk left standing at the end of the 1974 field season (Figure 6.11). Another one located at S320 east of Structure 7 is 6.5 feet wide and has a number of postholes located outside of it that could be interpreted as a screening wall (Figure 6.12). The gap itself, however, is filled by a dark surface discoloration that probably obscured the palisade postholes within it. A third gap, measuring 4.7 feet wide, is located east of Structure 3 at S200 (Figure 6.11). This opening is partially covered by the posthole alignment discussed above as a possible second palisade remnant. It is also overlapped on the interior by a linear posthole alignment that may represent a freestanding wall or palisade repair wall. Several pieces of evidence indicate that this gap is not an entranceway. Structure 3 is located less than 3 feet from the opening. The interior wall segment would not function very efficiently as a screen or impediment to entry because it is inside the palisade. The outside wall, adjacent to the ditch, appears to only partially overlap the opening in the palisade. The postholes making up this alignment, furthermore, are so irregularly spaced that we cannot be sure they indeed constitute a wall. In spite of these objections, the fact remains that there is a large gap in the palisade. It is difficult to believe that excavators simply missed the postholes here. We cannot, therefore, discount the possibility that these three features do represent an entrance.

The best candidate for an entrance occurs east of Structure 8 at S380 (Figure 6.12). Here there is a gap of 5.4 feet in the palisade. The palisade wall on the south side of this gap turns inward and parallels the palisade section north of the gap for a distance of 19 feet. The configuration of the two sections of wall is suggestive of the cul-de-sac type entrance except that the passageway is inside the palisade line rather than outside. Eight feet south of the gap is a 10-foot-long line of postholes extending out from the palisade at a right angle. This alignment may represent a wall designed to shield the entrance or impede entry from the south. The large array of postholes located 20 feet north of the gap contains at least one set of postholes that may represent a rectangular bastion.

There is little reason to question the existence of the two overlapping palisade segments at S380. Posthole size and spacing in each segment are similar to those of the palisade in general, and the two alignments do not have to be teased out of a morass of extraneous postholes. There are, however, several problems with identifying these alignments as an entrance. To begin with, the subsoil surface in the palisade gap was obscured by a dark surface stain. It is possible that there were palisade posts here and that their existence was masked by the stain. A more serious problem is posed by the distribution of postholes at the northern end of the passageway formed by the overlapping palisade segments. The most widely spaced postholes here are only 1.5 feet apart, a distance that seems hardly adequate for the easy passage of townspeople, especially if they were carrying anything bulky. A final potential problem is that the passageway lies inside the palisade line, not outside of it as at the Jonathan Creek and Gunter's Landing sites. What difference, if any, this would make in the actual defensibility of the entrance is not clear. The fact remains, however, that this particular configuration is unusual.

A second strong candidate for an entrance through the extant palisade is located at S530 E620 (Figure 6.13). The palisade here is discontinuous as a result of the destruction of individual postholes through erosion and plowing. The two palisade segments remaining at this location, however, are not in line with one another. Their location and orientation, rather, suggests that they may have formed a simple overlapping entrance. An entrance here would fall on the site's north–south axis that runs though the large Feature 45 post marking the center of the site. It is not unreasonable to expect that entrances to the town would be tied into its overall symmetry.

Linear posthole alignments paralleling the palisade occur at S200, S250, S280, and S420 along the inner side of the palisade. The alignment at S280 east of Structure 9 is almost 20 feet long and lies 2 feet from the palisade (Fig-

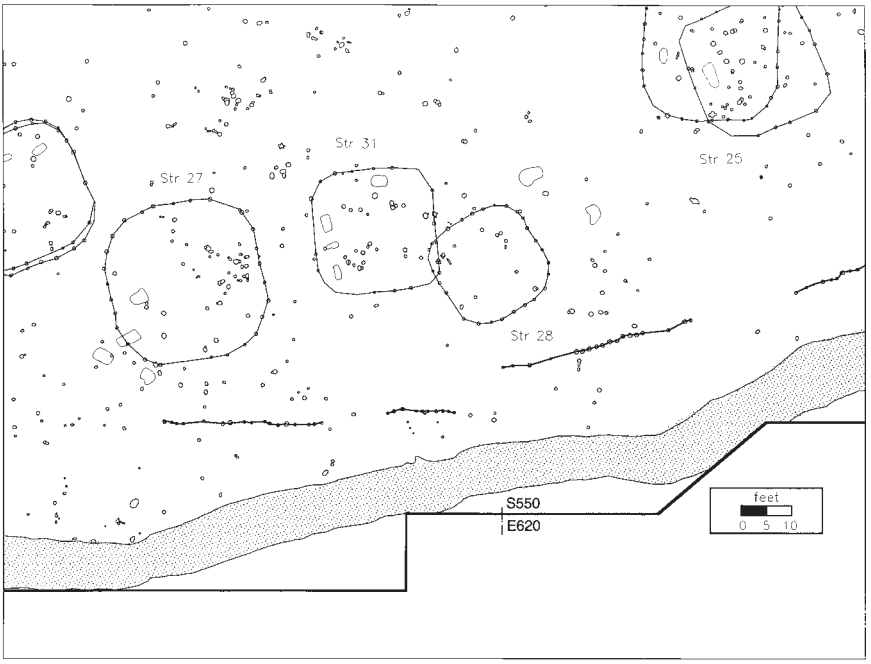


Figure 6.13. Southern segment of palisade and ditch.

ure 6.11). Posthole spacing in the alignment is similar to that in the palisade, but average posthole diameter is significantly smaller (.645 feet vs. .805 feet). The alignment is interpreted in Figure 6.11 as a straight line, but it could have merged with the palisade at both ends. Given the similar spacing of postholes and the spatial proximity of the two features, it is possible that the alignment at S280 represents an attempt to repair the palisade.

The alignment at S200 is approximately 32 feet long and lies 4 feet from the palisade (Figure 6.11). It partially overlaps the eastern wall of Structure 3 and hence is probably not contemporary with it. Since Structure 3 was probably erected relatively late in the town's occupancy, the alignment most likely predates the structure. Posthole spacing in the alignment is similar to that in the palisade, but posthole diameter is significantly smaller (.547 feet vs. .805 feet). The wall may represent a palisade repair, but there is no evidence to support such an interpretation.

The alignment at S250 is almost 25 feet long and lies 7 feet from the palisade (Figure 6.11). It overlaps the eastern side of Structure 4 and therefore cannot be contemporary with it. Since Structure 4 was probably erected relatively late

in the town's occupancy, the alignment most likely predates the structure. Average posthole size in the alignment is similar to that in the palisade, but posthole spacing is significantly greater. Given the distance separating them, it is unlikely that the alignment is a repaired section of the palisade.

There are two parallel posthole alignments at N420 (Figure 6.12). Respectively, they are 32 feet and 26 feet long and are located 22 feet and 19 feet from the palisade. They are similar to one another in posthole spacing and size but differ in posthole spacing from the palisade. Given these characteristics, it is clear that the two alignments are not related to the palisade as repair sections or entrance screens.

The alignments at S420 and S250 are similar to one another in posthole size and spacing. They are also similar in being located some distance from the palisade. It is possible then that the three features served somewhat similar functions. Unfortunately, the nature of these functions is not identifiable with the evidence at hand.

Defensive Ditch

The ditch was investigated in four different ways. Eight hundred twenty-four feet of the ditch was exposed and mapped at the base of plow zone. This included the entire southern third of the ditch, the eastern third except for a 100-foot section in the northeast corner of the site, and two 15-foot sections on the western side of the site (Figure 6.1). Short, shallow trenches were excavated at 10-foot intervals along the western ditch. These were designed to expose the edges of the ditch and thus its spatial configuration. Posthole tests, measuring .6 feet in diameter, were excavated along a 400-foot section of the western and southern ditches and along a 160-foot section of the eastern ditch (Figure 6.1). These tests were spaced 10 feet apart and excavated to the bottom of the ditch. They were intended to provide information on the abundance of artifacts in ditch fill. Finally, 3-foot-wide test trenches were excavated across the ditch at 10 different locations (Figure 6.1).

There is strong evidence that the ditch extended uninterrupted around the nonriver sides of the site. Except for relatively short sections in the northeastern and northwestern corners of the site, the entire length of the ditch was investigated either by surface exposure or shovel tests and posthole tests. No evidence of an unexcavated section of ditch was encountered in these investigations. It is possible, but unlikely, that such a gap, measuring less than 10 feet across, existed in the western ditch where exposure was discontinuous.

The likelihood that the ditch was continuous throughout its length raises

the question of how access to the town was gained. Presumably one or more bridges, consisting of logs laid side by side, crossed the ditch. These are likely to have been placed adjacent to palisade entrances such as the one at S380 E780. Evidence of such bridges in the form of log molds would have been destroyed by plowing and erosion. However, refuse may have accumulated in the ditch near the bridge if inhabitants discarded things as they entered and left the town. Posthole tests in the eastern and western ditch sections and test trenches at S399 E325 and S412 E330 were excavated to investigate this possibility.

Test trenches were excavated primarily to investigate the cross-sectional configuration of the ditch. For this reason and because of the short occupation span of King, no attempt was made to recover artifacts stratigraphically in test trenches excavated in 1973–1974 and 1992. In 1993, artifacts were collected separately from some strata in test trenches located at S399 E325 and S412 E330.

The ditch cross section varies somewhat, as is shown in the two profiles in Figure 6.14. In most trench profiles, the ditch has a flat, level bottom and sides that are almost vertical near the bottom but more gently sloping (30–50 degrees) above. The width of the ditch recorded at the base of plow zone varies between 8 feet and 21 feet, with the narrower section, however, occurring along the southern edge of the site where erosion has cut deeper into the ditch. The more probable range is 12–15 feet. The flat bottom surface ranges between 6.5 feet and 9.3 feet in width.

Recorded depth ranges between 2.3 feet and 4.2 feet, the smallest measurements being found along the more heavily eroded southern edge of the site and the largest occurring along the east edge of the site where erosion is minimal. If aboriginal ground surface in the latter location was approximately 99.1 feet (98.5 feet plus .6 feet of plow zone), total depth was probably around 5.0 feet.

The elevation of subsoil surface along the western edge of the site is 2.5–3.0 feet (95.4 feet) lower than it is along the eastern edge. Recorded ditch depth here, however, ranges between 3.2 and 3.8 feet. If 2.5–3.0 feet of soil has been lost in this portion of the site to erosion and plowing, the ditch here would have had a total depth of almost 7 feet. While the ditch could have been excavated to varying depths along its length, it seems unlikely that people would have been so careless with their energy expenditure as to dig an extra 2 feet of soil in some locations. Most likely, the absolute depth of the ditch along the western edge of the site reflects the fact that aboriginal ground surface was lower here. As described in Chapter 3, the King site was located primarily on a

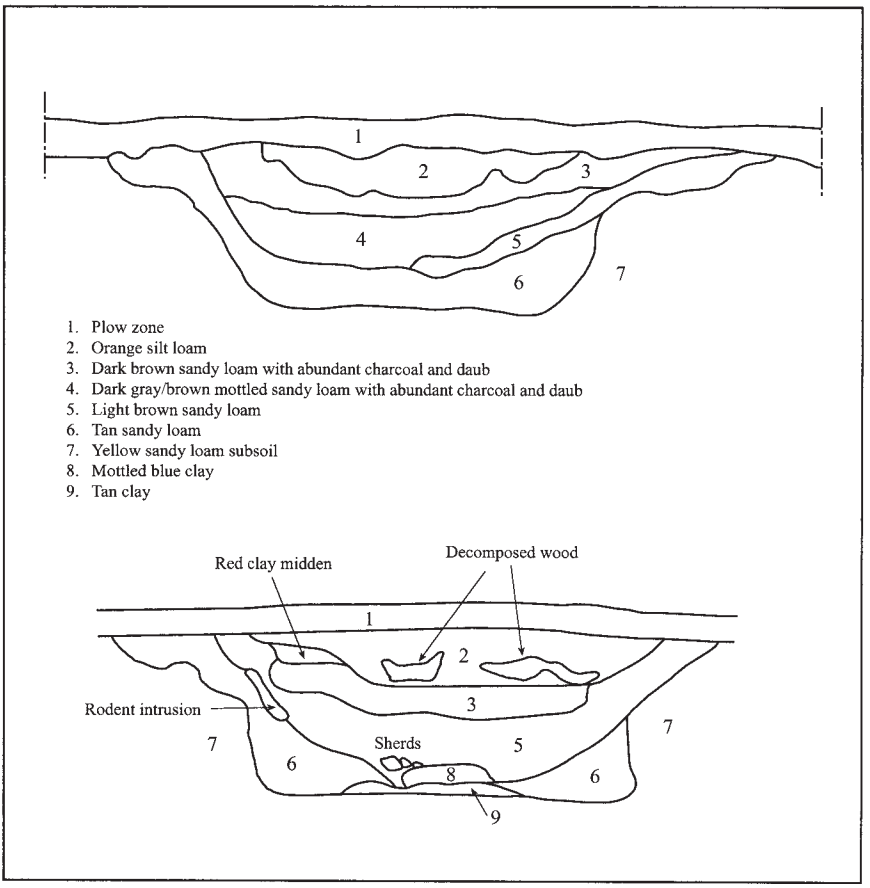


Figure 6.14. Defensive ditch profiles: upper profile located at 400S 304E; lower profile located at 180S 760E.

low ridge in the floodplain, but its western edge extended into a swale bordering the ridge on its western side.

The lowest stratum encountered in all test trenches was a tan sandy loam. This stratum typically filled the bottom of the ditch to a depth of .4–1.5 feet and, with reduced thickness, extended up the ditch walls to the base of plow zone. In the tests at S399 E325 and S412 E330, horizontal layers of water-sorted sediments were visible at the base of ditch walls. Sediment analysis of these test trenches and one located at S473 E357 confirm this identification. These sediments were presumably eroded from the exposed ground surface on ei-

ther side of the ditch during the period immediately following construction of the defensive perimeter when vegetation cover would have been minimal. The bottom of the ditch is too high (at least 15 feet) above the Coosa River to have formed a moat except during periods of high water. For much of the year, the bottom of the ditch was probably covered by shallow pools of standing water and mud.

Soil from the tan sandy loam stratum in the test trenches located at S399 E325 and S412 E330 was processed through 1/2-inch wire cloth. Artifact yield (pieces of pottery, stone, flint, and daub) was 138 and 268 items, respectively. In spite of its lower artifact yield, the test at S399 E325 contained several large fragments of pottery and daub.

In most test trenches, the second stratum was a brown or gray sandy loam, sometimes containing charcoal and daub flecks. Thickness ranged between .6 and 1.5 feet. This stratum probably accumulated subsequent to site abandonment as a result of overbank flooding by the river and erosion from the ground surface adjacent to the ditch. Artifacts were present in this stratum but were not recovered as separate collections in any tests.

The third stratum in most test trenches was a dark brown or dark gray layer resembling midden soil and ranging in thickness between .4 and 1.4 feet. Charcoal flecks and artifacts were abundant: the test at S399 E325 yielded 425 pieces of pottery, stone, flint, and daub, while the test at S412 E330 yielded a total of 951 items. This high artifact and charcoal content indicates that the dark strata are the result of heavy erosion of aboriginal occupation deposits. Presumably they formed during the late nineteenth-century floods that scoured the site so deeply.

The stratigraphically latest strata preserved in most test trenches are silty loams of a reddish or orange color that resemble subsoil at a depth of 3–4 feet. Thickness ranges between 1.0 and 1.5 feet. Traces of large decayed or charred logs, lying parallel to the ditch axis, occur within the strata in test trenches at S130 E740, S180 E760, S530 E660, and S473 E357. An east–west oriented test at S556 E480, excavated to investigate one such preserved feature, exposed a 7-foot section of a .7-foot-diameter log. Local residents report that the ditch was visible as a low area containing willows and other natural vegetation as late as the 1920s, when it was filled in for agricultural purposes. Presumably these last strata and the preserved wood are the product of this land-leveling project, the former being derived from remnants of the earth embankment constructed at the time the ditch was excavated and the wood representing trees growing in the partially filled ditch.

By the end of the 1992 season, it was apparent that the palisade had been obliterated by erosion along the entire western side of the site. One question that could still potentially be addressed concerning the western defensive perimeter is whether there had been an entrance on that side of the town. Assuming that the quantity of cultural material in the ditch would be greater where people crossed it to enter the town, a program of posthole testing was initiated to investigate variation in ditch fill artifact content in 1992 and 1993. Posthole tests were excavated at 10-foot intervals along the entire unmapped western section of the ditch with soil deeper than 2 feet below ground surface being screened for artifacts (Figure 6.1). Similar posthole testing was conducted in the ditch on the eastern side of the site on weekends in 1996 and 1997.

Artifacts recovered in posthole tests include pottery sherds, flint flakes, stone, and fired daub. Large quantities of any of these categories could be indicative of increased discard behavior. Pottery fragments, however, seem on logical grounds to be the most sensitive indicator. Daub is often represented by very small fragments and often breaks into more fragments during excavation with the posthole digger. Flint is very infrequent, occurring in fewer than one-third of the tests. Some stone is cultural in the sense of being fragments of tools or by-products of tool manufacture. A large proportion of the non-flint stone, however, appears to be unmodified river pebbles, which have questionable behavioral significance.

The frequency of potsherds in posthole tests ranged up to 16, but averaged around 4. Frequencies above 10 occurred in six locations along the western side of the site, but with only one exception in spatially isolated tests. Posthole tests located at S400 and S410 yielded 11 and 12 sherds, respectively, and, along with the test at S420 also yielded large quantities of stone and daub. Posthole tests along the eastern side of the site yielded smaller quantities of pottery on average and none yielded significantly larger quantities, not even in the vicinity of the probable palisade entrance at S380.

Two test trenches were excavated at S399 E325 and S412 E330 in response to the large quantity of material recovered in the posthole tests at S400 and S410. As noted earlier, the lowest stratum in the two trenches yielded 138 and 268 artifacts, respectively. Unfortunately, in the absence of comparable artifact collections from the other test trenches, it is not known whether these are unusually large quantities for the basal stratum. The S399 E325 trench, however, did contain several large fragments of pottery and daub. These were scattered across the width of the ditch in a zone located .6–1.0 feet above its bottom surface. Their size suggests that they were thrown into the ditch rather than carried there by water.

A test trench was excavated across the ditch in 1974 opposite the location of the palisade entrance at S380 E780. Unfortunately, the artifact collection from this test has been misplaced and thus cannot be tabulated. Field notes, however, do not indicate the presence of an especially large amount of cultural material or individual artifacts of especially large size.

Palisade configuration and artifact size and density in ditch tests indicate that King had at least two entrances through its defensive perimeter: one located at S380 E780 near the southeast corner of the site and one located at approximately S410 near the center of the site's western perimeter. Presumably at least one additional entryway was located along the northern, river side of the site.

Assuming that it extended to the bank of the Coosa River at the northeast and northwest corners of the site, the defensive ditch had a total length of approximately 1,330 feet. Volume of ditch fill was calculated using ditch dimensions recorded in profiles from the eight test trenches located on the eastern and western sides of the site. The recorded widths of each ditch at the base of plow zone and at ditch bottom were averaged and multiplied by an average depth of 5.1 feet and thickness of 1 foot to obtain trench volume in the eight tests. The average of these calculations, 54.75 cubic feet, was then multiplied by ditch length to obtain a total ditch volume of 72,817 cubic feet. Using Erasmus's (1965) finding that an adult male can excavate approximately 2.6 m^2 (91.8 square feet) of soil with a digging stick in a 5-hour work day, approximately 3,967 person-hours (793 person-days) would have been required to excavate the ditch.

Ditches have been reported at a number of Mississippian sites. The dimensions of several, listed in Table 6.5, demonstrate that these features vary considerably in size and area enclosed. At one extreme, the circular ditch at Rucker's Bottom ranges between 3 and 9 feet in width and 1.5 to 3 feet in depth and encloses only 1.4 acres. At the other extreme, the ditch at Etowah is around 31 feet wide, 9–10 feet deep, and encloses 52 acres. Some of this variation reflects the loss of soil from site surfaces through plowing and erosion. Ledford Island, Martin Farm, and Rucker's Bottom probably lost at least a foot of soil to judge by the depth of house floors below plow zone, while at Woodstock Fort, the loss must be closer to 2 feet. Ditch dimensions at Shoulderbone are derived from nineteenth-century eyewitness accounts written sometime after the site had been brought under cultivation and the ditch had begun to fill.

To the extent that earth embankments surrounding Mississippian sites were constructed to help support palisade posts, it is probable that all "defensive" ditches were excavated in part for the purpose of supplying construction ma-

Table 6.5. Dimensions of ditch features at various Mississippian sites

Site	Width	Depth	Area Enclosed	Associated Palisade
Etowah[1]	31	9–10	52	Yes
Lake George[2]	26	4.9–5.6	55	Yes
Lubbub Creek[3]	13	4.3	9.6	?
Parkin[4]	85	6.2	17	Yes
Neeley's Ferry[5]	46	3.6	9	Yes
1Ds32[6]	18	4.75	—	Yes
King	12–15	2.3–4.2	5.1	Yes
Sellars[7]	9	2.1	10.2	Yes
Matthews[8]	5	1.0	28	Yes
Shoulderbone[9]	10–12	3.0+	4.5	Yes
Rucker's Bottom[10]				
Rectangular	6–10	1.5–3	1.8	Yes
Circular	3–9	1.5–3	1.4	Yes
Ledford Island[11]	7	2.5–3	—	No
Martin Farm[12]	5.5–7.4	1.5–1.9	—	?
Woodstock Fort[13]	5	2.5–3.0	4.5	Yes

Note: Width and depth in feet; area in acres. Dashes indicate no data available.

1. Larson 1972.
2. Williams and Brain 1983.
3. Blitz 1993.
4. Mitchem 1996.
5. Mulvihill 1996.
6. Martin 1989.
7. Butler 1981.
8. Walker and Adams 1946.
9. Williams 1990.
10. Anderson and Schuldenrein 1985.
11. Lewis and Kneberg Lewis 1995.
12. Schroedl et al. 1985.
13. Caldwell 1957.

terial. Ditches of the size found at King, Etowah, Lake George, Lubbub Creek, Parkin, Neeley's Ferry, and 1Ds32, however, almost certainly were excavated for the purpose of impeding enemy assault as well. The small size of ditches at Woodstock Fort, Rucker's Bottom, Ledford Island, and Martin Farm makes it unlikely that these features also had a direct defensive function. The small area enclosed at Rucker's Bottom and Shoulderbone lends support to this interpretation. The 1.4 acres and 1.8 acres enclosed at the former site seems hardly adequate to house a self-sustaining village population, while at Shoulderbone, a large portion of the 4.5-acre space is taken up by Mound A. A defensive function can be ruled out with more certainty for the small ditch at Ledford Island.

It is located inside the palisade and 40 feet from it. The ditch at Martin Farm is also not spatially associated with a palisade.

The rectangular palisade and ditch at Rucker's Bottom is similar in configuration and size to two palisades at the roughly contemporary Irene site near Savannah (Caldwell and McCann 1941). The latter appear to enclose a rectangular space between a platform mound and a large circular building, the so-called rotunda. Given their architectural associations, it is likely that these walls functioned to delineate and perhaps limit access to ceremonial space rather than provide security from attack. The rectangular palisade and ditch at Rucker's Bottom may have had a similar purpose.

There is some evidence, then, to support the belief that only larger ditches—perhaps only those more than 5 feet deep and 10 feet wide—were constructed as defensive barriers. Given its size and its steeply sloping sides, the ditch surrounding King is clearly a defensive feature. It is unusual, however, in that it encloses a relatively small settlement and one without a platform mound. Total labor cost for constructing the ditch and palisade is estimated to be 980 person-days using Cole's labor cost estimates and 1,114 person-days using those of Hammerstedt. With a resident population of under 250 people, and with little evidence of a support population dispersed in nearby farmsteads, construction of the defensive perimeter would have imposed a relatively large burden on the available labor force.

In summary, the defensive perimeter at King consisted of a single palisade line located inside of and parallel to a defensive ditch. The former consisted of single-set posts set approximately 2.5 feet into the ground and probably banked to a height of 2 feet or more with earth derived from the ditch. Small semicircular bastions may have been located along the palisade at intervals of 100 feet or more, while one or two bastions may have flanked an entranceway. At least one entrance of the cul-de-sac type was located on the east side of the site near the southeast corner. A second entrance may have been located opposite it on the western side of the site.

Summary

In Chapter 5, I described two types of domestic structures—the primary domestic structure and the rectangular structure—that are represented in the architectural features recorded at the King site. These structures and their associated outdoor work spaces were the scene of human activities and interactions that were primarily oriented toward personal and household matters. In the current chapter, I have described structures, spaces, and facilities that func-

tioned primarily at the community level. They were probably constructed and maintained by communal work parties and were either used by a large portion of the resident population at one time or another or provided important benefits to the community as a whole.

The plaza is a large open space, located in the center of the site, that is devoid of recognizable domestic architectural features. Religious and political ceremonies as well as competitive games and more socially oriented gatherings of community members probably occurred here. Structure 17 is a large structure measuring almost 50 feet square that is located in the northeastern sector of the plaza. It probably functioned as a public meeting house where political issues were debated and resolved and where some religious ceremonies were performed. To judge from eighteenth- and nineteenth-century ethnohistorical accounts, it probably also served as a clubhouse where men could relax and interact socially. Structure 16 is a small building measuring 20 feet square and located adjacent to Structure 17 in the northeast plaza sector. It is too small to have served as an elite residence, but its location in the plaza suggests that it must have played an important role in community affairs. Most likely, this role was religious in nature. A concentration of postholes located immediately north of Structures 16 and 17 may represent a lightly constructed building measuring approximately 58 × 23 feet. Structures of similar size, located in front of eighteenth-century Cherokee townhouses, may have served as summer council houses. Feature 45 is a large post pit located in the geographical center of the site and near the center of the plaza. The post was probably erected at the time the town was founded and may have been removed when the town was abandoned. As such, it probably served as a symbol of the community's existence and identity. Finally, the town had a rather formidable defensive perimeter consisting of a palisade and large ditch.

Between them, these two different sets of buildings and spaces—domestic and public—would have been the venues for most activities of the town's inhabitants. Fortunately, their physical characteristics and spatial relationships can tell us a great deal about the King site as a community. But there is a limit to what postholes, hearths, and empty spaces can reveal. To learn more about the King site community, we must look at its former inhabitants as they are revealed by burials. To this end, the following chapter will describe the basic characteristics of the burial sample and the kinds of variability that characterize it. In the chapter that follows that, Chapter 8, we will begin our examination of community organization, an examination that will continue through five chapters to the end of the book.

Notes

1. Coweeta Creek is included in this list because its "mound" is not a typical Mississippian platform mound. Five buildings were erected one above the other in the same location, and each was covered by a thin deposit of fill soil. The resulting mound consists of a series of stacked structures, not a series of platforms with buildings erected on successive summit surfaces.

2. Sullivan gives a floor area of 575 square feet (24 × 24 feet) for the structure. However, it is not clear whether her measurement is for the combined overlapping floor space of the two building stages or for just one of them.

3. Drawing on a much larger sample of sites, Milner (1999) reports that bastions tend to be spaced about 100 feet apart.

7
Burial Descriptions

Two hundred forty-nine burials were excavated and recorded at King during five field seasons between 1972 and 1993. These are distributed throughout the excavated site area, occurring in the plaza, Structure 17, and the habitation zone (Figure 5.1). Several other extensively excavated Mississippian sites in the Southern Appalachian region have also yielded burials in association with architectural remains. Well-known examples include Etowah and Rucker's Bottom in Georgia; Toqua, Hiwassee Island, Ledford Island, Mouse Creeks, and Rymer in Tennessee; Moundville and Lubbub Creek in Alabama; and Coweeta Creek and Town Creek in North Carolina. King is unique among these in that its architectural features and community plan and its burials have both been thoroughly analyzed and the resulting bodies of information integrated into a detailed reconstruction of the aboriginal community.

The purpose of this chapter is to describe the King site burial sample and the variability that exists within it. Chapters 9–11 are devoted to the analysis of this variability. The goal of the mortuary analysis is to reconstruct as fully as possible the social and political organization of the King site community. The analysis has made extensive use of the contextual evidence provided by the site's architectural features and settlement plan. Burial evidence, in turn, has been used to flesh out the picture of the site as a community and its life history.

Analysis of Burials

Mortuary analysis proceeded in a series of steps designed to simplify what is a relatively complex phenomenon. I began by reviewing the different kinds

of burial records that had been made in the field (burial forms, field notes, field drawings, field photographs) in an attempt to fill in gaps and resolve contradictions existing in them. Grave goods had been assigned descriptive type names in the field but, with few exceptions, had not been analyzed in any way. My next task, therefore, was to measure, quantify, describe, and in some cases reclassify the burial artifacts. I received assistance in this undertaking from Elizabeth Misner (Misner 1995), who analyzed the bifacial blades, Charles Cobb and Melody Pope (Cobb and Pope 1998), who analyzed the flintknapper kits, and Gina Matthiesen (Matthiesen 1994), who analyzed the projectile points. I then constructed a descriptive database that included relevant information on burial pit characteristics, burial location, body treatment, preservation state, sex, age, and grave goods (Appendix C).

During these preliminary steps, I was able to observe the preservation condition of each burial, and I began to compile evidence for the different site formation processes that had impacted the collection. I also developed criteria that would allow me to exclude specific burials from specific kinds of analysis on the basis of preservation conditions. For example, burials that had been heavily impacted by plowing were more likely to have lost some of their grave goods than those in which plowing disturbed only the upper portion of the burial pit. Those burials were not used in analyses involving grave goods associations. Depth of pit bottom below the base of plow zone, which had been analyzed in a preliminary study by Thomas Foster (1993), emerged as a significant variable in identifying pit form and in interpreting the architectural context of burials.

Burial investigation began in earnest with a bivariate analysis of associations between different types of burial pits, body treatments, and grave goods. This provided me with a fairly good understanding of how those different dimensions of mortuary variability related to each other. Grave goods associations were analyzed further using R-mode cluster analysis. This confirmed most of what I had already learned about the artifacts but also made me aware of several interrelationships that I had not noticed earlier.

It was by now clear that there were strong relationships between sex and age and several other mortuary dimensions. These relationships were worked out more thoroughly using the database, geographic information systems (GIS) maps of the site, and bivariate statistics. I then investigated how burial location within the site related to pit form, body position, and artifact types. This also involved an attempt to assign individual burials to households that had been identified with architectural evidence.

Subadults and adult females were interred with relatively few types of grave goods compared to adult males. My next step, therefore, was to investigate the

interrelationships between pit form, body position, and grave goods separately for subadults and adult females. Once this was completed, I did the same for the adult males.

The final step was to bring together the results of the separate mortuary analyses of subadults, adult females, and adult males and to integrate them with information on site location and household affiliation. This final analysis was intended to provide insights into the community's leadership organization and variability in household wealth and sociopolitical status.

Nature of the Burial Sample

Two hundred sixty-five burial numbers were assigned in the field and in the laboratory following fieldwork. In the field, burial numbers were assigned to soil stains and fragments of human bone exposed at the base of plow zone and beneath house floors. In the majority of cases, these identifications proved to be correct: stains turned out to be pits containing human skeletons and/or grave goods and bone fragments proved on further exposure to be part of more complete skeletons. Nine surface stains (Burials 141, 159, 171, 173, 180, 183, 202, 204, and 206) yielded no human bone or artifacts identifiable as grave goods during excavation, but pit characteristics such as size, shape, depth, orientation, and location support their identification as burials.

In 16 cases (Burials 95, 114, 116, 207, 208, 221, 228, 230, 232, 236, 238, 239, 247, 248, 251, and 257), no clear evidence was found to support identification of a soil stain as a burial. These features have been dropped from consideration as burials. The remaining 249 "confirmed" burials and their demographic and mortuary characteristics are listed in Appendix C.

As used here, the term *burial* refers to a single individual and the grave goods that were placed with him or her at the time of interment. Upon excavation, several burials (or more accurately, burial pits) were found to contain more than one individual. With one exception, each additional individual was given a separate burial number at the time of discovery. Two overlapping burials excavated in 1992 were designated Burials 224a and 224b in the field. These were changed in the lab to Burials 224 and 258, respectively. Supernumerary skeletal elements were found in 38 burials during laboratory analysis. These elements were not assigned separate burial numbers.

For a variety of reasons, it was not always possible to assign individual skeletal elements or burial artifacts to a specific individual. Deceased individuals were typically interred in separate burial pits, but in a number of cases two or more individuals were interred together in a single pit (multiple burial).

There are also several cases in which the burial pit of one individual intruded that of an another (intrusive burial). Every effort was made during excavation of these kinds of burials to determine which bones and artifacts belonged with which individual. This was not always possible, however, especially when heavy rains flooded burials during excavation, as happened in three instances. Usually such wayward skeletal elements could be correctly assigned in the lab, but this was frequently not possible with burial artifacts.

The amount of information about mortuary practices that can be obtained from burials at King varies considerably from one interment to another. In a few cases, field notes are inadequate to supply information on, for example, placement of grave goods or details of body treatment. Plow destruction in many cases prevents identification of pit form. Plowing, looting, and intrusive burials in many cases have resulted in the loss of grave goods, their displacement within the burial, or their mixing with other burials. In a few multiple burials, grave goods associations are ambiguous. Appendix D describes the stratigraphic characteristics of 138 burials in which one or more of these factors may have obscured some aspect of the mortuary program.

As a result of the varying impact of these kinds of factors, it has been necessary to select different subsamples of burials for specific types of analysis. The most important of these consists of 142 burials that I have termed "reliable burials" (Appendix C). These burials are unlikely to have lost or gained any grave goods as a result of plow disturbance, looting, burial intrusion, or being part of a multiple burial. They are important because they can be used in the analysis of artifact co-occurrence. Another important subsample consists of 90 burials that have been disturbed by plowing or intrusive burials but can be reliably associated with the grave goods that remain in their burial pit. These "disturbed burials" can be used in most analyses that do not involve artifact co-occurrence. Finally, there are 17 multiple and intrusive burials in which grave goods cannot be assigned to one burial or another with certainty (Appendix F). These "mixed burials" can be used to investigate questions concerning body position, pit form, and location, among others, but usually not questions concerning grave goods. Burials 81 and 149 are exceptions, as some grave goods in each of these two "partially mixed" burials can be confidently assigned to these individuals. The composition of other subsamples will be identified at the time the relevant analysis is described.

The reader should take careful note of exactly what subsample is being used in each part of the mortuary analysis because the frequency with which mortuary traits occur varies from one subsample to another. The number of burials reported as having marine shell beads as grave goods, for example, will vary

depending upon whether reliable or disturbed burials are being considered. Likewise, the number will vary depending upon whether all subadult burials or only those that can be assigned a specific age are being considered.

Osteological Analysis of Burials

The King site skeletal collection has been analyzed in whole or in part seven times. Lucy Tally supervised burial excavation in 1973 and 1974 and was responsible for cleaning and conserving the skeletal material. Following the termination of field investigations in August 1974, she sexed and aged the approximately 200 burials available at the time with guidance from Dr. Charles Peters, a bioarchaeologist in the Department of Anthropology, University of Georgia (Tally 1974). In 1978, Gary Funkhouser investigated the paleodemography of the King site skeletal population for his master's thesis in anthropology at the University of Georgia (Funkhouser 1978). He reanalyzed the sex and age of 127 of the most complete skeletons under the direction of Drs. Charles Peters, Robert Tyzzer, and Robert Blakely.

Robert Blakely undertook a broad-ranging analysis of the collection with funding from the National Science Foundation in 1983–1984. He and his students at Georgia State University analyzed the entire skeletal collection, looking at sex and age, dental wear and caries, enamel hypoplasia, cortical bone thickness, cranial deformation, periostitis, and physical trauma (Blakely, ed. 1988).

In 1992, the University of Georgia contracted with Clark Larsen at Purdue University to conduct a complete osteological inventory and analysis of the Department of Anthropology's human skeletal collection. The project was undertaken in response to the recently enacted Native American Graves Protection and Repatriation Act and was designed around the recommendations of the Skeletal Database Committee of the Paleopathology Association (Rose et al. 1991). Because of the NAGPRA requirement that museums document all Native American human remains within their collections, the approximately 200 skeletons in the King site collection were included in the project. Most of the osteological analysis was conducted by Matt Williamson (Larsen et al. 1994).

Cassandra Hill was responsible for excavating and conserving burials encountered during the 1992 and 1993 field seasons. She sexed and aged the 26 burials that were recovered and identified their pathologies (Hill 1994). Over a three-year period, beginning in 1998, she reviewed the entire skeletal collection from the site, looking for evidence of pathology and trauma. The results

of these investigations have been presented in a number of papers (Hill 2001a, 2001b, 2002).

Dorothy Humpf (1995) conducted a number of analyses of the entire King skeletal collection in 1993–1994 as part of her Pennsylvania State University doctoral dissertation, which examined the demographic and health status of several sixteenth-century populations in northwestern Georgia. Each skeleton was sexed and aged and examined for evidence of a variety of health indicators, including iron-deficiency anemia, enamel hypoplasia, stature, tuberculosis and blastomycosis, treponemal disease, spondylolysis, and trauma.

Sex and age identifications made by Tally, Blakely, Williamson, and Hill are presented in Appendix E. In general, the four investigators agree closely in their identifications. Tally, Blakely, and Hill, however, tend to assign greater age to older adults than does Williamson. This discrepancy reflects a difference of opinion among human osteologists concerning the reliability of age markers such as cranial suture closure and dental wear.

I have utilized the sex and age identifications made by Williamson (Larsen et al. 1994) in analyzing King site mortuary patterns. I have favored his results over the others because they are the most thoroughly documented and because I wanted to use his more conservative age estimates for older adults. Tally and Hill were able to estimate age in the field for a number of burials that could not be recovered because of poor bone preservation. In those cases, I have used their age estimates. There are also a few cases in which Tally's and Hill's field observations together with the available field documentation indicate an age different from that given by Williamson. In these cases, I have used Tally's and Hill's age identifications. These cases are identified in Appendix E.

Finally, bone samples from the femora of Burials 30 and 223 were submitted for DNA analysis to Dr. Mary Ritke at the University of Indianapolis. She employed the procedure used by Haak et al. (2005) to purify DNA from the two samples and the Amelogenin method (Sullivan et al. 1993) to identify sex. Burial 30 failed to yield sufficient DNA for analysis, but two independently purified DNA samples from Burial 223 yielded conclusive evidence that this individual was female (Ritke 2006). This result is in line with Williamson's osteological identification of Burial 223 as female.

Williamson employed a variety of techniques to estimate the age of King site burials (Larsen et al. 1994:v–vi):

> Dental age was evaluated using the eruption sequence of Ubelaker (1989) for juveniles and modal tooth wear patterns from Lovejoy (1985) and presence/absence of periodontal recession/premortem loss for adults.

Adult cranial age was determined by observation of ectocranial suture closure (Meindl and Lovejoy 1985) and fusion of the spheno-occipital (basilar) synchondrosis (Krogman and Iscan 1986). Postcranial age estimations were made based on epiphyseal union (Bass 1987; Stewart 1979) and long bone lengths (Ubelaker 1989) for juveniles and degree of fusion of the medial clavicular epiphyseal plate (Suchey et al. 1984), pubic symphysis morphology (Brooks and Suchey 1990) and auricular surface morphology (Lovejoy et al. 1985) for adults. A composite age estimate was then derived by averaging the various age estimates per individual.

A number of burials had no preserved human bone or grave goods diagnostic of age and sex at the time of excavation. Twelve of these (Burials 20, 141, 155, 159, 171, 179, 181, 202, 205, 206, 209, and 218) occurred in small pits measuring less than 3.5 feet in length. A comparison of pit length for flexed burials securely identified as adult (>15 years) and subadult revealed that the former average 4.4 feet and the latter 3.2 feet. Only one adult burial had a pit length as small as 3.5 feet. Given these differences in pit size, I have felt justified in identifying the 12 burials in question as subadults.

Unfortunately, burials in pits with lengths closer to 4.4 feet cannot be identified as adults because subadults buried in an extended position require longer pits. Burial 60 (3 years old), for example, was interred in a partially flexed position in a pit measuring 4.2 feet long.

Analysis of grave goods indicates that several artifact types were interred exclusively or almost exclusively with males (see Chapter 9). Fifteen individuals, unidentifiable as to sex on osteological grounds, were accompanied by one or more of these male artifact types and have been identified as "artifactual males" (Appendix C). These sex identifications have been used throughout the mortuary analysis. No artifact types appear to have been interred exclusively with females, and as a result no burials have been identified as artifactual females.

Skeletal analyses conducted in the laboratory (Blakely, ed. 1988; Humpf 1995; Larsen et al. 1994) identified supernumerary human skeletal elements in 41 burials (Table 7.1). Six of these cases represent multiple and intrusive burial situations recognized as such in the field (see Appendix F). In 10 cases, there is evidence from field and laboratory records that bones were mixed during laboratory analysis by one of the many individuals who have conducted research on the collection over the years. In seven cases (Burials 78, 93, 98, 124, 125, 131, and 154), the extra elements are one or two deciduous teeth and were probably

Table 7.1. Burials with supernumerary skeletal elements

Multiple/Intrusive Burials	Mixed in Laboratory	Bone or Teeth as Grave Goods	No Explanation
23	1	78	2
81	6	92	18
91	13	93	32
137	48	98	58
146	54	105	64
187	68	117	69
	73	124	77
	122	125	99
	169	129	123
	201	131	133
		143	185
		144	216
		154	

grave goods. Six other burials have extra skeletal elements that also probably represent grave furniture. All 13 of these burials will be described in a later section that looks at human remains as grave goods.

In 12 cases, identification of the source of supernumerary skeletal elements is less certain. Burials 2, 18, 69, and 185 are adults that include one or a few bones of infants. These may represent infants that were intentionally interred with adults. Verification of this interpretation, unfortunately, is not possible because of poor field documentation and bone preservation. The remaining eight burials have extra permanent teeth or osseous elements that could be grave goods or the result of burial intrusion or mixture in the lab.

Dimensions of Mortuary Variability

King site burials differ from one another in a number of ways. Most of the variability can be assigned to five different categories or dimensions: preservation state of skeletal remains and grave goods; biological characteristics such as age, sex, and health status; physical form of burial pits and the burials they contain; burial location within the site; and grave goods. Burial variability will be described in the remainder of this chapter within the framework of these dimensions.

Burial Preservation

The preservation state of burials has been affected by erosion and plowing, organic decay, intrusion by later burials, and recent looting.

Erosion and Plow Destruction

As described in Chapter 4, overbank erosion has removed surface soil deposits over the entire site. The east-central sector of the habitation zone was least impacted. Severity of erosion increases to the west and south, with more than 2.5 feet of soil having been lost along the site's western perimeter.

Plowing impacted burials differently depending upon the original depth of the burial pit below the aboriginal ground surface. Burial pits excavated from the depressed floors of primary domestic structures (PDS) have bottom elevations that on average are 1.0 foot lower than those located outside these structures. These burials are, as a result, less likely to be damaged by plowing. Burials of subadults younger than 8 years, on the other hand, are more likely to be damaged by plowing than older burials since they were interred in pits that on average are .5–.8 feet shallower.

The only burials that have not been impacted by erosion and plowing were interred inside PDS that have intact floor surfaces. There are 20 such burials. The upper portions of these pits contain no features or wall modifications that can be attributed to mortuary behavior. It is unlikely, then, that any information has been lost from those burials that have lost only the upper foot or so of their pit walls.

Some burial pits have ledges or steps cut into their walls and some have board covers. The former tend to be located .5–.6 feet above pit base, while the latter occur between .3 and .8 feet above pit base. Evidence of ledges and board covers, then, is most likely to be lost in those burials in which plowing has penetrated to within .6 feet of pit base. In order for analyses involving these types of pit modification to be reliable, only pits with an intact depth of greater than .8 feet will be used. Ninety-two burials meet this criteria (Appendix C).

It is not clear how much of the walls of shaft-and-chamber burials have to be intact to allow this type of pit modification to be identified. The slight wall undercutting noted in Burial 106 begins close to the top of the preserved pit wall. The better-defined "chamber" in Burial 101 begins around 1.0 foot above pit base. It is possible, then, that one or two examples of this rare pit form are represented in the sample of burial pits with depths greater than .8 feet deep but cannot be recognized as such.

In 85 cases, plowing penetrated deep enough to inflict some damage on skeletal remains and grave goods. In 63 of these, plow damage was so severe that some or all human bone was destroyed and some artifacts could have been removed from the burial or destroyed.

Intrusive Burials

There are 17 cases involving 44 burials in which two or more individuals appear to occur in a single pit (Appendixes D and F). Most of these are the result of one burial intruding one or more earlier burials. In a few cases (Burials 91/259, 94/134, 132/197, 135/136, and 139/145), however, we cannot rule out the possibility of multiple burials in which two individuals were interred in the same pit at the same time. In some intrusive burials, the later interment actually passes through the earlier one(s), destroying or displacing skeletal remains and grave goods (Figures 7.1 and 7.2). In other cases, there is little obvious destruction or displacement of bone or artifacts (Figure 7.3). Grave goods occur in 14 cases of intrusive burials. In 10 of these, some or all items cannot be assigned to a specific burial with certainty (Appendix F).

Most burials were interred within PDS or in one or two kinds of locations outside these structures (see Burial Location section, below). Burials of the latter kind were often placed so close together that adjacent burial pits frequently touched or overlapped slightly. Burials interred from the floors of primary domestic structures are usually more widely separated, but placement was restricted to the outer floor sectors on the northern side of structures. When there were a lot of burials, as in the case of Structure 23, spacing could get tight. Given these practices, it is not surprising that later interments sometimes intruded earlier ones. That this did not happen very frequently suggests that household members tried to keep track of the locations of interments and avoid disturbing those already in place.

Most burial intrusions occurred in outside burial plots and were probably due to failure to keep accurate records of burial locations. Intrusive burials located within some PDS, on the other hand, may be the result of a transfer of domestic space between households. Burials 82 and 93 are both located within the walls of Structure 15 but predate its construction. The occupants of this structure were apparently unaware of their existence when they interred Burials 81 and 92 and cut completely through the earlier interments (Figure 7.2). Likewise, the occupants of Structure 14 were probably unaware of the existence of Burials 149 and 160, which predate the structure, when they interred Burial 150.

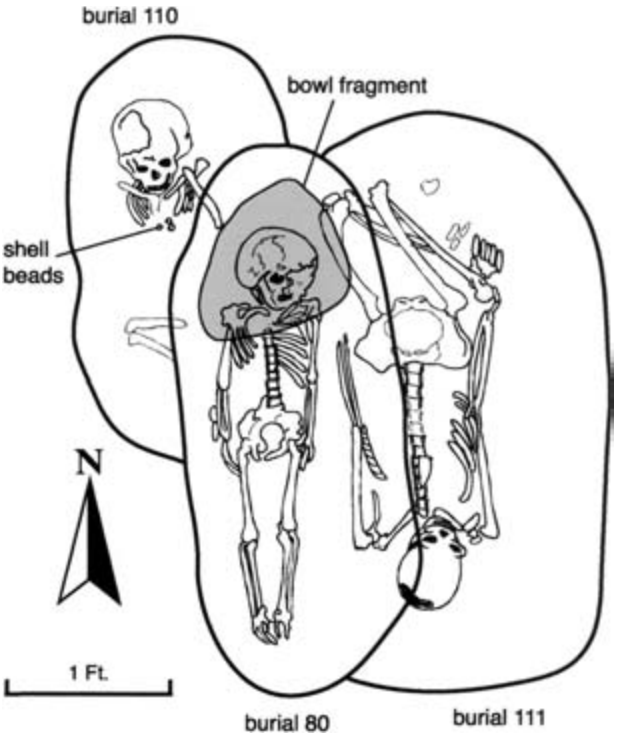


Figure 7.1. Burial 80 (extended) intrusive into Burials 110 (flexed) and 111 (partially flexed with tightly flexed knees).

Organic Decay

The preservation state of organic material varied considerably among burials. Some human bone was in excellent condition, with most elements and element surfaces being intact. At the other extreme tooth caps alone remained or there was no bone at all. In the majority of cases, the shafts of long bones were recoverable, but smaller elements and those with thin walls were not. Bone, antler, and shell artifacts also varied. Some burials, for example, contained *Busycon* shell beads with smooth, intact surfaces, while in others, only small irregularly shaped fragments with deeply eroded surfaces remained. As with human skeletal material, it is likely that bone, antler, and shell artifacts have disappeared completely in some burials as a result of organic decay.

In order to gain some understanding of this kind of variability and its possible causes, human skeletal preservation was evaluated and subjectively ranked on a scale of 1–4 (1, no bone or teeth caps only; 2, bone outline only; 3, long

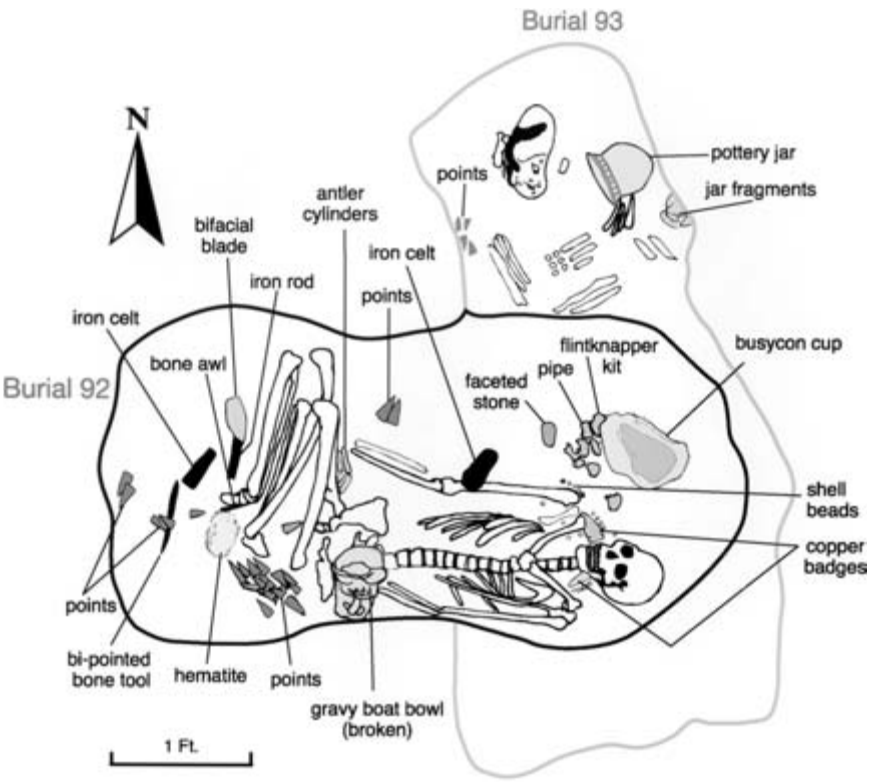


Figure 7.2. Flexed Burial 92 intrusive through Burial 93.

bones well preserved; 4, near perfect preservation) using field photographs and field drawings (Appendix C). The cause of this variability is not known. Some very deep burials have very poor skeletal preservation, and this may relate to the tendency for the clay content of subsoil at King to increase with depth. A more clayey soil presumably would hold moisture longer and this might lead to more rapid decay of organic material. Comparison of the human bone preservation ranking with depth of burial pit bottom below surface for 45 burials interred inside PDS, however, shows only a very weak correlation ($r = .363$).

There is some evidence that preservation conditions vary across the site. Comparison of the average preservation rank for all reliable burials in the northern half of the habitation zone (north of Structure 2 or S230) with the rank of those in the southern half reveals that the former are significantly better preserved than the latter ($t = 3.08$, $p = .001$). Why there should be this north–south difference is not evident. The site is located on the crest of a north–south

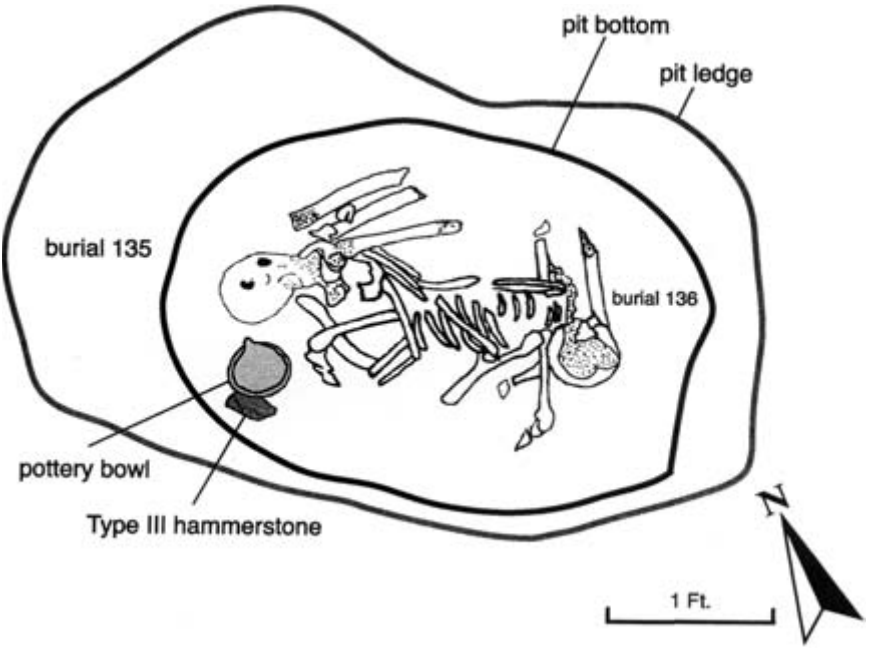


Figure 7.3. Intrusive flexed Burials 135 and 136.

oriented floodplain ridge in the Foster Bend meander loop. I would expect soil texture, soil moisture, and soil chemistry to be relatively uniform along this ridge and not vary from north to south.

There is also evidence that preservation conditions varied over shorter distances. The five subfloor burials located on the northern side of Structure 17 have an average preservation rank of 2.4, while the five burials located on the eastern and southern sides have a significantly lower average preservation rank of 1.6 ($t = 2.31$, $p = .02$). This difference is difficult to explain because the latter burials on average are shallower (2.0 feet vs. 2.4 feet) and are located less than 30 feet from the north-side group. Pit size indicates that these burials are all adults. Given these conditions, I can think of no reason preservation should be so much poorer unless the bodies of the deceased were treated differently prior to interment.

Twenty-one burials contained grave goods made of animal bone, antler, and teeth. Forty-nine burials have shell artifacts of one kind or another. For the 142 reliable burials, the numbers are 14 and 31, respectively. While there is no standard to compare these figures against, the frequency of bone and antler

tools in King site burials does seem low in comparison with other artifact categories such as triangular points (31 burials) and pottery vessels (25).

Although bone, antler, and shell artifacts recovered from burials vary in their state of preservation, there is no direct evidence that such artifacts have been lost or that their loss is the result of decay. We can, however, evaluate the effect of organic decay on these artifacts by comparing them to a standard measure of decay—the preservation ranking of human skeletal remains. Comparison of the mean preservation ranking of reliable burials lacking bone tools and those with bone tools reveals that the former have significantly lower preservation ranks (2.49 vs. 3.0; $t = 2.24$, $p = .013$). Burials lacking shell artifacts also have significantly lower preservation ranks (2.44 vs. 2.77; $t = 2.26$, $p = .012$). In other words, burials with poor skeletal preservation are less likely to have grave goods made of bone or shell or, presumably, antler. In all probability, the soil conditions responsible for poor human skeletal preservation in some burials have led also to the loss of these kinds of artifacts.

Unfortunately, we cannot use preservation rank to predict whether bone and shell artifacts have disintegrated in a particular burial. Five of the 14 burials with flintknapping kits also have beaver incisors, suggesting a functional relationship between the two types of grave goods. If the absence of incisors from the other nine burials is due to decay, we should expect those burials to have significantly poorer skeletal preservation rankings. This is not the case ($t = .45$, $p = .33$).

The relationship between skeletal preservation rank and presence/absence of bone and shell artifacts serves as a warning that the absence of the latter from some burials may be due to decay. This means that we can use the presence of bone and shell artifacts in a burial, but not their absence, to speculate about mortuary practices.

Burial Looting

Pothunters visited the King site on at least two occasions and looted several burials. The first visit occurred in July 1973 and resulted in the destruction of at least five burials located in and around Structure 5. Fragments of human bone were present in five potholes, and sections of burial pit outlines survived in a few cases, but no artifacts that can be identified as grave goods were left behind by the looters. Unfortunately, no record of which human remains went with which looted burial pit was made at the time. The remains were assigned burial numbers 261–265 in the laboratory.

Following the 1974 field season, the landowner cleared a small plot of trees

that had covered the northwestern corner of the site and began cultivating the area. In the spring of 1982, pothunters excavated over a dozen holes in this area. Six potholes encountered burials, including one that contained a sixteenth-century sword. Keith Little (1985), an archaeologist associated at the time with Jacksonville State University in Anniston, Alabama, interviewed the pothunters a year later and was able to obtain what he felt was an accurate inventory of artifacts that they had recovered from each burial. These grave contents are listed in Appendix C. Burials 233, 234, and 241, excavated during the 1992 field season, were looted burials. Skeletal material in the potholes was broken and not in anatomical order and recent debris such as cigarette butts was present in all three pits. Burial 234 is probably Little's Looted Burial 1 and has been so designated. None of the other five burials described by Little can be identified with the looted burials excavated in 1992. These five looted burials have been designated Burials 266–270.

Biological Variability

The number of males identified by Williamson (Larsen et al. 1994) using osteological evidence exceeds the number of females in the King site burial population by a small amount: 37 males vs. 32 females. The excess of males over females conforms to Weiss's (1972) observation that osteological analyses typically are biased in favor of males. Humpf (1995:123) found a similar ratio (44:42), but Blakely (1988:21) identified a substantially greater proportion of females (83:105). None of these ratios differ significantly from the others or from a 1:1 ratio.

Table 7.2 lists age of death and mortality rate for King burials by five-year intervals. King resembles other Mississippian populations in having a large number of deaths during the first five years and a second peak in mortality in the twenties (Berryman 1984; Black 1979; Blakely 1971; Boyd 1986; Parham 1987; Powell 1988). It is distinctive, however, in having a relatively large number of people dying in their thirties and early forties. With a sample size of 137 individuals, this heightened mortality may be due in part to sampling error. It also may be a result of the way the community developed through time. Most demographic models assume a stationary population with no immigration or outmigration (Weiss 1973:6–10). The King site population clearly does not meet this condition. Immigration contributed significantly to population growth during at least the first third of the town's 40- to 50-year existence. Abandonment, furthermore, appears to have taken place over a number of years, with a small number of households remaining after most of the popula-

Table 7.2. Age at death and mortality rate for King site burials

Age at Death	Number of Deaths	Percentage Dying	Number of Male Deaths	Number of Female Deaths
0–4.9	36	.26		
5–9.9	11	.08		
10–14.9	3	.02		
15–19.9	13	.09	2	1
20–24.9	27	.20	7	9
25–29.9	10	.07	3	6
30–34.9	11	.09	8	1
35–39.9	8	.06	8	0
40–44.9	12	.09	6	6
45–49.9	5	.04	2	2
50–54.9	1	.001	0	1

tion had left. A final factor may be Spanish contact, which could have exposed the community to Old World epidemic diseases. There is, however, no direct evidence that the population experienced sudden, increased mortality as a result of epidemic disease (Blakely and Detweiler-Blakely 1989). The high mortality rate in the forties probably also reflects the conservative approach that Williamson took to aging older individuals (Larsen et al. 1994). Individuals whom Blakely (1988) and other osteologists probably would have identified as being in their fifties and sixties were considered by Williamson to have died in their forties.

In his analysis of the King burial population, Blakely (1988:22) found an even more pronounced rise in mortality during the fifth decade of life. Blakely and Mathews (1990) identified 37 individuals in the King site burial collection as bearing wounds from metal-edged weapons. Eleven of these individuals survived long enough for their wounds to heal; the remainder presumably died not too long after being wounded. According to Blakely and Mathews, individuals receiving wounds were predominantly young females in their twenties and thirties and older men and women in their forties and fifties. The latter, according to Blakely (1988), represent a significant proportion of the unusually large number of individuals dying at an advanced age.

Milner and others (Milner et al. 2000) have reanalyzed the burials that Blakely and Mathews identified as bearing metal-edged weapon wounds. They found no evidence of such wounds and reject Blakely and Mathews's claims

that a large number of King site residents were killed by the Spanish. I accept the findings of Milner and his colleagues.

Infants under 1 year old represent only 1 percent of the burial population, a very low number in comparison with other Mississippian populations (Black 1979; Boyd 1986; Parham 1987; Powell 1988). Differential bone preservation probably accounts for most of the underrepresentation of infants, although we cannot rule out the possibility that infants were often interred in locations or in a manner that made them inaccessible to us. As noted in an earlier section, subadults less than 8 years of age were interred in pits that were as much as 1 foot shallower than those of older individuals. These shallower burials would have been more likely to be destroyed by erosion and plowing. The large number of burials in the 0–4.9 years age category, however, suggests that the age distribution of burials has not been greatly affected by this factor. Of course, it is possible that infants were interred in even shallower pits and hence were more likely to be destroyed by plowing than burials of older children.

Table 7.2 shows a large difference in the number of male and female burials in the 30–34.9 years and 35–39.9 years age categories. There does seem to have been an unusually large number of males dying during this age interval, but that does not explain the absence of females. Two burials in this age range cannot be sexed osteologically and could be female, but their grave goods indicate that they too were male (see Chapter 9). Given the wide variety of architectural and settlement contexts in which burials were excavated at King, it is difficult to believe that there was any systematic bias in the recovery of adults of either sex who died during their fourth decade of life. I am at a loss to explain why so few females aged 30–39 years are in the burial sample.

A number of different pathological conditions have been identified in the King site burials by Blakely, Humpf, and Williamson. Some of these—cranial deformation, porotic hyperostosis, periostitis, and enamel hypoplasias—occur with some frequency and may vary in incidence between different segments of the population. These types of pathologies have been considered as variables in the mortuary analysis.

Garrett (1988) reports that 52 out of 60 observable crania had some form of cranial deformation, with parallelo-fronto-occipital deformation as defined by Neumann (1942) being most common. Garrett does not identify the individual burials with deformed crania. According to Williamson (personal communication 2002), only 28 crania were well-enough preserved to allow reliable identification of cranial deformation. He identifies only 11 crania as being deformed, with fronto-occipital deformation, as defined by Ubelaker (1989), being the most common (Appendix C).

Hypoplastic enamel defects on incisors may result from a variety of diseases and nutritional deficiencies and as a result can be considered only as a nonspecific indicator of metabolic stress that occurs during the period of enamel formation—birth to 6.5 years (Goodman et al. 1980). Blakely (1988) identified 68 burials with enamel hypoplasia. Humpf found that the condition was present in 35 out of 90 adults with preserved anterior teeth, while Larsen et al. (1994) found it in 79 out of 124 (64 percent) individuals with preserved incisors. The burials identified by Larsen and colleagues as having enamel hypoplasia are listed in Appendix C.

Periosteal reactions or periostitis can have a variety of causes, including localized or systemic infection and trauma, and, therefore, are generally considered a nonspecific indicator of disease. Detweiler-Blakely (1988:91) identified 12 individuals with periostitis, Humpf identified 28, and Williamson identified 15 out of 97 (15 percent) burials with preserved tibia (Appendix C).

Several individuals manifest unusual pathologies that could have had a major impact on their lives and their social position in the community or that could relate to the way they died. Burial 23, an adult male, has a lenticular-shaped hole measuring 9×40 mm on his forehead that penetrates the frontal bone. The configuration of the hole and the damage to the bone itself suggest that it was made by a blow from a stone celt (Hill 2001b; Milner et al. 2000). Burial 246, an adult female, was interred in a prone position, face and chest down and legs tightly flexed to the side (Hill 1994). The right ulna and radius were broken in midshaft in a manner suggestive of a "parry fracture." Pit fill around the burial was unusually rich in pottery, stone, and animal bone refuse. The combination of these unique features indicates that the woman died a violent death and was interred in an unusual and, one might say, disrespectful manner.

Burial 151, an older adult female, was buried on her back in a loosely flexed position. The individual had a hip deformity, resulting from an injury, that prevented her from extending her left leg completely (Hill 2001a). Burial 223, an adult female, had a hip deformity in which the left femur was rotated inward 90 degrees below the neck (see Chapter 9). Hill observes that this type of injury is common in breech births when the baby is pulled out by the hips or legs. We will consider how this pathology may have impacted Burial 223 during her lifetime in Chapter 9.

Burial 226 was an older male who exhibited a number of pathologies, including an avulsion of the trapezius attachment; osteophytosis of the cervical, thoracic, and lumbar vertebrae; ossified costal cartilage of the upper ribs; and a number of cortical alterations on the clavicles. Hill (1994:59–64) concludes

that "this suite of pathology is attributable to extreme load stress," probably resulting from long-term use of a tumpline to carry heavy burdens.

Burial Form

Burial Pit Depth

Burial depth, the depth to which burial pits extend below the base of plow zone, varies between .1 foot and 3.4 feet (Appendix C). Some of this variability may be attributable to factors such as the sex, age, and social status of interred individuals and spatial location relative to architectural features. Most, however, appears to be due to variation in the impact of overbank erosion and plowing on occupation and pre-occupation deposits. Comparisons of burial pit depth below ground surface are therefore of limited analytical value unless pits are located close together or originate from preserved floors of structures. Absolute elevation of pit bottom is also of limited analytical value because the contours of the aboriginal ground surface cannot be reconstructed with certainty.

Foster (1993) was the first to investigate the relationship between burial pit depth and the sex, age, social status, and architectural associations of burials. He found that burial pits located within PDS were on average deeper than those located outside, that children were buried in shallower pits than adults, and that male and female burials were similar in depth. Some of the data that were available to Foster at the time of his analysis have since been modified and refined. Except for differences in detail, however, all of Foster's observations have been confirmed by the present analysis.

Given the impact of overbank erosion, the only way to determine how deep burial pits might have been in aboriginal times is to look at those burials located within PDS with intact floors. Seven structures with intact floors have a total of 21 burials that were interred during structure occupancy (Table 7.3). Pit depths for these "inside" burials range between 1.2 feet and 2.9 feet and average 2.0 feet. Evidence presented in Chapter 9 indicates that burial pits for individuals 8 years old or older were excavated deeper on average than those for younger individuals. Applying this distinction to the data in Table 7.3, we find that pit depths for the older and younger groups average 2.2 and 1.8 feet, respectively. Unfortunately, there is no way to determine whether burial pits located outside domestic structures were excavated to the same depth below aboriginal ground surface.

Burials provide our best evidence for estimating the depth of the basins in which PDS were erected. The difference in absolute elevation of burial pits lo-

Table 7.3. Depth of burial pits located within primary domestic structures with preserved floors

Burial	Structure	Age	Pit Depth
184	5	3	1.7
222	7	S-A	2.4
205	8	S-A	1.7
206	8	I	1.8
192	9	>12	2.8
193	9	3	2.2
191	10	22	2.3
148	14	A	1.3
150	14	37	1.5
188	14	18	1.8
209	23	I	2.4
210	23	18	2.3
211	23	22	2.8
212	23	42	2.9
213	23	S-A	1.8
214	23	13–17	2.8
216	23	4	1.3
217	23	>12	1.4
218	23	S-A	1.2
219	23	4	2.2
220	23	7	1.4

Note: Measurements in feet. S-A = Subadult; I = indeterminate; A = adult.

cated inside these structures and burial pits located outside but adjacent to them should be equal to the depth of the structure basin. This assumes, of course, that burials were interred at approximately the same depth below local ground surface (house floor or village ground surface) regardless of location.

Table 7.4 compares absolute elevations for the pits of burials 8 years old and older located within and adjacent to the four PDS where such information is available. Elevation differences range between .95 and 2.45 feet. The larger figure reflects the fact that Burial 192 has one of the deepest (2.8 feet) burial pits on the site. Given that the inside/outside depth difference for Structure 9 is based on this one burial, we probably should not give it as much weight as the other sets of measurements. We may conclude, then, that PDS basins were usually excavated to a depth of approximately 1 foot below surrounding ground surface.

Table 7.4. Elevation of pit bottoms for burials located within and adjacent to primary domestic structures

Structure	Inside Burials		Outside Burials		Average Elevation Difference
	Burial	Elevation	Burial	Elevation	
5	191	96.2	28	96.5	
			29	97.8	0.95
9	192	95.5	169	97.9	
			170	98.0	2.45
14	148	96.8	185	97.2	
	150	96.6	190	97.6	
	188	96.3			0.80
23	210	96.4	122	96.6	
	211	95.9	126	97.5	
	212	95.8	127	97.9	
	214	96.0	128	97.3	
	217	97.3	157	98.0	1.18

Note: Measurements in feet.

This difference in depth is useful in determining whether burials located within the walls of a PDS were contemporaneous with the occupation of that structure, that is, whether they were inside burials. The use of pit depth to identify inside burials is not, however, without its limitations. The 10 burials 8 years or older listed in Table 7.4 have pit depths ranging between 1.3 feet and 2.9 feet, and the five burials younger than 8 years have nearly as great a range of pit depths—1.3–2.2 feet. Since these ranges equal or exceed the presumed average depth of house basins, we cannot automatically assume that a deep burial is an inside burial. Other evidence, such as specific location within the structure, compass orientation, and stratigraphic relationship to other burials, must be considered as well. Shallow depth—that is, less than a foot below PDS floor level—on the other hand, is probably a more reliable indicator that a burial was not an inside interment. Sanitation requirements and odor probably set a limit on how shallow a burial could be.

Burial Pit Form

Burial pits at King occur in three forms: simple, stepped, and shaft-and-chamber. Regardless of form, pits are typically rectangular or oval with vertical sides and a flat base. Stepped pits have narrow ledges located at both ends, along both sides, or around most of the pit circumference. Ledges tend to be

located .5–.6 feet above the pit base. In shaft-and-chamber burials, one side of the pit is undercut a foot or so to form a side chamber, and the body is placed partially within it.

Simple and stepped pits sometimes contained decayed remnants of wooden boards. These are oriented parallel to pit length in most cases, but occasionally lie perpendicular to it. Boards usually occur between .3 and .6 feet above pit base, but in a few cases are as much as .8 feet above it. The lower elevations probably reflect the location of boards subsequent to their collapse into the hollow chamber beneath. Boards may have been placed over burials if the pit was kept open for a period of time. The absence of water-sorted sediments in the bottom of burial pits, however, suggests that pits were filled shortly after they were dug.

A total of 16 pits are stepped, 16 have boards, and two have side chambers (Appendix C). Plowing may have destroyed evidence of these features in many shallow pits. Seventy-five burial pits have clearly defined walls and sufficient depth (>.8 feet) to ensure that stepped forms and board covers can be detected in most cases. Of these, 61 (81 percent) are simple in form, 12 (16 percent) are stepped, and two (3 percent) are shaft-and-chamber. Twelve pits (16 percent) have boards.

A similar variety of pit forms characterizes the Dallas phase burials at Toqua. Sixty-six percent of the pits with identifiable form are simple, 28 percent are stepped, and 7 percent are shaft-and-chamber (Scott and Polhemus 1987). At least 13 percent of the pits have board covers. Mouse Creek phase burial pits are primarily simple in form with boards represented in 4 percent of cases, but there is no evidence of stepped or shaft-and-chamber configurations. Stone box graves, not represented at King, account for 4 percent of the graves in Mouse Creek phase sites (Sullivan 1987). Eighty-seven percent of the burials at the Coweeta Creek site in North Carolina have simple pits, while 13 percent are shaft-and-chamber (Rodning 2004:391). Stepped pits are not reported for the site.

Among pits with depths greater than .8 feet, six had both steps and preserved boards, but seven had only boards and seven had only steps. Decay may have destroyed boards in the latter cases, but the fact that some simple pits had boards indicates that steps and boards do not necessarily always occur together. Nevertheless, boards were apparently laid on steps in at least four of the six burial pits containing both features.

Burial 101 has the only definite shaft-and-chamber pit. The chamber was produced by undercutting the wall along one side of the pit to a depth of approximately 1 foot. One side of the skeleton and some artifacts are located

Figure 7.4. Bundle Burial 131 with flexed Burials 143 and 144.

within this pit extension. Burial 106 may also have had a shaft-and-chamber pit, but the wall overhang noted during excavation began near the top of the pit and was not very wide.

Body Position

There are three basic types of body position: extended, flexed, and bundle. The latter, with three examples, is the least common. Burials 131 and 260 consist of disarticulated bones that appear to have been confined to a small space, presumably within a bag or wrapping (Figures 7.4 and 7.5). Both occur at the foot end of a pit containing other flesh interments—two flexed individuals (Burials 143 and 144) in the former and a single partially flexed individual (Burial 117) in the latter. The third bundle, Burial 166, appears to have been articulated when it was bound in a very tightly flexed position (Figure 7.6). It was interred in its own pit.

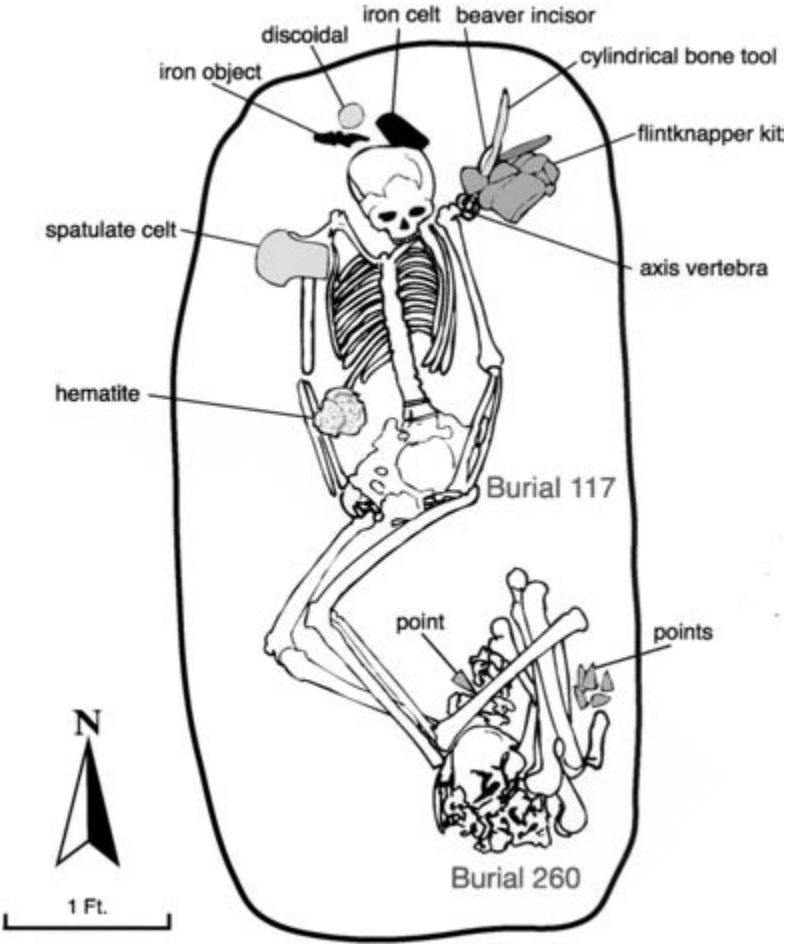


Figure 7.5. Bundle Burial 260 with partially flexed Burial 117.

Fifteen burials can be identified as extended (Appendix C). All individuals lay on their backs and, with the exception of Burial 23, had their arms and hands at their sides (Figures 7.1 and 7.7). Burials 23 and 24 were interred side by side in a single pit; the remaining 13 individuals were interred alone.

One hundred fifteen burials can be identified as flexed. There is considerable variation among these burials in the way upper body, arms, and legs are arranged. Some of this variability may be accidental or unintentional or may be due to postinterment site formation processes. Inspection of the burials, however, reveals sufficient patterning to allow seven subtypes to be tentatively

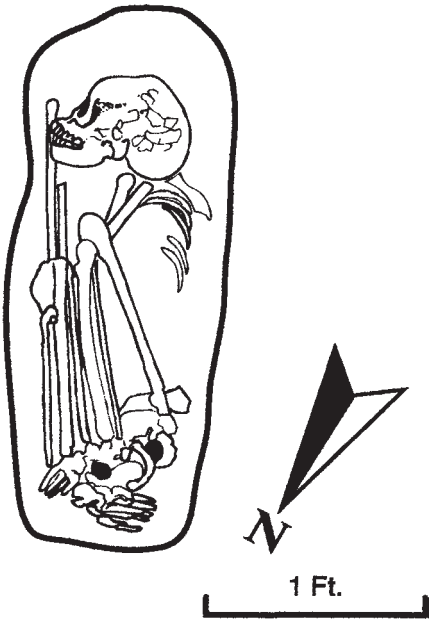


Figure 7.6. Bundle Burial 166.

distinguished: flexed on back, flexed on side, partially flexed on back, partially flexed on side, partially flexed with knees tightly flexed, tightly flexed, and unidentifiable flexed.

The majority of individuals (95) have upper legs flexed at a right or slightly obtuse angle to the body axis and lower legs flexed so as to lie perpendicular to the body axis. Thirty-seven of these are lying on their back (both shoulders are resting on the pit bottom) (Figure 7.8) and 26 are lying on one side (Figure 7.9), while the remainder are too poorly preserved to be identified in this manner.

Of the flexed burials lying on their back, approximately half have legs flexed to the left and half to the right. Arm position varies among these individuals in a fairly consistent fashion, suggesting that conscious choices were made in arranging the body in this manner. Both arms may lie at the side of the body; one arm may be bent at the elbow, with the forearm lying across the stomach at a right angle to the body axis; and one arm may be slightly bent at the elbow with the hand lying on the pelvis. In 27 out of 29 cases, the bent arm points in the same direction as the knees (Figure 7.8). Burials lying on their side are equally divided between lying on their left and right side. They usually (16 out of 21 cases) have their arms tightly flexed so that the hands lie near the head (Figure 7.9).

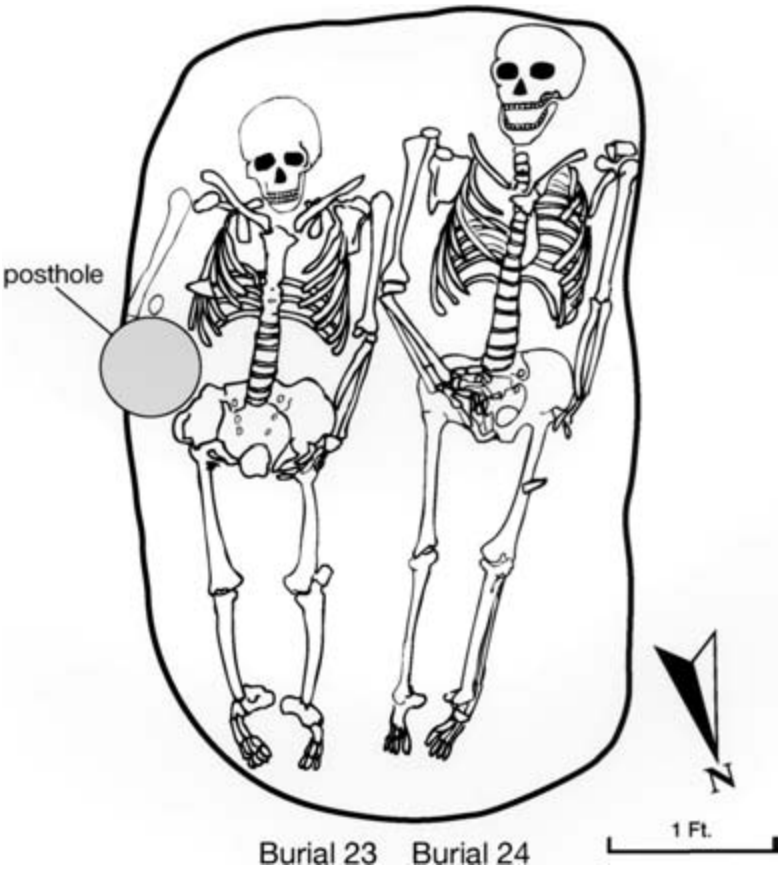


Figure 7.7. Extended Burials 23 and 24.

Eleven partially flexed burials have both upper and lower legs flexed at an obtuse angle, with the result that feet are located well below the hip (Figures 7.5 and 7.10). Individuals may lie on their back or side, but the former is most common. Arm positions are similar to those of the flexed burials, although one individual has one hand on the pelvis and the other near the head. Four subadults lying on their backs (Burials 51, 60, 170, and 237) have so little leg flexure that it is debatable whether their body position is partially flexed or extended (Figure 7.10). Arm position in each case cannot be determined as a result of poor bone preservation. These burials have been classified as partially flexed.

Ten burials have upper legs flexed at an obtuse angle and lower legs sharply flexed so that the feet lie close to the pelvis (Figure 7.1). All appear to be lying

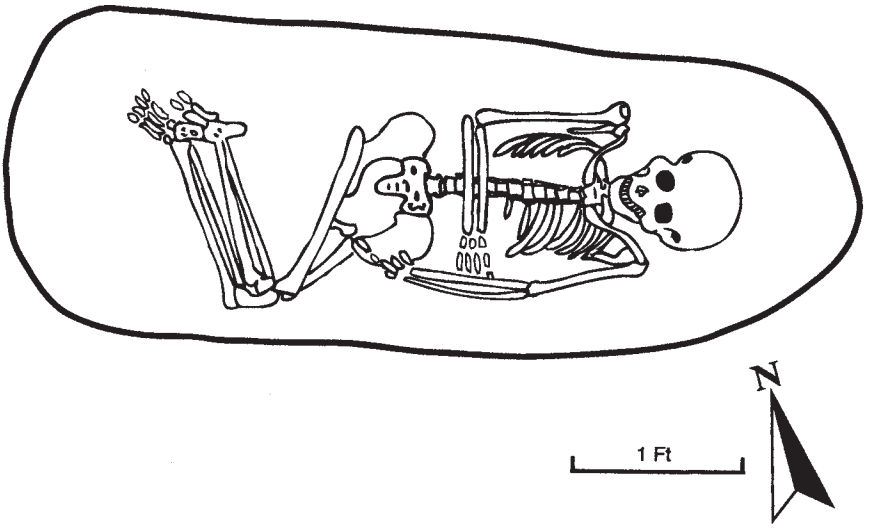


Figure 7.8. Burial 54 (flexed on back).

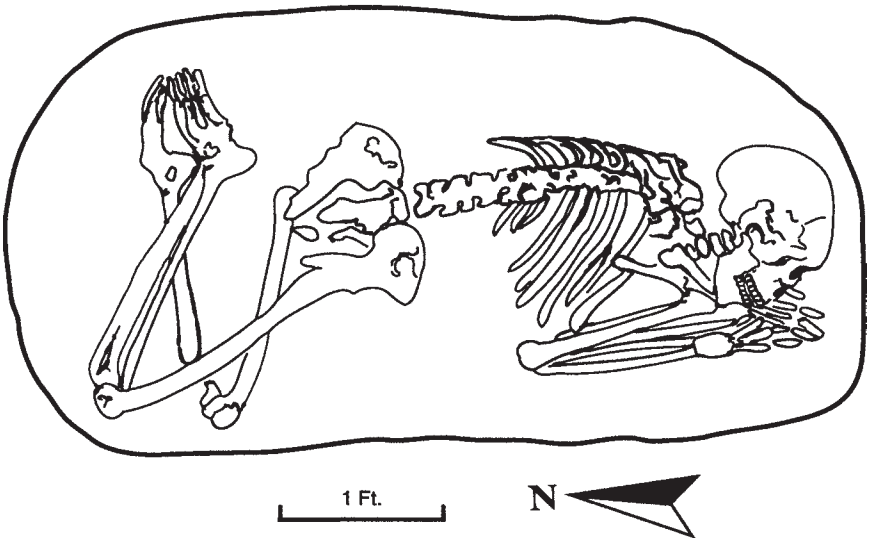


Figure 7.9. Burial 67 (flexed on side).

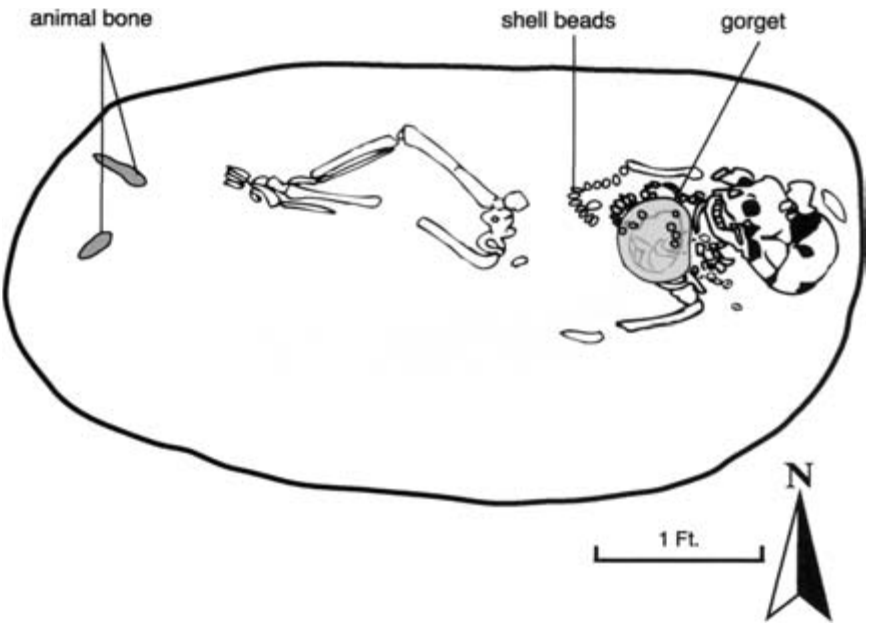


Figure 7.10. Burial 60 (partially flexed on back).

on their back. One individual (Burial 151) interred in this fashion had a deformed hip that may have made it difficult to position the legs in any other way (Hill 2001a).

Three individuals were interred in a more tightly flexed position. Burial 59 lies on its back with knees drawn up close to the chest and the lower legs lying parallel to the body axis (Figure 7.11). Burials 113 and 124 lie on their side. Their upper legs form an acute angle with the body axis, but the amount of flexure is not much greater than that seen in other flexed burials. Rather than a distinct type of body position, they may represent nothing more than one extreme in the range of variation in the flexed-on-side position.

Three flexed burials were interred in a face-down position. All are adult females. Burial 246 is the only one that is truly in this position, as both the pelvis and upper body are prone. The others, Burials 25 and 169, are not entirely prone, the pelvis being positioned on its side with legs extending out to one side while the upper body is turned face down. In both cases, it is possible the body was interred on its side but that subsequent settling brought the upper shoulder forward and down. These two burials will be considered to be in the flexed-on-side position in future analyses.

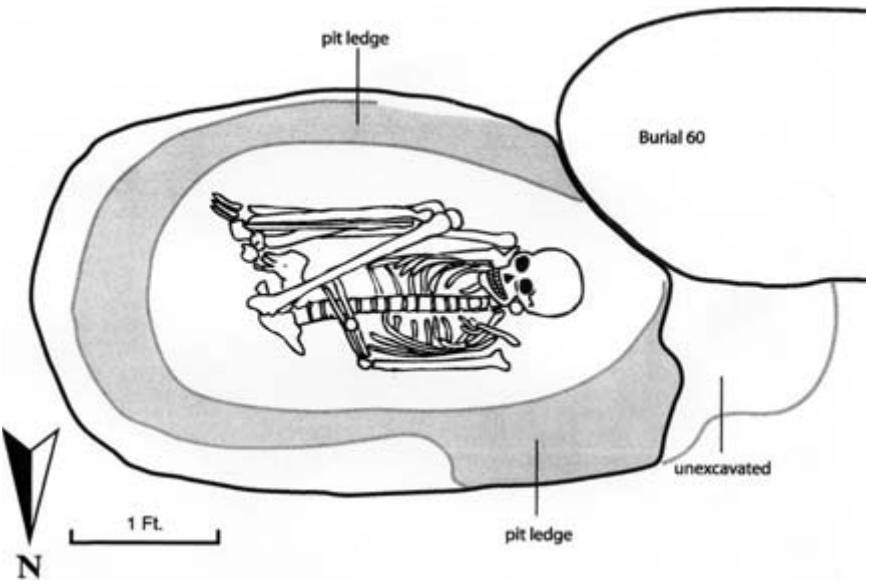


Figure 7.11. Burial 59 (tightly flexed on back).

Extended, flexed, and bundled burials undoubtedly were seen as distinct types of body position by the King site inhabitants. Whether any or all of the varieties of flexed body position described above also were recognized as distinct is another matter. A small number of burials can be considered to be intermediate between the four subtypes—flexed, partially flexed, partially flexed with knees tightly bent, and tightly flexed—suggesting that the subtypes represent merely arbitrary points along a continuum of variation.

Flexed and extended burials occur in the Dallas phase component at Toqua with the same frequency as they do at King—88 percent and 11 percent, respectively (Polhemus 1987). Bundles are unreported, while cremations, a type not found at King, occur with a frequency of less than 1 percent. Mouse Creek phase burial patterns are quite distinct. Extended burials account for 83 percent of the available samples, while flexed and bundle forms occur 12 percent and 5 percent of the time, respectively (Sullivan 1987). Cremations also occur with very low frequency.

Multiple Burials

The great majority of burials (92 percent) were single interments. In 10 instances, however, two or three bodies were placed together in a single pit at

Table 7.5. Multiple burials

Burial	Age	Sex	Location	Body Arrangement
4/5	A, S-A	M, I	Village	Flexed on back, unknown
13/14	A, A	F, I	Str. 2	Both flexed, left side
22/25	A, A	F, I	Village	Both flexed, left side
23/24	A, A	M, M	Village	Both extended
30/35	A, S-A	I, I	Plaza	Adult flexed, infant unknown
45/46	A, S-A	F, I	Village	Both flexed; adult left, child right
55/89	A, A	I, I	Village	Both flexed, right side
117/260	A, A	M, I	Village	Flexed, bundle
131/143/144	I, A, A	I, I, I	Village	Two flexed right, bundle(?)
186/187	S-A, S-A	I, I	Str. 14	Flexed, left(?), right

Note: A = Adult; S-A = subadult; I = indeterminate.

the same time (Table 7.5). These multiple burials appear to fall into two major types: those containing two individuals of approximately equal age who are interred side by side and in similar positions, and those in which one individual is interred in a different body position near the feet of the other. Four burials contained two individuals that were flexed and facing the same direction. Bodies were close together with one individual's arm or leg lying on the other individual (see, for example, Figure 7.4). All were adults, but only females could be identified. Burials 45 (44 years, male) and 46 (8 years) were both flexed but faced each other. This is also one of three cases in which individuals interred together are of markedly different age. Burials 186 and 187 may also have been flexed and facing each other, but preservation was too poor to allow certain identification.

Three multiple burials had one individual placed at the feet of the other. Burial 35, a 1- to 6-year-old infant, was located at the feet of Burial 30, an adult extended on its back. Burial 260, an adult bundle burial, was placed at the feet of Burial 117, a young adult (Figure 7.5). Burial 131, consisting of a bundle of limb bones, was placed at the feet of two adults (Burials 143 and 144) (Figure 7.4). Burials 4 and 5 may represent a fourth instance, but field notes do not clearly indicate the spatial relationship between the two bodies.

In a later section of this chapter, Burials 260 and 131 are treated as grave goods that were interred with another individual. Burial 117 appears to have been a prominent warrior, and it is reasonable to infer that the bundle of human bones placed at his feet (Burial 260) was a war trophy, the remains of someone he had killed in battle. There is no evidence that Burials 143 and 144

were warriors, but we cannot rule out the possibility that Burial 131 was also a war trophy.

Burials 132/197, 135/136, and 139/145 (Figure 7.3 and Appendix D) may be multiple burials, but the fact that one body was placed above the other in each case suggests they are the result of later burials intruding earlier ones. All bodies are flexed and the members of each pair are oriented in opposite directions. Burials 132/197 and 135/136 were placed directly above one another, while Burials 139 and 145 overlap only in the torso and leg area.

Burial Location

Burials were placed in a variety of locations across the site. Two hundred twenty-seven individuals were interred within the habitation zone either beneath the floors of primary domestic structures (PDS) or rectangular structures (RS) or in the spaces between them. Within the public sector, burials were interred in Structure 17, in the plaza north of Structure 17, and in the plaza south of the central post. Description of burial location in this chapter will focus on two aspects of this dimension of burial variability: the tripartite division of the site into habitation zone, plaza, and Structure 17 and, within the habitation zone, the distinction between location beneath the floors of PDS and RS and location outside of these structures. A third aspect of the location dimension—the association of burials with specific structures and multistructure households—will be described in Chapter 8.

Habitation Zone Burials—Primary Domestic Structures

Ninety-three burials are located within the walls of PDS. Fifty-nine of these were interred beneath the floor of a PDS while it was being occupied (Appendix C). Such burials are referred to as "inside" burials. Sixteen burials located within the walls of PDS were interred either before or after structure occupancy. Along with the 121 burials located in spaces between PDS and RS, these are referred to as "outside" burials. Eighteen of the 93 burials cannot be identified with certainty as either inside or outside burials. Thirteen burials are located within the walls of rectangular structures. They also are considered to be "inside" burials.

Several kinds of evidence can be used to determine whether a burial was interred from the floor of a PDS during its occupation. Pit depth can be expected to exceed that of nearby outside burials by approximately 1 foot. Other kinds of evidence, described in greater detail below, include location within the structure and compass orientation.

Several spatial patterns can be recognized among inside burials located within PDS. All inside burials, except two, are located in outer floor sectors. The exceptions, Burials 10 and 92, lie on the border between central and outer floor zones in Structures 2.3 and 15.1. Other possible exceptions are Burials 186/187 and 91/259, which are located within the central floor space of Structures 14 and 15 but may predate the structure. Regardless of these few exceptions, the outer floor area appears to have been considered the appropriate place to inter the deceased within a PDS.

Nearly all subfloor burials are located in the northern half of structures, that is, they are located on or north of a line drawn through the central hearth and parallel to the structure's northern and southern walls (see, for example, Structure 2 in Appendix A, Figure A.4). In PDS that are oriented close to the cardinal directions, this line would have an east–west lie. In structures that are rotated 20 degrees or more off the cardinal directions, this line would have a northeast–southwest or northwest–southeast orientation, and burials located on it or slightly "north" of it might actually lie south of the hearth. Burials 94, 134, 176, 181, and 188 fall into this category and should be considered as lying in the northern half of their respective structure.

Two burials are located in the southern half of PDS: Burial 184 in Structure 5.2–5.4 and Burial 191 in Structure 5.1. They could predate the structures, but pit depth and compass orientation indicate that they were contemporary with structure occupancy. With these exceptions, inside burials occur exclusively in the northern sectors of PDS. This holds for PDS in all parts of the mapped habitation zone and suggests that placement inside houses was not determined by factors such as location within the town or the direction structures faced. More likely, burial placement was tied to the cardinal directions, with north, as defined for each particular PDS, being considered the appropriate quarter for interment.

Of the 40 burials for which location within the outer floor space can be reliably determined, 35 occur in a central sector—that is, the space between two adjacent interior roof support posts—and only five occur in a corner sector. Eighteen of the former are located adjacent to the north wall, while 7 and 10 are located adjacent to the east and west walls, respectively. The most common burial location, then, is the north-central floor sector.

There is abundant ethnohistorical evidence that historic-period Southeastern Indians buried at least some of their dead in their houses (Hitchcock 1930:112; Hvidt 1980:48; Swanton 1928a:392, 395) and beneath the beds of the living (Moore 1988:48; Romans 1999:129; Swanton 1946:724; Waselkov and Braund 1995:129; Williams 1930:195). To the extent that this practice

was widespread and common in the Southeast, we may hypothesize that the benches upon which King site household members slept and lounged were located in the northern half of houses and primarily in the central sector of the northern, eastern, and western walls.

As described in Chapter 5, occupation refuse tends to be more heavily concentrated in the southern half of PDS with intact floors. We may infer from this that the domestic activities responsible for this debris generally took place in the southern half of structures. It seems likely, furthermore, that sleeping and activities related to general household maintenance would occur in different locations within a single structure. The general scarcity of occupation debris in the northern sectors of excavated house floors supports the idea that sleeping platforms were located in the northern half of houses.

Five PDS with a total of seven construction stages (Structures 1.1, 7, 8.1, 8.2, 23.1, 23.2, and 24) have both entrance trenches and interior burials. In most of these, burials are located along the wall opposite the entrance passage. In two cases, Structures 1.1 and 24, burials are located along a wall adjacent to (left of) the entrance passage. No entrances occur in a floor sector with burials.

Since most preserved entrance trenches are on the south side of PDS, we might conclude that there was a preference for placing burials and entrances in opposite halves of houses. This seems unlikely for the reason that entrance location appears to have been determined by at least three different factors: preference for a south-facing orientation, preference for orientation toward the plaza, and preference for orientation toward extended family household work spaces (see Chapter 8). Only the first may be related to burial location and was probably overridden by the other factors in many instances. Most PDS located on the south side of the site, for example, probably had entrances on their north sides.

We have seen that burials interred inside PDS seldom intrude one another. Even in Structure 23, which had 12 burials located in the northern third of its floor area, there is little overlap between adjacent burial pits. This suggests that structure residents were able to remember with a great deal of accuracy where burials were located.

Burial pits tend to have the same compass orientation as the primary structures in which they are located. The average difference for all inside burials (50) and structures (15) that can be readily associated and that can be oriented with reasonable accuracy is 6.5 degrees. Much of this difference can be attributed to Burials 178, 212, and 220, which have orientations diverging by 24, 27, and 33 degrees, respectively. Two of these are from Structure 23, which had the

largest number of inclusive burials, and the difference may reflect attempts to fit burials into small available spaces. More than half the burial pits diverged from structure orientation by 4 degrees or less.

Burial pits are almost always aligned with the nearest exterior wall. Even Burials 178, 212, and 220, which diverge from their structure's orientation by as much as 33 degrees, lie roughly parallel to the nearest exterior wall. Only Burial 20, which appears to be oriented at right angles to the east wall of Structure 1, can be said to be misaligned.

Because of the close correspondence between burial orientation and structure orientation, the former has proven to be a useful tool in the analysis of architectural data. In one case, Structure 25, burial orientation provided the first piece of evidence that the structure had two building stages. In a number of cases, it was one piece of evidence used to identify burials that predate or postdate building occupancy.

The number of individuals interred in primary domestic structures varies from 0 to 12. In Chapter 8, we will see that the primary determinants of the number of burials in a structure are the length of time the structure was occupied and its social and symbolic position within multistructure households. In general, structures with more building stages have greater numbers of burials.

Individuals interred within primary domestic structures are best interpreted as having been members of the household or core kin group residing in the structure (Carr 1995; Goldstein 1981). Without mitochondrial DNA evidence, we will probably never be able to prove that this was the case at King. Nevertheless, several lines of evidence do give strong support to the proposition. To begin with, Creeks and other Southeastern tribes buried household members in this manner in the eighteenth and nineteenth centuries and continue the practice even today (Hitchcock 1930:112; Moore 1988:48; Moore 1994; Romans 1999:129; Swanton 1928a:392, 395, 1946:724; Williams 1930:195). Second, the distribution of at least one inherited, nonmetric dental trait (Carabelli's cusp) indicates that several individuals buried in Structure 15 were related (Tally 1975). Third, the individuals interred in each structure tend to resemble a cross section of the larger community's population, individuals of all ages and both sexes being represented. Four PDS contain five or more individual interments. Adults and subadults are represented in each structure's burial sample, as are both males and females in most cases (Table 7.6). In the domestic structure sample as a whole, furthermore, interments are equally divided between male (4) and female (4) and are well distributed among the various age groups.

Identification of subfloor burials as representing deceased household mem-

Table 7.6. Age and sex of individuals interred in primary domestic structures having five or more burials

Structure	Burial	Age	Sex
1	15	A	I
1	16	1–6	I
1	19	A	I
1	20	S-A	I
1	27	1–6	I
1	42	A	M
2	9	45	F
2	10	7	I
2	11	A	I
2	12	2	I
2	13	18–30	F
2	14	22	I
15	80	4	I
15	81	35	M
15	92	45	M
15	111	23	F
23	209	S-A	I
23	210	18	I
23	211	22	F
23	212	42	M
23	213	S-A	I
23	214	13–17	I
23	215	A	I
23	216	4	I
23	217	>12	I
23	218	S-A	I
23	219	4	I
23	220	7	I

Note: A = Adult; S-A = subadult; I = indeterminate.

bers raises the question of which household adult males were interred with. Given that postmarital residence in King society was probably preferentially matrilocal (Gearing 1962; Swanton 1928a), the adult males living in most households probably had married in from their natal household. But were these males buried in their natal household or where they resided at time of death? Eighteenth- and nineteenth-century ethnohistorical references indicate that burial was in the wife's house (Moore 1988:48; Romans 1999:129; Wasel-

kov and Braund 1995:129; Williams 1930:195). According to Moore (1994), the practice continues into the present in traditional Oklahoma Creek households. We are probably safe, then, in assuming that at King adult males were buried where they resided.

Individuals of both sexes and all ages were interred within the walls of domestic structures at the Coweeta Creek site in North Carolina (Rodning 2004:385–387). Burials are also located inside domestic structures at the Mouse Creek phase towns in eastern Tennessee. Unlike King and Coweeta Creek, however, these burials are all subadults under 5 years of age (Sullivan 1987:23).

Habitation Zone Burials—Rectangular Structures

Burials were located in the space enclosed by the posthole patterns of six RS (Table 7.7 and Appendix B). In all cases, the compass orientations of associated burials and structures are quite similar. Two or more burials are present in four RS. In three of these cases (RS 1, 6, and 8), pit orientation and/or spacing indicates that burials had been arranged in tight clusters of the kind characteristic of outside burials. The fourth case, Burials 22 and 25, is a multiple burial. Burials 135 and 136 are located immediately adjacent to RS 2 and have a similar compass orientation. They are probably contemporary with the structure. Interments associated with RS appear to represent a cross section of the site population with adult males and females and subadults being represented. Pit sizes for Burials 70 and 71 indicate that these interments were children.

Burials overlap the posthole patterns of four rectangular structures. RS 1, 3, and 11 each have a single burial lying partially inside and partially outside the enclosed structure area. RS 9 overlaps a tight cluster of five burials. It is possible that structures and burials are contemporary in each case, but unlikely. Wall posts of RS 1 and RS 11 intrude the burial pits, and in the case of RS 9, the large cluster of burial pits covers most of the length of one wall.

Habitation Zone Burials—Outside Burials

At least 137 burials are located in the habitation zone but outside PDS and RS. The placement of burials within PDS suggests that there was concern for burying household members together and within the physical space utilized by the household. Given this concern, we might expect outside burials located near domestic structures also to be deceased household members. If this is correct, than we can expect such burials to manifest some of the same characteristics as those placed within primary domestic structures. We might expect them to:

Table 7.7. Burials associated with rectangular structures

RS	Structure Orientation	Burial	Burials Inside Walls	Burials Adjacent to Walls	Burial Orientation	Sex	Age
1	86, 86, 77	169	x		90	F	20
		170	x		90	I	7
2	38	135		x	39	M	33
		136		x	39	F	40
6	67	69	x		72	F	27
		70	x		—	I	I
		71	x		—	I	I
8	39	53	x		37	F	22
		54	x		37	F	>18
		56	x		40	M	38
		57	x		31	M	25
9	13, 25	129	x		26	M	37
10	0, 0	124	x		7	I	>12
11	82, 85	22	x		75	I	22
		25	x		75	F	42

Note: I = Indeterminate. Dashes indicate no data available.

1. Have burial pits with compass orientations similar to that of the associated PDS.
2. Exhibit some regularity in their placement relative to the PDS—for example, placement in front of rather than behind the structure.
3. Include individuals of all ages and both sexes.
4. Vary in number in conformity with the length of time the household was in existence.

Review of the 137 known outside burials suggests that they share several additional characteristics, including the following:

5. A tendency to form tight spatial clusters with individual pits generally located less than 2 feet apart. Burials 53, 54, 56, and 57 and Burials 58–63, 66, and 67 are two good examples of such clusters (Appendix B, Figure B.16). Burials 1–8 form a much looser cluster—the distance separating Burials 7 and 8 from the other six, in fact, raises the possibility that they are not part of the cluster.
6. A tendency for pits in such clusters to be oriented parallel to and at right

angles to one another. This characteristic may be seen as analogous to burial placement within PDS since burials oriented parallel to adjacent exterior walls are in fact oriented at right angles to one another.

7. A tendency for large clusters of burials to be located slightly in front of PDS—that is, on the side of the structure facing its associated courtyard or the side having an entrance passage—but well off to one side. Burials 1–8 (Structure 1), Burials 53, 54, 56, and 57 (Structure 14), and Burials 119–121, 139–142, 145, 146, and 161–165 (Structure 23) are good examples of such placement. The distances between such burial clusters and associated PDS are fairly consistent, being 15 feet in the case of Structure 1, 25 feet in the case of Structure 14, and 27 feet in the case of Structure 23.
8. A tendency for one or two burials to be located directly in front of the entrance passage of a PDS. There are four possible examples of this: Structure 7 and Burial 128, Structure 8 and Burial 129, Structure 11 and Burial 48, and Structure 24 and Burials 166 and 167. Distances between burials and the four structure entrances are fairly uniform, being 7, 14, 5, and 9 feet, respectively.

Using these eight characteristics as criteria, we can make a reasonably strong case for assigning a number of outside burials to households occupying a specific PDS or group of PDS. These assignments will be made in Chapter 8.

Structure 17

Ten burials are located within the walls of Structure 17 (Figure 6.4). Burial pits range in depth between 1.5 feet and 2.8 feet and average 2.1 feet, indicating that all originated from the floor of the structure. Spatial characteristics for the most part parallel those observed for inside burials in PDS. All burials except one are located in the outer floor zone, the exception extending approximately halfway into the central floor area. All burials are aligned with the adjacent exterior structure wall, and their compass orientations correspond closely to that of the structure itself, the average difference being 4 degrees.

Unlike PDS, no burials are located in the corner floor sectors. A perhaps more significant difference is the location of three burials in the southern half of the structure. This difference may reflect the public function of the structure and the kind of symbolism associated with it. Structure 17 almost certainly functioned as a council house for the King site community. Unlike PDS, which appear to have been divided into a northern half for sleeping, relaxation, and burial and a southern half for domestic activities, Structure 17 had benches for sitting and resting around its entire circumference. Given what we

know about the eighteenth- and nineteenth-century Creek rotunda and square ground and Cherokee townhouses, it is possible that people were assigned seating space according to their clan affiliation, sociopolitical status, or where they came from in the town. If this is correct, we might expect individuals to be buried in the section of the floor that corresponded with their seating location. Because of its importance as a public building, we also might expect that interment within Structure 17 was limited to individuals with special qualifications. These questions are considered further in Chapter 12.

Plaza Burials

Eleven burials (Burials 30–40) were interred in a fairly loose cluster immediately north of Structures 16 and 17 (Figure 6.6). They may have been enclosed within the walls of a lightly constructed pavilion. All but one of the burials are quite shallow, and seven had been heavily damaged by plowing. Burial 194, located 30 feet south of the large post pit (Feature 45), is the only other burial known to have been interred in the plaza. As with the Structure 17 burials, we can assume that interment in the plaza was limited to individuals with special qualifications.

Burial Artifacts

Iron Tools

Eight iron artifacts were recovered from five burials excavated during the 1973 and 1974 field seasons. A sixth burial, looted by pothunters in 1982, contained a complete sword (Little 1985). The artifacts excavated in 1973–1974 consist of three celts or chisels; one wedge or celt with tapering cross section; a rod with round cross section and flattened, chisel-like end; and two possible knife blades (Smith 1975) (Figure 7.12, Table 7.8). Similar artifacts have been recovered at other sites in northwestern Georgia and are believed to originate with the De Soto and/or Luna expeditions (Marvin Smith 1987). The sword has a straight two-edged blade and a swept hilt. It is dated to the mid-sixteenth century by Dr. Helmut Nickle, Curator of Arms and Armor at the Metropolitan Museum of Art in New York (Little 1985).

Copper Arrow Symbol Badges

Two copper arrow symbol badges (CASB) with embossed decoration were recovered from Burial 92 (Figure 7.13). They measure 92.7 and 94.7 mm in length and 37.2 and 36.9 mm in maximum width. Shape resembles a projectile

Figure 7.12. Iron tools from burials (scale in centimeters): A, two celts from Burial 92; B, celt from Burial 15; C, celt from Burial 117; D, rod from Burial 92.

Table 7.8. Iron artifacts from burials

Burial	Description	Length	Width	Thickness	Placement in Burial
15	Celt/chisel	80	39	10	Shoulder
19	Knife blade(?)	136	—	—	—
40	Knife blade(?)	110	—	—	Hip
92	Celt/chisel	98	32	8	Elbow
	Celt/chisel	102	28	6	Feet
	Rod	186	11	11	Feet
117	Unidentified fragment	93	11	5	Head
	Wedge/celt	85	47	19	Head
234	Sword	1,200	—	—	—

Note: Table adapted from Smith (1975:Table 1). Measurements in millimeters. Dashes indicate no data available.

Figure 7.13. Copper arrow symbol badges from Burial 92 (scale in centimeters).

point with flat base, small side notches, straight-sided blade, and rounded tip. Both have a single small hole drilled or punched through their basal portion. The two specimens have very similar embossed designs consisting of concentric semicircles and groups of two or three parallel straight lines.

Similar objects have been recovered from burials at 13 additional sites in Georgia and adjacent portions of Alabama, Florida, and Tennessee (Brain and Phillips 1996:372–373; Marvin Smith 1987:101). Differences in overall shape and temporal context lead archaeologists to distinguish two types: an older Cemochechobee type dating probably to the fourteenth–early fifteenth century and a Thirty Acre Field type dating to the sixteenth century (Brain and Phillips 1996:373). The CASB from Burial 92 are of the latter type.

Most of the nine sites with Thirty Acre Field type CASB have been looted or poorly excavated with the result that the number of specimens per burial is not known. Cemochechobee CASB are known from burials at seven different sites. They occur in groups ranging in number from 2 to 13 and averaging nine. Twelve Cemochechobee type specimens, recovered from a burial at the eponymous site (Schnell et al. 1981:218–225), are reconstructed as being part of a feather headdress. Evidence of a similar sort supports the reconstruc-

tion of a headdress accompanying four individuals in Burial 38 in Mound C at Etowah (Larson 1959). There is also some evidence that CASB were sometimes worn as ear ornaments suspended by the hole in their base from ear spools. Larson (1993) found evidence for this use in Burial 109 at Etowah, and Phillips and Brown (1978:Figure 115) illustrate several images of ear spools engraved on shell cups and gorgets that have copper arrow, plume, and mace symbol badges suspended below. Four other burials had groups of Cemochechobee CASB that were placed near the feet, head, pelvis, and elbow (Brain and Phillips 1996).

The CASB in Burial 92 were located in the neck area and partially underlay the shoulders. They were oriented with their pointed end down. Approximately 220 medium-sized *Busycon* disc beads were located in the same area, some beneath the CASB and the shoulder. Ten human molars, some stained with copper salts, were also located in the neck/shoulder area. They were not found, however, until the skull was removed following the completion of field recording. As a result, their exact stratigraphic context is not known, although Pat Garrow (personal communication 2000) recalls that they were located beneath the chin and above the cervical vertebrae. The three sets of artifacts—CASB, beads, and molars—generally have been identified as constituting elements of a necklace (Marvin Smith 1987). CASB and beads may have been part of a single item of costume, but their location does not support their identification as parts of either a necklace or headdress. The location of the CASB an inch or two below each ear and their orientation with the pierced base closest to the ear, in fact, suggests that they were part of ear ornaments, although there are no ear spools present. The human molars may have been part of this costume piece, but their location beneath the chin suggests they were separate, perhaps part of a necklace.

Large Bifacial Blades

Eight burials, excavated during 1973–1974 and 1992 field seasons, were interred with large bifacially flaked chert blades (Figure 7.14, Table 7.9). One of these, from Burial 65, was stolen from a museum exhibit in 1973 and is known only from field photographs. Two additional burials (Burials 234 and 269), looted by pothunters in 1982, are reported to have contained three blades and one blade, respectively, but these have not been analyzed by professional archaeologists (Little 1985).

Bifacial blades are leaf shaped but vary from bipointed to a teardrop shape in which one end is rounded or blunt and the other is pointed. Elizabeth Misner (1995) analyzed the production stages and use modification of the bifa-

Figure 7.14. Large bifacial blades from burials (scale in centimeters): A, Burial 101; B, Burial 92; C, Burial 34; D, Burial 223; E, Burial 223; F, Burial 15.

cial blades recovered from Burials 15, 34, 85, 92, 101, and 105. I inspected the two blades from Burial 223 with a hand lens and a microscope. All except the specimen from Burial 85 and the large blade from Burial 223 bear some evidence of use wear and/or intentional resharpening. Retouching, producing a bifacially beveled edge, covers one end of the specimens from Burials 15 and 34, the midsection of the small blade from Burial 223, and all but the broken end of the Burial 105 specimen. Grinding and polishing is present along 90 percent of the edge of the Burial 34 specimen, including the beveled portion, and on the pointed end of the Burial 92 specimen. Fine retouching that could be use wear is present along most of the edge of the Burial 101 blade and portions of the beveled edge of the Burial 105 specimen. Additional evidence of post-manufacture modification exists in the form of breaks in the outline of the blades from Burials 15, 34, 92, and 105. The edges of the three blades from Burials 101 and 223, in contrast, curve smoothly from one end to the other.

It is clear from the above that most bifacial blades were reworked subsequent to their manufacture. Reworking may have been undertaken to "salvage" blades that broke or to resharpen blade edges that became dull through

Table 7.9. Large bifacial blades from burials

Burial	Length	Width	Thickness	Material
15	122	47	8.0	Light gray, white inclusions
34	191	47	8.0	Mat brown
65	150–200	—	—	—
85	101	40	6.5	Light gray
92	108	45	7.0	Reddish brown
101	170	69	10.0	White
105	66	33	5.5	Cream
223	220	67	8.5	White
	123	41	7.8	Gray/black

Note: Measurements in millimeters. Dashes indicate no data available.

use. The unretouched ends of the Burials 15 and 34 blades are almost identical in outline, width, and thickness, but the former specimen is one-third shorter than the latter. Assuming that the two blades were originally of comparable length, the Burial 15 specimen would be a good candidate for a blade that broke and was refurbished or was resharpened numerous times. The relatively short length of the Burial 92 and 105 blades also suggests heavy reworking.

Large bifacial blades are well known from Dallas, Mouse Creek, and Lamar sites. They are generally considered to have had ceremonial and/or symbolic rather than utilitarian uses (Hatch 1974; Lewis and Kneberg Lewis 1995; Polhemus 1987; Sullivan 1986). Given the apparent fragility and the probable value of the blades, it does seem unlikely that they would have been used in everyday household or subsistence activities. It is surprising, therefore, to find that the King site blades probably were used in ways that resulted in breakage, edge wear, and resharpening.

Bifacial blades are depicted as being held in the hand of bird-human figures in Hightower (Muller 1989) or Big Toco (Brain and Phillips 1996) and Craig B (Phillips and Brown 1978) style shell gorgets. These depictions suggest that blades were held in the hand without benefit of a hafted handle, an interpretation that is supported by the fact that the individual in Burial 34 held his blade in his right hand. Because of their physical characteristics and depictions on shell gorgets in warlike scenes, blades are often interpreted as weapons or weapon symbols (Brown 1976a). If they were indeed used as weapons in combat, they would be likely to break or chip along the edge with some frequency. Unless they were rubbed against other items while being brandished, however, we would not expect their edges to show evidence of grinding and

polishing. The use of bifacial blades in warfare will be discussed further in Chapter 11.

There is a tendency for bifacial blades to be placed on or adjacent to the upper body of the deceased. In Burials 34, 101, 105, and 223, blades were placed on the chest or abdomen. As noted, in Burial 34 the blade was actually in the right hand. In Burial 15, the blade was placed just above the shoulder and immediately in front of the face. In the other three cases, blades were placed adjacent to the hip (Burial 65) or legs (Burials 85 and 92).

Large bifacial blades were not particularly rare, as they occur in nine of approximately 40 adult male burials. They must have had considerable value, however, in the eyes of King site inhabitants. Their large size and fine workmanship suggest that only highly skilled flintknappers could have made them, and all but one (the smaller specimen from Burial 223) appear to have been made from nonlocal cherts. It is possible that larger blades made from cherts that were less accessible had the greatest value. The largest King blade measures 220 × 69 mm. A blade recovered by Moorehead (1932) from Mound A at Little Egypt and presumably contemporaneous with those at King appears to be nearly 400 mm in length. An alternative criterion for measuring the value of these implements will be discussed in Chapter 11.

A smaller, less well-formed biface was found in close proximity to Burial 130 but cannot be assigned to that burial with certainty. It is made from local black chert and measures 94 × 30 × 9 mm. One end tapers to a fine point. The other end is more rounded but has been largely destroyed by an impact-type fracture that runs diagonally across one side of the implement. Cortex is also present at this end of the implement on one face. Evidently the tool broke during manufacture. The entire unbroken edge of the tool has been retouched, and use flakes are present along much of the tool's perimeter.

Two bifacially flaked chert tools, similar in size and shape to the Burial 130 blade, were recovered from the floor of Structure 8 and from Barnett phase midden at the Little Egypt site. The Structure 8 specimen is bipointed, measures 92 × 25 × 8 mm, and has use wear on its edges (Ruggiero 2000). The Little Egypt specimen, measuring 86 × 31 × 5 mm, is also leaf shaped but is squared off at one end (Hally 1979:225). It has not been analyzed for use wear. The Structure 8 specimen is made of Ft. Payne chert, which occurs locally in northwestern Georgia; the Little Egypt specimen appears to be a local chert as well. Their smaller size, local origin, and occurrence in household and midden contexts suggest that these two artifacts are utilitarian implements. The Burial 130 biface conforms rather closely in overall shape and size to them and therefore probably had household or subsistence-related uses as well. I do not consider it to be the same kind of artifact as the eight bifacial blades discussed above.

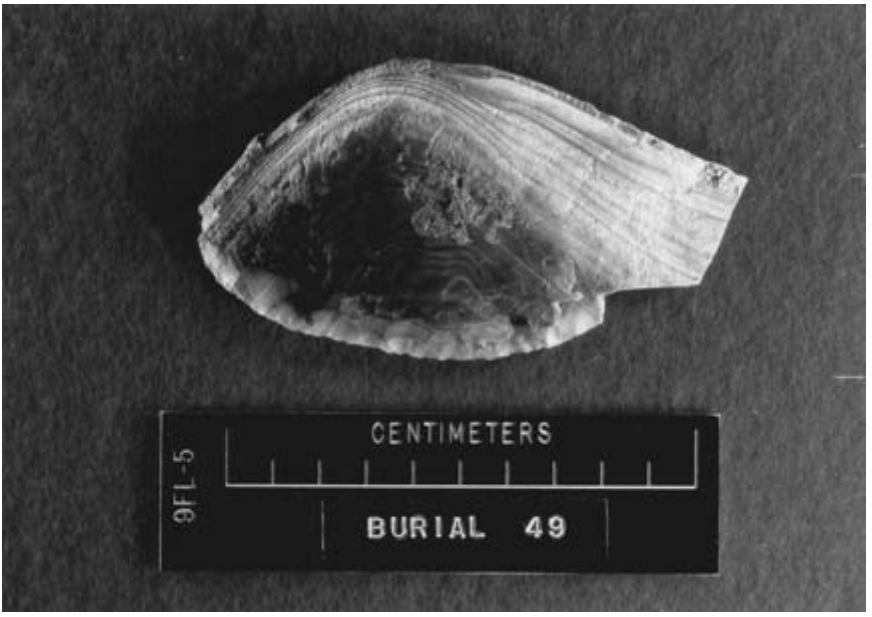


Figure 7.15. Asymmetrical blade from Burial 49.

Asymmetrical Blade

Burial 49 contained a large tabular fragment of a chert nodule measuring 117 × 65 × 7 mm. The artifact lay in the chest area of the deceased, on top of a mask gorget. One edge is bifacially flaked to form a convex cutting edge almost 100 mm long (Figure 7.15). The opposite edge is nodule cortex that varies in thickness between 10 and 30 mm. The chert is mottled gray and white and is not of local origin. Scratches near the middle of each face indicate that the piece had been used in some fashion in its present form and is not a preform. Because of its size, exotic material, and unique shape, the piece will be treated as being a type of large bifacial blade.

Triangular Points

Three hundred six triangular points were recovered from 29 burials during the 1972 through 1993 field seasons (Table 7.10). One of these points, from Burial 61, was probably an accidental inclusion in pit fill rather than an intentional grave good. Points also were recovered from Burials 234 and 269, looted in 1982.

The points conform most closely to the type that has been variously called Dallas Excurvate (Lewis and Kneberg 1946:113) and Dallas Point (Polhemus

Table 7.10. Triangular points from burials

Burial	Number of Points	Color						Comments
		Black	Gray	White	Red	Pink	Honey	
1[1]	3	3						
15	10	2	2	1	1	4		1 distal fragment
30	12	4	5	1				2 points missing
34	20	19		1				
40	1							Heavy plow damage
44	6	4				1	1	1 point reworked 1 basal fragment
49	1	1						
56	3							3 points missing
57	1							1 point missing
61[1]	1							Basal fragment
65	11	10		1				
81	10	8	1			1		
87[1]	3							3 points missing
92	31	28	3					
93	8	4	1			1	2	
100	24	21	1			1	1	
101	21	12	3	3			3	4 basal fragments
102	7	2		1				4 points missing
105	50	27	9	6	5	1	2	
117	9	7		1		1		
118	13	10		1		2		
145[1]	5	4		1				
146[1]	6	3				2	1	
153	5							5 points missing
157	1						1	
176	4	4						
195	2		2					Heavy plow damage
223	23							Not analyzed
229	13							Not analyzed
234	23							Not analyzed
269	2							Not analyzed

1. Burial associations are not certain.

1987:729). They are triangular with straight to slightly convex edges and straight to slightly concave or convex bases. Length ranges between 20 and 60 mm and averages 38 mm. Width ranges between 12 × 20 mm and averages 14 mm (Matthiesen 1994). Flaking is usually quite well executed and often of the "collateral" type (Matthiesen 1994). Most points are made of black, gray, or blue-gray chert, but white, pink, and red cherts were also used. Ft. Payne, Knox, Newala, and Conasauga cherts are locally available and when heat-treated produce most of these colors (Goad 1979).

Although all points are triangular, a fair amount of morphological variation is evident among them. Matthiesen (1994) analyzed this variability to determine whether some might be attributable to microstylistic variation between individual flintknappers. She measured 252 points from 19 burials that had two or more points and were available for analysis. She measured point length, width, and thickness in two different locations, calculated basal curvature, and measured flake scar angle. A comparison of these measurements and a subjective evaluation of overall point shape allowed her to confidently identify 13 microstyles. Seven of these microstyles, subjected to additional, more-objective analysis involving cell point charts, bivariate scatter plots, and cluster analysis, are illustrated in Figures 7.16 and 7.17.

Number of points per burial ranges from 1 to 50 with two-thirds of burials having five or more. Placement of points in burials is quite variable, but a number of patterns can be recognized. To begin with, points are almost always arranged in tight clusters and with parallel alignment, suggesting that they were laid in the grave as bundles of complete arrows. In Burial 44, the arrow shafts may have been held in the hand of the deceased. There are four exceptions to this pattern. In Burials 34, 92, 101, and 117, one or two arrows were evidently laid across the bundle at a 90-degree angle or in the opposite direction. Burial 34 is the most elaborate in this regard, with most arrows placed near the feet in two similarly oriented bundles, one being located .5 feet down the shafts of the other, and two arrows laid at right angles to them. The latter are oriented in opposite directions to each other.

In Burials 34, 87, and 92, some points are located less than 1 foot from the pit wall with their base toward the wall. The proximity of the pit wall suggests that these points were either not hafted at the time of interment or that they had only the foreshaft attached. If the latter was the case, then the possibility exists that all or most points had only foreshafts attached at the time of interment.

With two exceptions, only a single bundle of points was placed in a burial. In Burial 34, there are two bundles at the feet of the deceased and a third

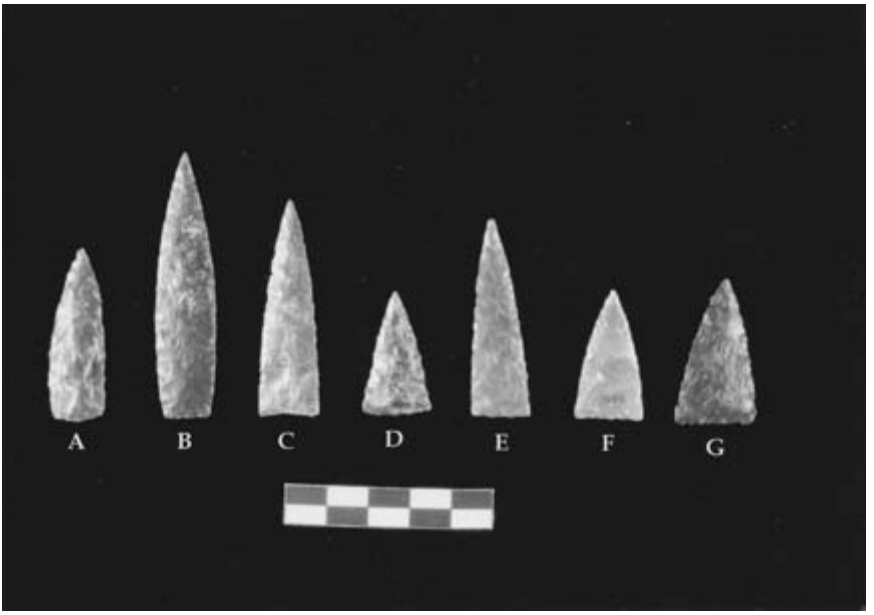


Figure 7.16. Points from burials representing different microstyles (scale in centimeters): A, style 34C; B, style 65A; C, style 92A; D, style 100A; E, style 101A; F, style 105D; G, style 118A.

bundle at the shoulder. In Burial 92, there is one bundle of points located near the right forearm, two bundles of points placed in the vicinity of the feet, and individual points in two other locations near the feet.

Points, and presumably their shafts or foreshafts, were almost always oriented parallel to the upper body. Those placed in the shoulder area have shafts pointing toward the feet; those placed near the lower body have their shafts pointing toward the head.

Points were placed in three different locations in flexed burials: above the shoulder (Burials 15, 34, 44, 56, 93, 118, and 223); in the vicinity of the feet (Burials 34, 65, 92, 100, 101, 117, and 153); and at the knees (Burials 57, 139, and 176). Among extended burials, points were placed either between the legs or next to one leg (Burials 30, 102, and 105) or at the shoulder (Burial 81).

Dallas points are seldom found in domestic contexts at King (Ruggiero 2000). Several kinds of evidence, discussed in Chapter 11, indicate that most if not all of the points placed with burials at King were not used in domestic or subsistence activities but rather had sociopolitical and ideological functions.

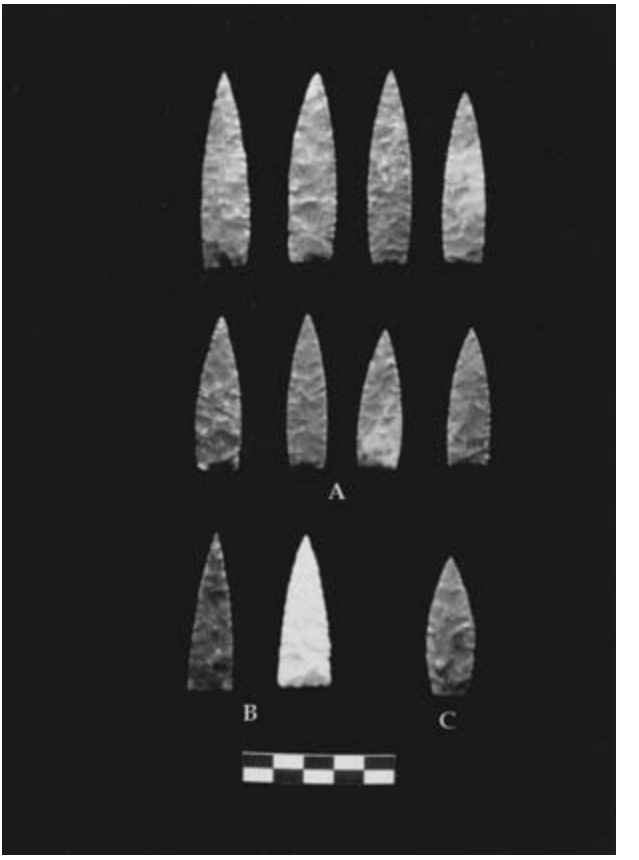


Figure 7.17. Points from Burial 65 representing three microstyles (scale in centimeters): A, style 65A; B, style 101A; C, unidentified style.

End Scrapers

Unifacial end scrapers were present in flintknapper kits accompanying Burials 49, 92, and 101. Dimensions range between 33 and 59 mm in length, 24 and 31 mm in width, and 10 and 15 mm in thickness. Cobb and Pope (1998:9, Figure 8) have analyzed the tools and describe them as follows: "These were produced by similar techniques from large, thick flakes. The working end of the scraper coincided with the distal portion of the flake, while the platform formed the proximal end that presumably was hafted. Steep, unifacial retouch

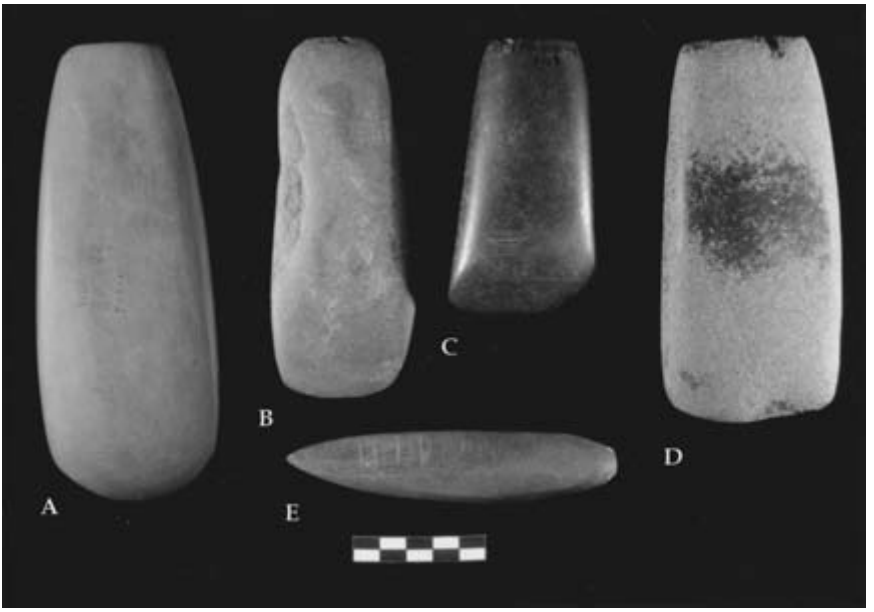


Figure 7.18. Stone celts from burials (scale in centimeters): A, Burial 192; B, Burial 130; C, Burial 215; D, Burial 130; and E, Burial 124.

is evident along all of the flake margins, resulting in a keeled dorsal surface. The bottom of the scrapers, corresponding to the ventral side of the flake, exhibits pronounced concave curvature."

Cobb and Pope also identified preforms for four unifacial end scrapers. Three of these occurred in the Burial 101 flintknapper kit, and one occurred in the flintknapper kit of Burial 117.

Celts

Six celts and one celt preform were recovered from five burials (Figure 7.18, Table 7.11). One celt from Burial 81 and the celt from Burial 192 are very similar. Both are made from chert concretions, have slightly rounded cross sections, and have a round bit. Both have cutting edges that are in mint condition. The second specimen from Burial 81 is more rectangular in cross section and has a straight bit that bears some evidence of wear. The specimen from Burial 215 is relatively thick in cross section and has a very steeply beveled bit. The latter is slightly rounded and asymmetrical.

The Burial 124 celt is quite narrow. It may have been manufactured this way but more likely it broke lengthwise and was reground along the broken

Table 7.11. Celts and celt preforms from burials

Burial	Dimensions	Material	Placement in Burial
81	121 × 50 × 21	Chert concretion	Head area
	98 × 49 × 17	Greenstone	Head area
124	121 × 27 × 26	Unidentified	Head area
130[1]	141 × 63 × 36	Altered gabbro	—
	135 × 53 × 17	Unidentified	—
192	171 × 60 × 21	Chert concretion	Upper arm
215	103 × 55 × 30	Altered gabbro	—

Note: Measurements in millimeters. Dashes indicate no data available.
1. Burial association is not certain.

edge. Battering on the poll end suggests it was used as a chisel or wedge. Several lines, oriented perpendicular to the tool's axis, have been incised at intervals on one side. A nearly identical specimen, including the incised lines, is illustrated by Lewis and Kneberg (1946:Plate 70B) from Hiwassee Island phase contexts at the Hiwassee Island site.

One of the Burial 130 celts was made from a piece of rock that was too thin to allow a completely shaped tool to be made. The resulting tool, while extensively polished, has an irregular surface and shape. The second Burial 130 specimen appears to be a preform. It has been pecked into the approximate shape of a celt, but grinding has been done only on the bit and poll ends and along one side and part of one face.

Cobb and Pope (1998) identify two tabular pieces of greenstone in the Burial 34 flintknapping kit as celts. One was definitely manufactured and used originally as a celt. The other one is so heavily worn and damaged that identifying it as originally a celt is questionable. The condition of the two items at the time of interment indicates that they were being used as hammerstones and not celts. The distal ends of both specimens are rounded and heavily battered, and the poll end of one has been broken and heavily battered. In their current state, they fit Cobb and Pope's criteria for Type III hammerstones, and that is how they will be handled here.

Spatulate Celts

One spatulate celt was recovered from Burial 117, and a second specimen is reported to have been looted from Burial 234. The Burial 117 specimen is made from a banded fine-grain sandstone (Figure 7.19a). In overall shape, it conforms to Brain and Phillips's (1996:377–379) intermediate type, the poll be-

Figure 7.19. Spatulate celt and possible spatulate celt from burials (scale in centimeters): A, Burial 117; B, Burial 220.

ing slightly rounded and relatively long. Dimensions are 145 × 106 × 14.7 mm. The bit was ground to a fine edge and shows no signs of wear. The celt lay on the right shoulder of the deceased, and the handle must have lain parallel to the upper arm. Similar artifacts have been found in Middle Lamar period contexts at Leake and Etowah, in Dallas phase contexts at Toqua, and in Mouse Creek phase contexts (Brain and Phillips 1996:379; Sullivan 1986:333).

Possible Spatulate Celt

This tool was recovered from Burial 220, a 7-year-old child. It is made from a chert concretion and measures 113 × 100 × 22 mm (Figure 7.19b). The bit is slightly asymmetrical and has poorly defined shoulders. Its cutting edge, however, has been carefully ground to a fine edge. The poll is short, is rounded in cross section, and has converging sides. Surface grinding has not proceeded far enough to remove all flake scars.

The specimen is similar to the spatulate celt from Burial 117 in overall shape and size, but it is thicker and less carefully worked and the poll is too narrow. It may be an unfinished spatulate celt, but one wonders why the bit was sharpened before overall shaping was complete. Its association with a sub-

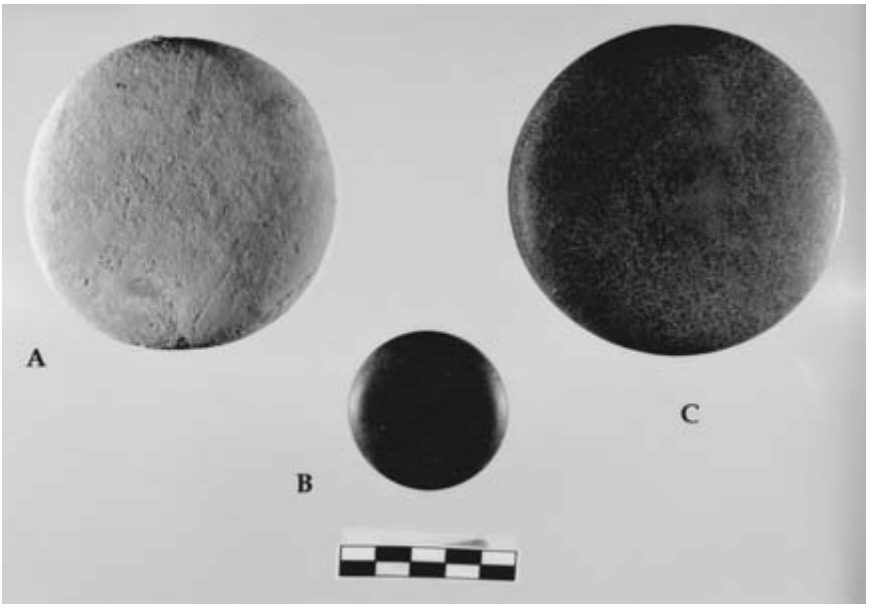


Figure 7.20. Stone discoidals from burials (scale in centimeters): A, Burial 40; B, Burial 117; C, Burial 101.

adult, whose only other burial good was the midsection of a celt, also does not fit the mortuary profile for spatulate celts.

Discoidals

Six discoidals were present in four burials (Figure 7.20, Table 7.12). All are plano-convex in form and, at least in the unweathered gabbro specimens, finely crafted. The discoidals from Burials 15, 40, and 101 are fairly similar in size, and the members of each pair are nearly identical. The Burial 117 discoidal is only about half as large as the others but has the same shape and quality of workmanship.

Polhemus (1987:Figure 9.23b) illustrates a plano-convex discoidal from an eighteenth-century Cherokee context at Toqua. At 125 mm in diameter, it is slightly larger than those from King. To judge from these two occurrences, plano-convex discoidals are later than the biconcave type that is commonly found in Mississippian contexts (Fowler 1969; Lewis and Kneberg Lewis 1995: Figure 6.11i–j; Polhemus 1987:792).

The discoidals in Burials 15 and 101 were placed next to flintknapping kits, while the Burial 117 discoidal was approximately 1.5 feet from such a kit.

Table 7.12. Discoidals from burials

Burial	Diameter	Thickness	Material	Placement in Burial
15	74	30	Gabbro	Hip
40	86	33	Limestone	Head
	87	39	Siltstone	Head
101	93	38	Metagraywacke	Elbow
	92	32	Gabbro	Elbow
117	46	19	Gabbro	Head

Note: Measurements in millimeters.

Burial 40 has no flintknapping kit but is heavily plow disturbed and has undoubtedly lost some of its grave goods.

Flintknapping Kits

A number of burials were accompanied by small, spatially discrete concentrations of stone tools and chert debitage that can be identified as flintknapping kits (FKK) (Figure 7.21). Twelve such burials were excavated during the 1973 and 1974 field seasons (Table 7.13). One of the six burials (Burial 269) looted in 1982 also yielded artifacts identifiable as a FKK. A second looted burial (Burial 267) yielded a "flat water worked cobble" that could be a Type III hammerstone (Little 1985). Other flintknapping tools and flake debris may have been present in this burial but overlooked by the looters. Additional kits may have been present in Burials 124 and 240. The former yielded one Type III hammerstone; the latter one Type I and one Type III hammerstone. Heavy plow disturbance may have removed other tools and chert debitage in both cases.

Flintknapping kits can be identified using two criteria. First, they consist of tight spatial clusters of tools and chert material that are in actual physical contact with one another. So compact are the clusters that it is probable the items included in them were confined within woven or skin bags at the time of interment. Second, as described below, kits are quite uniform in content.

Flintknapper kits typically include one or more spherical or disc-shaped concretion hammerstones (Types I and II), one or more tabular concretion hammerstones (Type III), one or more sandstone abraders, and a number of chert pieces (Cobb and Pope 1998). The latter include cores, flake debitage, triangular point preforms, end scraper preforms, and unifacially worked flakes. Most kits contained only one kind of chert, a blue-gray to black variety that is probably local Ft. Payne chert. In four cases, however, half or more of the chert was a mottled white/light gray/pink variety that may not be of local origin.

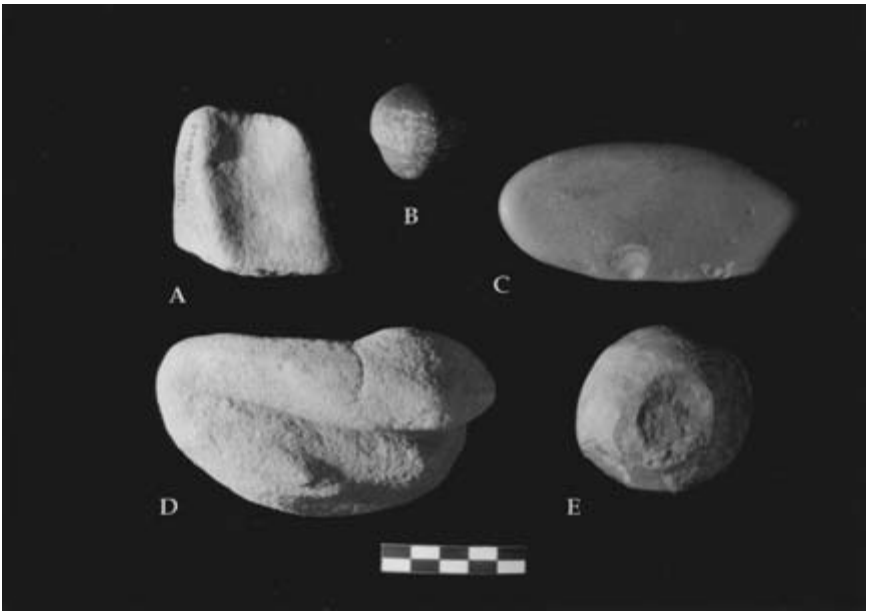


Figure 7.21. Flintknapping tools from burials (scale in centimeters): A, abrader from Burial 15; B, Type II hammerstone from Burial 15; C, Type III hammerstone from Burial 81; D, slot abrader from Burial 103; E, Type I hammerstone from Burial 15.

Ten of the FKK recovered in 1973 and 1974 have been analyzed by Cobb and Pope (1998). Their classification of tools and chert material was followed closely in the construction of Table 7.13; however, there are some differences. Through no fault of theirs, the material that Cobb and Pope list in their Table 1 as being from Burial 65 is actually from Burial 101. No material from Burial 65 was analyzed by them. Two items listed by Cobb and Pope in their Table 1—a fire-cracked rock from Burial 92 and an abrader from Burial 102—have been found on closer examination of field records to be spatially separated from the kits and hence unlikely to be part of them.

Cobb and Pope identify 9 of the 10 bifaces and all five unifaces in FKK as preforms. An eleventh biface, from Burial 102, was not made available to Cobb and Pope for analysis because it was initially identified as being part of a large bifacial blade. The fragment ($43 \times 36 \times 7$ mm) has parallel sides and a square base. In overall quality of workmanship, it resembles the bifacial blade artifact type, but its square base, relatively narrow width, and absence of fine edge retouching is not characteristic of the type. Whatever the artifact was originally, its small size and inclusion in the flintknapper kit suggest that it was destined to be reworked into a new tool.

Table 7.13. Contents of flintknapper kits from burials

	Burial											
Tool Type	15	30	34	49	65	81	84	92	101	102	103	117
Type I hammerstone	1					1		1				1
Type II hammerstone	1		2	1		1			1	1	1	
Type III hammerstone	1	1	2	1	2	3	1	1	1		1	2
Abrader	2	2	1	1			1	3	1			2
Slot abrader											1	
Debitage	3		12	6	1	10	3	2	4	4	24	9
Bipolar core	1										1	
Amorphous core	9			7		5			2	11	4	1
Uniface	1								2		1	1
Biface	1					3		1	3	1	1	1
Scraper preform									3			1
Flake drill						1					1	

Cobb and Pope list two celts in Burial 34. Further analysis of these artifacts indicates that they were being used as Type III hammerstones, not celts, at the time of interment. The two abraders listed by Cobb and Pope for Burial 84 are actually two parts of a single broken tool. Cobb and Pope list three abraders for Burial 117, but there are only two such tools present in the collection. Upon further analysis, it is clear that two of the Type III hammerstones identified in Burial 81 by Cobb and Pope are actually a different type of tool. I have identified them as "tabular polishing stones." A third Type III hammerstone from Burial 81 bears no evidence of workmanship or wear and has been reclassified as a "tabular rock."

Cobb and Pope (1998) distinguished three types of abrading tools in the FKK from King: abrader, trough abrader, and slot abrader. Review of the 12 abraders available from these kits indicates that abraders and trough abraders were probably being used in the same manner and that the concave working surfaces Cobb and Pope identify as troughs are merely the result of longer or more intense usage. This being the case, there is little reason to recognize two separate tool categories.

Cobb and Pope did not include Burials 30 and 65 in their analysis of FKK because the tools associated with these burials were not available for them to study. Burials 30 and 65 each contain two of the three artifact types present in most FKK. The missing items are chert debitage in the case of Burial 30 and a sandstone abrader in the case of Burial 65. While these two sets of ar-

tifacts lack the variety and number of items in the FKK accompanying Burials 15, 81, and 117, they are not very different from the kits in Burials 102 and 84. Burial 102 also lacks an abrader but has abundant chert debitage. Burial 84 has all three common artifact types—Type III hammerstone, abrader, and chert debitage—but does not really have much more material than Burials 30 and 65. If the artifacts accompanying Burials 102 and 84 are considered to be FKK, those from Burials 30 and 65 should be as well. The interesting question, of course, is why some kits have much smaller inventories of tools and flaked chert than others.

Several FKK tool clusters contained one or more tools representing activities other than flintknapping. These include celts, end scrapers, tabular polishing stones, tabular stones, tabular limestone, beaver incisors, turkey tarsometatarsus awls, split bone tools, bone handle, cougar radius tool, and antler tine. These tools were used in a variety of different craft activities involving scraping, cutting, grinding, polishing, and piercing. In at least some cases, these activities were probably not directly related to flintknapping.

Type I Hammerstones

Cobb and Pope (1998) identified four examples of what they call Type I hammerstones in four of the flintknapper kits (Table 7.13, Figure 7.21e). A fifth specimen occurs with Burial 240. Little (1985:4) reports two hammerstones from the looted Burial 269 that are probably Type I hammerstones. The specimen from Burial 15 is made from an igneous stream rock; the others from siliceous concretions. Overall shape ranges from nearly spherical to ovoid. Dimensions are 55–71 mm in length, 38–56 mm in width, and 24–52 mm in thickness. All specimens exhibit battering along their greatest circumference. In the spherical specimens, it occurs around most of the margin, while in the ovoid specimens it occurs in well-defined zones near each end. The specimen from Burial 117 is distinctive in also having a small concentration of heavy peck marks on one face, suggesting use as an anvil. Type I hammerstones are probably represented at Toqua in the Pitted Cobble/Hammerstone (Category 146) tool type (Roberts 1987:809).

Type II Hammerstones

Cobb and Pope (1998) identified examples of this type of hammerstone in FKK accompanying seven burials (Table 7.13, Figure 7.21b). Little (1985:4) reports a spherical hammerstone from the looted Burial 269 that may be a Type II hammerstone. Type II hammerstones are made on small siliceous concretions with natural shapes ranging from discoidal to spherical to pear shaped.

Maximum diameter ranges between 38 and 50 mm. Battering occurs almost exclusively around the greatest circumference and is usually quite heavy. The surfaces that parallel the plane of greatest circumference are either rounded or flat and in three cases (Burials 15, 81, 101) are very smooth, perhaps as a result of being held between thumb and forefinger. No hammerstones of this kind have been distinguished at Toqua (Roberts 1987).

Type III Hammerstones

Cobb and Pope (1998) identified 13 examples of what they call Type III hammerstones in nine of the flintknapper kits (Figure 7.21c). Five additional specimens occur in Burials 30, 65, 124, 135/136, and 240). With the possible exception of the two specimens from Burial 34, all known examples are made on unmodified tabular or lenticular rocks that are ovoid in shape. The Burial 34 specimens resemble celts and were identified as such by Cobb and Pope (1998). Most Type III hammerstones are siliceous concretions, but the two from Burial 34 are greenstone.

The 18 specimens recovered from King site burials are remarkably homogenous in overall shape and size (Table 7.14) but somewhat variable with respect to use wear. Most have battering along one or more edges, usually near the ends of the tool. Light peck marks and striations are also common on tool faces, usually near one end. Striations vary in orientation, with some lying parallel to the long axis of the tool and others oriented at a right angle across the tool or angled obliquely across it. Striations were probably produced by dragging the tool surface across the irregular edge of a biface, presumably to strengthen striking platforms for further flake detachment (Cobb and Pope 1998:6). In a number of cases, continued use of the tool in this manner has produced shallow rounded depressions. Peck marks tend to be thin linear depressions 1–2 mm long. They may be formed when the tool is struck directly against the flaked edge of a biface. No comparable tool type has been distinguished at Toqua or elsewhere in the Upper Tennessee River valley.

Sandstone Abraders

Ten burials have yielded a total of 15 sandstone abraders (Figure 7.21a, Table 7.15). In seven burials, the tools were spatially associated with FKK. Burial 102 has a FKK, but the abrader is spatially separated from it by almost 2 feet and is presumably not part of the kit. Burial 76 does not contain an identifiable FKK.

All tools are made on a fine-grained sandstone. In most cases, an irregular-

Table 7.14. Type III hammerstones from burials

Burial	Dimensions (mm)	Wear Patterns
15	84 × 47 × 11	Edge battering, striations
30	89 × 44 × 11	Edge battering, striations
34	76 × 44 × 15	Edge battering, depression with striations, light pitting
	75 × 48 × 15	Edge battering, light pitting
49	74 × 45 × 13	Edge battering, depression with striations
65	86 × 49 × 16	Edge battering, depression with striations
	96 × 39 × 12	Edge battering, striations, light pitting
81	103 × 49 × 12	Edge battering, striations, light pitting, ground edge
	106 × 30 × 12	Striations
	93 × 53 × 12	Edge battering, striations, light peck marks
84	77 × 49 × 13	Edge battering
92	92 × 50 × 13	Edge battering, striations
101	95 × 44 × 10	Edge battering, striations
103	93 × 48 × 12	Edge battering, striations
117	78 × 58 × 13	Edge battering, heavy pitting
	90 × 57 × 14	Edge battering, striations, ground edges
124	108 × 52 × 21	Edge battering, depressions with striations, heavy pitting
135/136	97 × 60 × 16	Edge battering, depressions with striations, flaked edge
240	100 × 48 × 17	Edge battering, striations

shaped fragment of stone was selected and one or more surfaces were used. Tools with multiple worked surfaces tend to have a more regular cuboid form, but there is no evidence that they were purposefully shaped. Worked surfaces are typically rather smooth, although they frequently bear heavy linear striations, especially around their margins. Surfaces range from flat to slightly concave to deeply concave, reflecting differences in the amount of usage. The two large tools from Burials 30 and 101 are distinctive in having very large concave working surfaces that extend over most of one face.

Cobb and Pope (1998) suggest that sandstone abraders were multipurpose tools and may have been used by flintknappers to prepare striking platforms on the edges of bifaces. The fact that abraders do not always occur in burials in association with flintknapper kits suggests that these tools sometimes may have had other uses. Some, for example, may have been used to sharpen bone tools. The abrader in Burial 76 lay next to two deer ulnas that were probably awls. Bone preservation in Burial 102 is so poor that any bone tools that may

Table 7.15. Sandstone abraders from burials

Burial	Dimensions (mm)	Use Wear
15	57 × 56 × 24	1 smoothed concave surface, heavy striations
	92 × 72 × 25	1 smoothed flat surface, heavy striations
30	109 × 84 × 19	1 smoothed concave surface, 1 smoothed flat surface, heavy striations
	62 × 52 × 14	2 smoothed concave surfaces, heavy striations
34	86 × 40 × 39	4 smoothed concave surfaces
49	48 × 46 × 43	1 smoothed slightly concave surface
76	44 × 31 × 23	1 smoothed flat surface
84	62 × 48 × 39	1 smoothed slightly concave surface
92	110 × 82 × 35	2 smoothed slightly concave surfaces, heavy striations
	29 × 28 × 22	4 smoothed slightly concave surfaces
	27 × 25 × 17	3 smoothed slightly concave surfaces
101	102 × 82 × 19	1 smoothed concave surface, 1 smoothed slightly concave surface, heavy striations
102	43 × 36 × 26	2 smoothed concave surfaces, heavy striations
117	105 × 79 × 29	1 smoothed slightly concave surface, heavy striations
	66 × 46 × 26	1 possible smoothed surface

have accompanied the abrader in that burial probably disappeared through decay. No comparable tool type has been distinguished at Toqua or elsewhere in the Upper Tennessee River valley.

Slot Abrader

Burial 103 contained an ovoid sandstone abrader that measures 113 × 60 × 54 mm (Figure 7.21d). It has three different kinds of worked surfaces, one of which has a deep V-shaped groove that is almost as long as the tool itself. All working surfaces bear heavy striations that are oriented parallel to the long axis of the tool.

Cobb and Pope (1998:11) point out that tools with similarly shaped grooves from elsewhere in the Southeast have been identified by archaeologists as arrow shaft straighteners, pottery abraders, and shell bead grinders. The fact that this specimen was found in direct association with Type II and III hammerstones and several large pieces of chert suggests that it was part of an FKK and probably had at least one use associated with flaked tool production. No comparable tool type has been distinguished at Toqua or elsewhere in the Upper Tennessee River valley.

Circular Polishing Stones

Burials 212 and 226 yielded small disc-shaped stones, measuring 58 × 22 mm and 34 × 15 mm, respectively. They are made from a fine-grained material, quartz sandstone in one case and an unidentified stone in the other. The entire circumference of both discs has been ground. This surface is flat in cross section in the Burial 212 specimen and slightly rounded in the Burial 226 specimen. Both tools were probably held in the hand and used to polish some material, possibly pottery. Polished discs of similar size and cross section occur in Dallas phase burials in eastern Tennessee (Lewis and Kneberg Lewis 1995:Figure 6.11; Polhemus 1987:795).

Dumbbell-Shaped Polishing Stone

Burial 20 yielded a dumbbell-shaped chert concretion, measuring 28 mm in maximum diameter and 36 mm in length. The slightly convex surface on one end is highly polished.

Tabular Polishing Stones

The five artifacts assigned to this tool type are chert concretions that have a tabular shape and light striations over much of their surface. Dimensions are 57–118 mm in length, 25–61 mm in width, and 11–17 mm in thickness. The two specimens from Burial 81 have striations covering most of one side. These are oriented parallel to the long axis of the tool and are so abundant that the resulting surface has been worn smooth. These tools may have been used as whetstones.

The other three tools, from Burials 30 and 226, have striations on their broad faces, but grinding has also produced facets along portions of their edges. These tools may have been held in the hand and rubbed against another larger object.

Cobble Anvil

Burial 205 contained a large quartz cobble, measuring 133 × 127 × 83 mm and bearing zones of concentrated pitting on two faces and along one edge. Individual pits are often identifiable as linear scars several millimeters long and approximately a millimeter wide and are clearly the result of percussion by a hard material with sharp edges. The rock is too large and heavy to have been used as a handheld tool. It probably served as an anvil for bipolar flaking.

Cupstones

The name "cupstone" is given to two concretions that have deep concavities on one face. Concavities have smooth, rounded, and slightly irregular surfaces that were probably formed by grinding. Scraping of these surfaces produces a fine yellow powder that could have been used as a pigment. The specimens measure 115 × 91 × 33 mm and 91 × 65 × 33 mm. They were recovered from the compact cluster of burials containing Burials 130, 137, 154, 168, and 198. They lay closest to Burial 130, the last to be interred, but whether they are part of this individual's grave furnishings cannot be demonstrated with certainty.

Faceted Pigment Stone

Burial 92 contained a small (48 × 25 × 20 mm) piece of amphibolite that had been ground into a cuboid shape. Grinding facets of various sizes covered all surfaces. It was recorded in the field as being part of the Burial 92 FKK but was separated from the tightly clustered contents of the kit by .2 feet. Similar faceted stones are common in Dallas phase sites in eastern Tennessee. Polhemus (1987:910–811) believes they were ground to obtained powdered pigments. Lewis and Kneberg Lewis (1995:144) suggest that they were used to polish pottery and other materials.

Tabular Stone

The Burial 81 FKK contained a tabular-shaped concretion that measures 89 × 84 × 14 mm and resembles a Type III hammerstone in shape and size. It may have been an extra, unused tool of that type.

Tabular Limestone

The FKK in Burials 102 and 117 each contained a small tabular piece of limestone, measuring 78 × 48 × 9 mm and 61 × 18 × 7 mm, respectively. Both are heavily weathered and may have lost any surface indications of use.

Hematite

Hematite was present in eight burials. In Burials 81, 92, 103, 118, and 223, it occurred as an irregularly shaped, friable mass mixed to varying degrees with pit fill soil. Presumably this represents ground hematite held in a perishable container. In the remaining cases, Burials 15, 117, and 240, hematite occurred as a tabular or rounded rock. Grinding facets were present on two of these. Hematite is reported as a burial artifact from a number of Dallas phase sites

(Hatch 1974; Polhemus 1987:Appendix D). It presumably was being used as a pigment.

Pottery Vessels

Twenty-six burials were accompanied by pottery vessels (Table 7.16). All vessels appear to have been used, either in domestic or ritual activities, prior to being placed in a burial. There is no evidence that any vessels were manufactured specifically for mortuary use. Vessel forms include rounded bowl, carinated bowl, Mississippian jar, pinched rim jar, flaring rim bowl, and "gravy boat" bowl as described in Hally (1986a). Barnett phase potters made the first four vessel forms in multiple sizes. With two exceptions, only the smallest size class of these forms is represented in the burials, the exceptions being two medium Mississippian jars.

All vessel forms except the gravy boat bowl are typically found in household settings and had domestic uses. Almost all of the pinched rim jars, Mississippian jars, and carinated bowls recovered from burials were sooted, a strong indication that they had been used in cooking-related activities. The rounded and flaring rim bowls from burials were not sooted and were probably used for food serving and short-term storage in domestic contexts (Hally 1986a).

The gravy boat bowl vessel form was used to carry fire—probably in the form of live coals (Figure 7.22) (Hally 1986a). The vessel form has been recovered from late prehistoric burials at sites along the Tennessee River in northern Alabama and Tennessee (Ball et al. 1976; Lewis and Kneberg Lewis 1995:360–361; Moore 1915; Webb 1939:Plate 66; Webb and DeJarnette 1942:Plate 261) and at the Bell Field (Kelly 1970:72) and Little Egypt (Moorehead 1932:Figure 71) sites in northwestern Georgia. It does not occur in domestic contexts in Barnett phase sites and has not been reported from such contexts in Dallas or Mouse Creek phase sites.

Pottery vessels were buried with a greater variety of individuals by age and sex than almost any other artifact class. Their placement within burial pits, however, is one of the least variable. All but four of the 18 burials for which placement relative to the body is ascertainable had pots located in the head/shoulder area. In no cases were they located near the feet or lower legs.

Partial Vessels

Partial vessels were found in five burials (Table 7.17). They include wedge-shaped fragments of a large carinated bowl (Burial 80) and two small Mississippian jars (Burials 130 and 193) that extend from the rim almost to the vessel base. Similarly shaped fragments are commonly found on preserved floors

Table 7.16. Pottery vessels from burials

Burial	Vessel Form	Placement in Burial	Pottery Type	Comments
11	Small pinched rim jar	—	Lamar Coarse Plain	Sooted
12	Flaring rim bowl	Shoulder	Lamar Incised	
20	Small pinched rim jar	—	Lamar Coarse Plain	Sooted
	Small Mississippian jar	—	Dallas Incised	Sooted
27	Small Mississippian jar	—	Dallas Plain	Sooted
33	Small rounded bowl	Head/shoulder	Dallas Filleted	
	Flaring rim bowl	Head/shoulder	—	
	Small Mississippian jar	Head/shoulder	Dallas Plain	
39	Medium Mississippian jar	Head	Dallas Plain	Sooted
74	Flaring rim bowl	Head	Dallas Plain	
81[1]	Medium Mississippian jar	Elbow	Dallas Plain	Sooted
91[1]	Small Mississippian jar	—	Lamar Coarse Plain	Sooted
92	"Gravy boat" bowl	Hip	Lamar Coarse Plain	Interior sooting
93	Small pinched rim jar	Head/shoulder	Lamar Coarse Plain	Sooted
124	"Gravy boat" bowl	Head	Lamar Plain	Interior sooting
135[1]	Small rounded bowl	Head	Dallas Filleted	
149	Small carinated bowl	Head	Lamar Incised	
175	Small rounded bowl	Head/shoulder	Dallas Plain	Sooted
178	Small carinated bowl	—	Lamar Incised	Sooted
184	Small Mississippian jar	Head	Dallas Plain	Sooted
205	Small Mississippian jar	—	Dallas Plain	Sooted
209	Small Mississippian jar	Head	Dallas Plain	Sooted
213	Small rounded bowl	Elbow?	Lamar Plain	
216	Small Mississippian jar	Shoulder	Dallas Plain	
218	Small pinched rim jar	—	Lamar Plain	Sooted
235	Small rounded bowl	Head	Lamar Plain	
237	Small rounded bowl	Elbow	—	
259[1]	Small Mississippian jar	—	Dallas Plain	Sooted
268 (Looted Burial 4)	Mississippian jar	—	Dallas Incised	
	Bottle	—	Dallas Plain	

Note: Dashes indicate no data available.

1. Burial association is not certain.

Figure 7.22. Gravy boat bowl from Burial 92 (scale in centimeters).

of domestic structures and sometimes bear use wear indicating that they were being used as tools in domestic activities (Hally 1986a). The three reconstructible partial vessels from Burials 80, 130, and 193 probably were being used as tools at the time they were placed in burials. Indeed, the distribution of soot on the exterior of the Burial 80 fragment indicates that it was being used as a griddle over a fire.

As is the case with the whole vessels, partial vessels were placed in the upper body region. Burial 80 is unique in that the vessel fragment was placed in an inverted position directly over the head of the interment.

Pipes

Twelve burials contained whole or partial pipes made of pottery or stone (Figure 7.23, Table 7.18). All burials except one were accompanied by a single pipe. Burial 103 was covered with wooden boards and a second pipe was placed on top of them.

Nine pipes are made of pottery. All are of the elbow type and have charred residue on the interior surface of their bowls. Five are characterized by tall conical bowls placed at a right angle to short stems. The proximal end of the stem is expanded slightly. The proximal end of the Burial 118 pipe stem has

Table 7.17. Partial vessels from burials

Burial	Vessel Form	Placement in Burial	Pottery Type	Comments
33	Flaring rim bowl	Head/shoulder	Lamar Plain	
80	Large carinated bowl	Over head	Lamar Incised	Sooted
93	Small Mississippian jar	Elbow	Dallas Plain	
130[1]	Small rounded bowl	Head	Dallas Filleted	
193	Small Mississippian jar	Head	Dallas Incised	Sooted

1. Burial association is not certain.

Figure 7.23. Clay and stone pipes from burials (scale in centimeters): A, clay pipe with short bowl from Burial 212; B, limestone elbow pipe with disc-shaped bowl rim from Burial 65; C, limestone disc pipe from Burial 81; D, clay animal effigy pipe from Burial 195; E, two clay elbow pipes with tall bowls from Burial 103.

been ground off at the point where it expands. Pipe surfaces were probably burnished, but weathering has obscured this in several cases. Decoration is usually absent, although three pipes (Burials 40, 103, and 118) have a line incised around the bowl exterior approximately 1 cm below the lip. The Burial 40 pipe also has a series of four incised semicircles arranged one above the

Table 7.18. Pipes from burials

Burial	Material	Form	Placement in Burial	Comments
40	Clay	Elbow, conical bowl	Head	Stem missing
65	Limestone	Elbow, disc rim	Head	
73	Clay	Elbow, flaring rim	Head	
81	Limestone	Platform, disc rim	Left arm	
84	Sandstone	Stemless	Pelvis	
92	Clay	Elbow	Head	Bowl missing
102	Clay	Elbow, conical bowl	Knees	
103	Clay	Elbow, conical bowl	Head	
	Clay	Elbow, conical bowl	Lying on board cover	
118	Clay	Elbow, conical bowl	Pelvis	
195	Clay	Effigy	Head	Rim missing
212	Clay	Elbow, flaring rim	Pelvis	
234	Stone	—	—	Looted burial

Note: Dashes indicate no data available.

other down the side of the bowl opposite the stem. This general type of pipe is found in Dallas and Mouse Creek phase contexts in eastern Tennessee (Lewis and Kneberg Lewis 1995:Figure 30k) and throughout northern Georgia (Hally 1970:Figure 20c; Heye et al. 1918:Plate 44; Smith 1994:Plate 13).

The pipes in Burials 73 and 212 differ in having short bowls that are oriented at an angle of 100 degrees and 110 degrees, respectively, to a longer stem with expanded proximal end. The pipe from Burial 195 is unusual in that the stem is formed to represent the head and neck of an animal, which holds the bowl in its open mouth. Similar pipes have been found at Dyar (Smith 1994: Figure 13) and Toqua (Roberts 1987:Figure 9.29i).

Three of the pottery pipes are fragmentary. Those from Burials 40 and 195 were broken by the plow. The Burial 92 pipe appears to have been placed in the ground with approximately two-thirds of its bowl missing. The pipe's location adjacent to the flintknapping kit and *Busycon* cup, however, indicates that it was an intentional grave offering and not an inclusion in pit fill.

The three stone pipes available for analysis are quite variable in form. One, from Burial 65, is an elbow pipe made of limestone. The bowl is short and has a flared, disc-shaped rim. A similar pipe is illustrated by Lewis and Kneberg (1946:Plate 72c) from the Dallas component at Hiwassee Island. The second pipe, from Burial 81, is made of limestone but is heavily eroded. It has a small bowl with a disc-shaped rim that is located near the midpoint of a cylindrical stem that tapers to a point at its distal end. Portions of its intact surface bear

red pigment. This pipe has its closest resemblance to catlinite disc pipes, which are most common in the Upper Mississippi Valley but also widespread in the Southeast (Brown 1989). Disc pipes made of catlinite are known from the Moundville and Seven Mile Island sites in Alabama, Great Tellico in eastern Tennessee, Nacoochee in north-central Georgia, and Mohman on the Coosa River a few miles upstream from King (Brown 1989:Figure 3). Burials at the Seven Mile Island site have also yielded three disc pipes made of limestone. The stem of the specimen from King probably was originally similar in form to the wedge-shaped stem that is typical of this type of pipe.

The third stone pipe consists of a stemless pipe bowl carved out of sandstone. The bowl is almost cylindrical and has a rounded base and rounded lip. Deeply incised straight lines 1–2 cm in length are distributed across the exterior surface in what appears to be an irregular pattern. Pipes of similar form are illustrated by Lewis and Kneberg (1946:Plate 72c) from the Dallas component at Hiwassee Island and by Setzler and Jennings (1941:Plate 21) from the Peachtree site in southwestern North Carolina.

Most pipes were placed either in the head/shoulder area or in the pelvis area. The extended Burial 102 had a pipe between its knees.

Bipointed Bone Tools and Preforms

Four burials contained bipointed bone tools made from segments of white-tailed deer metatarsals (Figure 7.24a, b, Table 7.19). These are quite uniform in length (164–186 mm) and maximum width (9–11 mm). Both ends have been ground down to points, but one tends to be slightly blunter than the other. The tool is somewhat asymmetrical, being slightly wider at the blunt-pointed end and slightly bowed or curved from one end to the other.

Similar artifacts have been reported from Dallas phase sites in eastern Tennessee (Lewis and Kneberg 1946:Plate 77a; Polhemus 1987:Figure 11.17, 1998:96–101) and Pine Island Sound in southwestern Florida (Walker 2000). Polhemus (1998:96–101) has documented the technique by which they are manufactured from deer metatarsals. The two preforms from Burial 81 are identical to specimens he describes from the Loy site (Polhemus 1998:96–101).

Turkey Tarsometatarsus Awls

Three burials contained awls made from turkey tarsometatarsus bones. The proximal end of the bone element was present on the two tools from Burial 65 but had been broken off the specimens from Burials 10 and 92. The good state of bone preservation and the presence of old fracture surfaces on these latter

Figure 7.24. Bone tools from burials (scale in centimeters): A, bipointed bone tool preform from Burial 81; B, two bipointed bone tools from Burial 81; C, four antler cylinders from Burial 157; D, bone handle from Burial 65.

indicate that breakage occurred prior to interment. Similar tools are present in Barnett phase burials at Little Egypt and Dallas phase burials in eastern Tennessee (Lewis and Kneberg Lewis 1995:153; Polhemus 1987:1034). Burial 65 also contained the midsection of a turkey tarsometatarsus and the proximal end of a turkey tibiotarsus. These may represent raw material for the manufacture of awls.

Deer Ulna Awls

Two burials contained deer ulnas that may have been awls or blanks for awls. Burial 76 had two specimens, one of which was not recoverable in the field. One ulna was present in the Burial 81 pit, but its association with that burial is not certain. The distal ends of the two specimens in the collection are missing, and the remaining portions show no signs of human workmanship. As a result, we cannot establish with certainty that the elements were being used as awls. In Burial 76, the two ulnas and a sandstone abrader lay together near the head of the deceased. This arrangement suggests that the ulnas were intentionally added to the burial and thus that they had recognized uses,

Table 7.19. Bipointed bone tools and preforms from burials

Burial	Dimensions (mm)	Placement in Burial	Comments
1[1]	164 × 9 × 7	—	
63	168 × 9 × 7	Between legs at crotch	
81	166 × 10 × 9	Head area	
	178 × 10 × 7	Head area	
	186 × 10 × 8	Head area	
	165 × 10 × 9	Head area	One end missing
	181 × 10 × 9	Head area	
	184 × 10 × 8	Head area	
	161 × 10 × 7	Head area	Fragmentary
	152 × 9 × 9	Head area	Fragmentary
	139 × 11 × 8	Head area	One end missing
	129 × 10 × 9	Head area	Fragmentary
	142 × 10 × 7	Head area	Fragmentary
	198 × 19 × 13	Head area	Preform
	202 × 18 × 6	Head area	Preform
92	180 × 8 × 8	At feet	

Note: Dash indicates no data available.1. Burial association is not certain.

presumably as tools. Deer ulna awls are known from Dallas phase contexts at Toqua (Polhemus 1987:1019) and Hiwassee Island (Lewis and Kneberg 1946: Plate 79).

Bone Handle

Burial 65 yielded a section of large mammal rib measuring 107 mm long, 36 mm wide, and 12 mm thick (Figure 7.24d). The element is probably from a horse, bison, or cow, but positive identification is not possible as a result of the relatively small size of the fragment and its extensive modification (Elizabeth Reitz, personal communication 2000). Given the mid-sixteenth-century date of the King site, cow seems unlikely as a source. Both sides of the rib have been cut away at one end and the cancellous bone has been removed from the interior. As a result, the side walls of the rib at this location are separated by 2–4 mm and resemble the two arms of a broad, flat tweezers. The opposite end of the element has been cut off at a right angle to the axis of the rib and has a square notch at one corner. The tool probably functioned as a handle for a relatively broad, thin implement of some sort. It held nothing at the time of exca-

vation. No similar objects have been reported from Mississippian contexts in northern Georgia or eastern Tennessee.

Cougar Radius Tool

Burial 65 yielded the midsection of a cougar radius that had been ground on one end to a steep chisel-like edge. Overall length of the tool is 145 mm. Similar tools, manufactured on cougar radii and ulnas, have been reported from Dallas phase contexts at the Hiwassee Island (Lewis and Kneberg 1946: Plate 79c) and Toqua (Polhemus 1987:1034) sites.

Beaver Incisors

Eight burials contained beaver incisors (Table 7.20). Most specimens are incomplete, consisting primarily of the hard outer enamel surface. The specimen from Burial 92, the only one with a preserved occlusal surface, bears signs of intentional or use-related modification. The occlusal surface is concave and beveled steeply from front to back. Beaver incisors with similar modification are found with Dallas and Mouse Creek phase burials (Lewis and Kneberg Lewis 1995:155; Polhemus 1987:1019). These chisel-like tools probably were used to cut or shave relatively soft materials such as wood.

Seven and possibly all eight of the burials with beaver incisors also have flintknapper kits. In Burial 15, the incisors lay on top of a large lanceolate blade near the shoulder of the deceased, while the flintknapping kit was located at the hip. In the other burials, incisors were placed close to the flintknapper kit. In Burials 34 and 117, they are located immediately adjacent to a tight cluster of flintknapping tools but extend away from it at 90-degree and 45-degree angles, respectively, suggesting that they may not have been included in the same container. Field records are not sufficiently detailed for Burials 81, 92, and 103 to determine whether incisor and FKK were in a single container.

Os Bacula

Burials 92, 118, 157, 223, and possibly 81 each contained a single baculum. All are from opossum except the specimen in Burial 157, which is from a larger unidentified mammal. Bacula are reported as grave goods with Dallas and Mouse Creek phase burials in eastern Tennessee (Lewis and Kneberg Lewis 1995:155; Polhemus 1987:1034). These frequently are polished and have a hole drilled through the proximal end. One King site specimen from Burial 118 has

Table 7.20. Beaver incisors from burials

Burial	Placement in Burial	Comments
15	Head	
34	Upper arm	Two incisors, close proximity to flintknapper kit
81	Head	Three incisors, close proximity to flintknapper kit
92	Head	Concave and beveled occlusal surface, close proximity to flintknapper kit
103	Shoulder	Close proximity to flintknapper kit
117	Shoulder	Disintegrated, close proximity to flintknapper kit
267	—	Possible flintknapper kit in burial
269	—	Flintknapper kit present in burial

Note: Dashes indicate no data available.

a polished surface and a drilled hole in its proximal end. The specimen that may be associated with Burial 81 also appears to be polished but is missing its proximal end. The Burial 92 specimen is intact and does not have a drilled hole.

Eyed Bone Cylinder

Burial 63 was accompanied by a cylindrical bone tool measuring 107 × 7 × 5 mm and made from a splinter of large mammal long bone. The item is highly polished and tapers slightly from one end to the other. The narrower end is rounded, while the broader end has a single round hole drilled through it. The item was found during cleaning of skeletal material in the lab and as a result its placement in the burial is not known. Lewis and Kneberg Lewis (1995:Figure 7.2Jj) illustrate a slightly shorter specimen and identify it as a bodkin.

Cylindrical Bone Tools

Burials 30, 81, and 117 yielded cylindrical pieces of bone that may have been awls or pins. Unfortunately, preservation is so poor in each case that identification as a tool is not always certain and species identification can be no more specific than unidentified mammal. Furthermore, more than one type of tool may be represented. The two specimens from Burial 30 measure 108 × 6 × 4 mm and 55 × 5 × 3 mm. The smaller specimen appears to have been ground

to a rounded point at one end. The specimens from Burials 81 and 117 measure 59 × 7 mm and 143 × 10 × 9 mm, respectively. The Burial 117 specimen was rounded on one end.

Split Bone Tools

Burial 81 yielded two tools made on splinters from large mammal bone shafts. One is from a group of bone tools located immediately adjacent to the skull. It is a wide splinter of bone from the distal end of a deer femur. The specimen measures 79 mm long but has probably been reduced considerably in length as a result of use and resharpening. The object is 16 mm wide and its working end has been ground into a broad rounded shape. The second tool cannot be associated with Burial 81 with certainty. It is made on a splinter measuring 116 × 4 mm. One end has been ground to a dull point; the other is broken. Tools made from splinters of large mammal long-bone shafts are common in Dallas phase contexts, but most are narrow and have pointed working ends like the second Burial 81 specimen (Lewis and Kneberg 1946:Plate 79; Polhemus 1987:Figure 11.16). A tool resembling the specimen with a broad rounded end is illustrated by Lewis and Kneberg Lewis (1995:Figure 7.3g).

Burial 30 yielded a fragment of a split bone tool with a ground point on one end. It resembles the thicker and blunter end of a bipointed bone tool but fragment size is too small to allow positive identification.

Bird-Bone Tool

A fragment of a bird long bone with a ground pointed end was recorded during the excavation of Burial 30. Preservation was so poor, however, that the specimen disintegrated during removal.

Antler Cylinders

Seven burials were accompanied by antler cylinders (Figure 7.24c, Table 7.21). These are segments of the dense outer wall of antler tines that have been cut and ground to form smooth-surfaced cylinders. Length varies between 31 and 68 mm. Cross section ranges from round to slightly ovoid with diameters ranging between 7 and 14 mm. In the better-preserved specimens (Burials 81 and 157), both ends are slightly rounded and smooth. Similar artifacts have been recovered from Dallas phase burials at Toqua (Polhemus 1987: Figure 11.19) and from Mouse Creek phase burials (Lewis and Kneberg Lewis 1995:155).

Exact placement within burials is known in only five instances. In three

Table 7.21. Antler cylinders from burials

Burial	Dimensions (mm)	Placement in Burial	Comments
30	32 × 10 × 7	Near head	Broken, eroded
57	—	Near legs	10 rods, missing
65	40 × 14 × 11	—	Broken, eroded
81	68 × 7 × 7	Near head	
	36 × 10 × 8	Near head	Eroded
92	27 × 10 × 10	Pelvis	Broken
	34 × 8 × 7	Pelvis	Broken, eroded
	35 × 7 × 5	Pelvis	Broken, eroded
102	45 × 10 × 8	—	Broken
	32 × 9 × 8	—	Broken
	46 × 8 × 7	—	Eroded
157	31 × 9 × 8	Pelvis	
	33 × 8 × 7	Pelvis	
	33 × 9 × 9	Pelvis	
	34 × 9 × 9	Pelvis	
	38 × 10 × 9	Pelvis	
	44 × 8 × 7	Pelvis	
	47 × 10 × 9	Pelvis	
	49 × 8 × 7	Pelvis	
	62 × 8 × 7	Pelvis	

Note: Dashes indicate no data available.

flexed burials (Burials 57, 92, and 157), they occur in the pelvic area. In two of the extended burials (Burials 30 and 81), they occur in the head area adjacent to a flintknapper kit.

Antler Tines

Antler tines were present in Burials 65 and 81. In the former, the specimen includes the tip of the tine and measures 130 mm in length. The specimen from Burial 81 consists of several large fragments from the base of the antler. Surface weathering in both cases has obscured any evidence of workmanship or wear that may have been present.

Bear Bones

A single bear phalange was found next to two opossum mandibles in the pelvic area of Burial 63 during excavation. A fragment of a large, heavy bone was

located near the head of Burial 103. It was identified in the field as bear bone, but this cannot be verified since poor preservation prevented recovery of the element. A bear (*Ursus americanus*) mandible with teeth was found while excavating the fill of Burial 138. It was located just beyond the edge of the pit and 1.8 feet above pit base. Given this location, we cannot be certain that the specimen is a funerary object.

Wolf Dentition

Fragments of at least five wolf (*Canis* cf. *niger*) teeth were recovered from Burial 193. Bone preservation for the 3-year-old child was very poor, with only teeth remaining. The identifiable wolf teeth—two upper canines, one lower canine, one lower carnossial, and one incisor—were located in the lower abdominal or pelvic area of the deceased. Given the poor preservation conditions, it is possible that the teeth were seated in sections of mandible and maxillary. Their arrangement in a small arc measuring approximately .4 feet in diameter, however, suggests that the teeth were strung together as a necklace or bracelet; the latter being more likely given placement within the burial pit.

Bird-Bone Fans

Burial 237, an infant less than 1 year old, had a section of vulture (*Cathertes* sp.) ulna located at each wrist. These measured 43 and 44 mm in length and bore quill knobs for three large primary flight feathers and cut marks on both ends. Two swan (*Olor* or *Cygnus*) carpometacarpus elements were located adjacent to the left hand of Burial 81. Although currently fragmentary and incomplete as a result of weathering, these elements were probably complete at the time of interment. Polhemus (1987:1035) reports several Dallas phase burials from Toqua that contained carpometacarpus and digital elements from trumpeter swan and Canada geese. At least one had cut marks on the end. Both Polhemus and Hill (1994) identify these artifacts as feather fans.

Animal Mandibles

Three burials yielded teeth and jaw elements from small mammals. Fragmentary left mandible and maxillary elements from opossum were located near the right hand of Burial 63. Burial 81 was accompanied by right mandible fragments from two different opossum, as well as a fox radius. These may have been located near the left hand of Burial 81, but field notes are not clear enough to be certain whether they belong to that individual or to Burial 82. A raccoon

mandible was located near Burial 149 but could have been interred with the intrusive Burial 150. Polhemus (1987:1034–1035) reports finding fragmentary weasel and minx skulls and mandibles with four burials at Toqua. He suggests that they may have been part of "personal bundles."

Human Remains

Fourteen burials have supernumerary human skeletal elements that could represent burial furniture. Seven individuals (Burials 78, 93, 98, 124, 125, 133, and 154) ranging in age between 3–4 years and adolescence were accompanied by between one and four deciduous teeth. These probably belonged to the deceased—having been replaced by permanent dentition—and it is reasonable to identify them as grave goods. One adult (Burial 123) and one 10-year-old (Burial 133) each have an extra adult tooth. These could be grave goods as well, although the rational behind such a practice is not clear.

Burial 92 had 10 permanent molars located in the neck area. They were probably part of a necklace, but there are no drill holes or other indications of how they might have been strung. Unfortunately, the teeth have been misplaced, so it is not possible to determine whether they represent one individual or several. All were well worn, indicating an adult of advanced age. Working from a photograph of the teeth, Karen Burns identified four mandibular molars, four upper premolars, one possible mandibular molar, and one possible lower premolar or canine. She believes that all 10 teeth could belong to a single individual (Burns, personal communication 2003).

Five burials have extra human skeletal elements. The most spectacular example is a disarticulated and bundled skeleton (Burial 260) that was placed at the feet of Burial 117, a 19-year-old male. Unfortunately the entire set of bones in the bundle has been misplaced. Field photos show the individual to have been an adult. Elements that can be identified in photographs include skull, all leg elements, one humerus, one innominate, and several vertebrae. A human atlas was located immediately adjacent to a flintknapper kit at the left shoulder of Burial 117. It could be from the individual in the bundle burial.

Burial 131 consists of a bundle of long bones that were placed at the feet of Burials 143 and 144, two adults of undetermined sex who were interred side by side in the pit. Five large shaft elements are distinguishable in the field photo and drawing, but only left and right femur shafts were sufficiently well preserved to be identifiable in the lab. One of the other elements in the field photo is sufficiently large that it must have been a tibia. The other two ele-

ments could be the second tibia and a fibula, but we cannot rule out the possibility that they were from the upper limbs.

Burial 105, a 43-year-old male, had the left and right frontal lobes of a human skull placed beneath the midsection of his right humerus. Preservation conditions did not allow the individual to be aged. A bifacial blade lay next to the arm of Burial 105 and on top of the frontal elements. Burial 129, a 37-year-old male, had a single adult humerus lying on top of his right arm.

Turtle Shells

Two turtle shells of unidentified species were recorded in Burial 30, one lying on the right humerus and the other lying adjacent to the left humerus. Both shells appear to have been whole at the time of interment, but because of poor bone preservation, neither was recoverable. Fragments of unidentified turtle shell were also recovered from a plow scar that had obliterated the left shoulder and upper arm of Burial 223.

Lewis and Kneberg (1946:126–127) and Polhemus (1987:1036) report finding complete box turtle shells (carapace and plastron) in association with small pebbles or drum teeth in Dallas phase burials at a number of sites in eastern Tennessee. Identified as rattles, they are often placed near the upper arms of deceased individuals. No pebbles were reported in field records as being present in Burial 30, but the location of the shells makes it likely that they were the remains of rattles.

Mask Gorgets

Five burials (Burials 20, 32, 49, 64, 188) were accompanied by *Busycon* shell gorgets with the features of humanlike faces engraved on their convex surface. The specimen with Burial 49 is of the Chickamauga variety (Brain and Phillips 1996:77); the other four were too poorly preserved to allow identification of their style. Gorgets in Burials 32, 39, 64, and 188 were located in the chest or shoulder area of the deceased. Placement of the Burial 20 specimen was unidentifiable because of poor skeletal preservation.

Mask gorgets are found in Barnett and Dallas phase burials with some regularity and with less frequency at sites across the Southeast dating to the sixteenth century and later (Smith and Smith 1989). They appear to occur exclusively with adult male and subadult burials, the latter probably being male as well (Smith and Smith 1989). Burial placement is invariably in the head or chest area (Smith and Smith 1989), suggesting that they were suspended on a necklace worn around the neck.

Rattlesnake Gorgets

Burials 12, 31, 35, 36, 60, 66, 99, and possibly 5 were accompanied by *Busycon* shell gorgets engraved with a rattlesnake motif on their concave surface (Figure 7.25). All eight specimens resemble Citico style gorgets as defined by Muller (1966). However, those from Burials 5, 31, and 99 exhibit features suggesting breakdown of the style. The specimen that may be associated with Burial 5 is rather crudely executed, and the neck, which has only one pitted border, curves around in front of the mouth. The examples from Burials 31 and 99 lack mouth elements, and the latter is somewhat simply and crudely executed. The Burials 5 and 99 specimens are small sized, having maximum dimensions of 86 and 69 mm, respectively. The remaining four measurable specimens have maximum dimensions ranging between 119 and 141 mm. Six gorgets were located in the chest area; burial location could not be determined for the others.

A small fragment of an engraved gorget that is almost certainly a rattlesnake gorget was recovered from the pit containing Burials 91 and 259. Bone and shell preservation in the pit is not good. The engraved decoration on the gorget fragment, however, is fairly well preserved, suggesting that the specimen was incomplete at the time of interment. The artifact cannot be assigned to either burial with any certainty.

Rattlesnake gorgets were probably worn on the chest suspended on a string around the neck. This is indicated by the placement of gorgets in the chest area of burials and by the presence of wear around the "suspension" holes at the top of some gorgets (Kneberg 1959:23).

Busycon Cups

Burials 65 and 92 were accompanied by whole *Busycon* conch shells that had been modified by removal of the central core or columella portion. Both cups were located at the right shoulder of the deceased. Similar artifacts have been recovered from Dallas phase burials in eastern Tennessee (Lewis and Kneberg Lewis 1995:169; Polhemus 1987:994). These artifacts are generally interpreted as cups or dippers and may have had their primary, if not exclusive, use in the black drink ceremony (Fairbanks 1979).

Busycon Shell

A fragment of the outer whorl of a *Busycon* shell measuring approximately 40 × 50 mm was present in Burial 101. Both surfaces are weathered, and edges are irregular and crumbling. The piece may be all that remains from a conch

Figure 7.25. Rattlesnake gorgets from burials (scale in centimeters): A, Burial 31; B, Burial 5.

Figure 7.26. Knobbed shell pins from burials (scale in centimeters): A, two large knobbed shell pins from Burial 120; B, small knobbed shell pin from Burial 118.

cup or mask gorget, but this seems unlikely since skeletal preservation is fairly good. No artifact type identification is possible.

A fragment of probable *Busycon* columella was recovered from the pit containing Burials 91 and 259. It may have been a knobbed ear pin. The artifact cannot be assigned to either burial with certainty.

Knobbed Shell Pins

Seven burials were accompanied by pins with knobbed or expanded heads that are made from the columella of *Busycon* shells (Figure 7.26, Table 7.22). Two size classes appear to be present. The larger type is represented by three specimens that have overall lengths of around 140 mm, shaft diameters of 9–11 mm, and maximum head diameters of 23–27 mm. The smaller type is represented by only one complete specimen, measuring $35 \times 8 \times 13$ mm. Six specimens are represented by head fragments only. These have maximum diameters ranging between 9 mm and 18 mm, suggesting that they are examples of the smaller pin type.

Both pin types have been found with Dallas phase burials and are identified as ear pins (Lewis and Kneberg Lewis 1995:168–169; Polhemus 1987:1010,

Table 7.22. Knobbed shell pins from burials

Burial	Dimensions (mm)	Placement in Burial	Comments
83	23+ × 16	—	Head portion only
117	137 × 25	—	
118	35 × 13	Chest	Eroded, complete?
120	139 × 23	Side of head	
	143 × 27	Side of head	
125	16+ × 13	Chest	Head portion only
156	14+ × 15	Side of head	Head portion only
	12+ × 9	Side of head	Head portion only
195	19+ × 17	Head	Head portion only
	24+ × 18	Head	Head portion only

Note: Dashes indicate no data available.

1018) or hair pins (Lewis and Kneberg Lewis 1995:169) on the basis of their usual placement adjacent to skulls. This functional identification appears to be correct for the King site specimens, as three of the burials had pairs of them in the skull area. Two pins, including the whole small-sized specimen from Burial 118, however, were located in the chest area, suggesting a different costume use.

Bracket Type Pins

Burials 118 and 223 each contained a single *Busycon* shell pin with a wide, flat head and a curved shaft that is rectangular in cross section. These artifacts are derived from the shoulder of the conch—the head of the pin coming from the top or spire portion of the shell and the shaft coming from the whorl or body portion (Phillips and Brown 1978:Figure 8). The Burial 118 specimen measures 31 mm across the head and 61 mm along the shaft. Placement of the two specimens was not recorded in the field. Presumably both underlay the skull and were not noticed until that element was removed from the pit. Whether they are ear pins or hair adornment is not known. Brain and Phillips (1996) illustrate comparable objects from burials at Etowah (village area), Brakebill (40KN55), Tellico (40MR12), Hightower (1TA150), and Polecat Ford (1CE308).

Pulley-Shaped Ear Spool

One pulley-shaped marine shell ear spool was recovered from the head area of Burial 30. The artifact is recorded on the field drawing but is not visible in field

photographs, suggesting that it was located at least partially under the skull. This is significant because plowing has impacted the burial slightly, removing part of the cranium, and may have removed a second ear spool as well. Edges of both inner and outer discs are eroded to the point that their original diameters cannot be measured. The specimen is 9 mm thick. What remains of the outer disc measures 33 mm in diameter. Similar artifacts have been recovered from Dallas phase burials (Lewis and Kneberg Lewis 1995:168–169).

Marine Shell Beads

Beads made from five types of marine shell—*Marginella, Anadara, Noetia, Olivella,* and *Busycon*—were recovered from 31 burials (Tables 7.23 and 7.24). Relative to *Busycon,* beads made of the other shell types occur with few burials and usually in small numbers as well. *Busycon* shell beads were also common in Dallas phase burials at the Toqua site, while *Marginella* and *Olivella* shell beads were uncommon (Polhemus 1987:Tables 11.7, 1.8).

Olivella and *Anadara* beads appear to have been most commonly worn around the neck, although Burial 158 clearly had one *Olivella* bead in the wrist area. Burial 85 was heavily disturbed by plowing, and it is therefore possible that *Anadara* beads found scattered along the length of one leg may have been moved there by the plow and that additional beads were completely removed from the burial.

Twenty-six burials were accompanied by disc- and barrel-shaped beads of various sizes that were cut from larger marine shells, presumably *Busycon* (Table 7.24). These beads vary considerably in size and frequency among burials. The quantity of shell represented by beads in a burial may provide some insight into the social status and economic wealth of the deceased. Shell quantity can be calculated by estimating bead size and bead frequency. I have subjectively assigned disc-shaped beads to three size classes and barrel-shaped beads to two classes (Table 7.24). I would have preferred to use bead dimensions or weight to establish the size classes and to classify individual specimens, but the weathered condition of many beads precluded the latter. A rough approximation of the relative amount of shell required to fabricate each of the five shape and size classes of beads was obtained by comparing the average weight of intact specimens of each class. Small disc beads weigh on average about .26 g; medium disc beads weigh about .84 g; large disc beads weigh about 2.95 g; medium barrel beads weigh about 3.81 g; and large barrel beads weigh about 14.9 g. I have converted these average weights into a standardized unit of value by dividing the weight of small disc beads into the weights of the other bead classes. Thus small disc beads equal one unit of value (one bead unit), medium

Table 7.23. *Marginella, Anadara, Noetia,* and *Olivella* shell beads from burials

Burial	Type	Frequency	Placement in Burial
30	*Marginella*	224[1]	Neck
60	*Anadara ovalis*	1	Neck?
61	*Anadara ovalis*	2	Neck?
73	*Olivella*	2	—
85	*Anadara ovalis*	8	Legs
	Anadara sp.	13	—
	Noetia ponderosa	1	—
90	*Olivella*	1	Head
158	*Olivella*	1	Forearm
163[2]	*Anadara* sp.	1	—
189	*Olivella*	2	—
235	*Olivella*	2	—

Note: Dashes indicate no data available.

1. Number is approximate due to fragmentation.

2. Burial association is not certain.

disc beads equal three units, large disc beads equal 11 units, medium barrel beads equal 14 units, and large barrel beads equal 57 units. The quantity of bead units represented in each burial, calculated by multiplying bead units by number of beads, is listed in Table 7.24.

We have no way of knowing whether King site inhabitants assigned value to *Busycon* beads on the basis of their size, but the approach is not totally unrealistic. The larger the diameter of a disc bead, the fewer specimens can be cut from a single *Busycon* shell. Disc-shaped beads probably were cut from most portions of the body whorl, while barrel-shaped beads probably were obtained only from the columella. Not only did barrel-shaped beads require more shell to manufacture, but fewer of them could be cut from a single shell.

Most burials with *Busycon* beads had only a dozen or so small or medium disc beads. A few burials, however, had a hundred or more such beads or a large number of large barrel-shaped beads, representing a significant quantity of raw shell.

Beads made from shell species listed in Table 7.23 cannot be readily integrated into the *Busycon* bead unit system. Each bead type occurs as a whole shell or valve, and each probably differed in availability and cost of import. Except for *Marginella* beads, none occurs in large quantities, suggesting either

Table 7.24. *Busycon* shell beads from burials

Burial	Bead Type	Number of Beads[1]	Bead Units	Placement in Burial	Comments
17	Medium disc	5	15	Neck	
18	Medium disc	5	37	—	Plow disturbed
	Large disc	2		—	
30	Small disc	1	58	Neck	Plow disturbed
	Large barrel	1		Neck	Plow disturbed
31	Medium disc	100	300	Neck/chest	Plow disturbed
60	Small disc	60	108	Neck/chest	
	Medium disc	16		Neck/chest	
61	Medium disc	103	309	Neck	
63	Medium disc	2	6	—	
64	Small disc	82	671	Neck/chest	Plow disturbed
	Medium disc	125		Neck/chest	
	Large disc	8		Neck/chest	
	Medium barrel	9		Neck/chest	
66	Medium disc	1	3	Right hand	
87[2]	Medium barrel	13	182	Neck	
88	Medium barrel	26	421	Neck/chest	
	Large barrel	1		Neck/chest	
92	Medium disc	220	660	Neck/shoulder	
97	Small disc	4	7	—	Plow disturbed
	Medium disc	1		—	
110[2]	Medium disc	4	582	—	
	Large barrel	10		—	

117	Small disc	15	24	—	
	Medium disc	3		—	
118	Small disc	30	69	Neck	
	Medium disc	13		Neck	
120	Small disc	106	106	Neck	
143[2]	Small disc	2	2	—	
144[2]	Small disc	2	2	—	
158	Small disc	12	12	—	
160[2]	Small disc	3	3	—	
195	Large barrel	54	3,078	Neck	Plow disturbed
224	Small disc	13	13	Neck	Plow disturbed
229	Medium disc	9	27	—	Looted
235	Small disc	24	52	Neck/chest	Plow disturbed
	Medium barrel	2		Neck/chest	
259[2]	Medium barrel	16	224	Neck	

Note: Dashes indicate no data available.

1. Larger numbers are approximate due to bead fragmentation.
2. Burial associations are not certain.

greater import cost or lower value in the eyes of community members. They rarely occur with *Busycon* beads, but when they do, bead unit counts range from 12 to 309.

Where placement relative to body could be determined, *Busycon* beads were invariably located in the neck or chest area and presumably were worn as necklaces. One possible exception to this pattern is the single disc bead recovered from Burial 66, which appeared to be held in the right hand. This hand is located immediately in front of the face, however, so even in this case the bead may have been part of a necklace.

Burial 92 may represent another exception. Approximately 220 disc beads were located in the neck and shoulder area of the burial in association with two embossed copper cutouts and 10 human molars. The fact that all items were located either beneath the skeleton or adjacent to it indicates that whatever kind of clothing article or articles they represent, they were not being worn around the neck at the time of interment. This group of artifacts was discussed further in the section above on copper arrow symbol badges.

Shell Spoons

Single freshwater mussel valves were present in pottery vessels accompanying Burials 11, 33, 39, 184, and 237. Associated pottery vessels include one Lamar Coarse Plain jar, three Dallas Plain jars, and one Dallas Plain bowl. In all cases, shells were sufficiently weathered that it is not possible to identify species or whether the shells had been intentionally modified. Lewis and Kneberg (1946:130) and Polhemus (1987:1019) report similar pottery vessel/mussel shell associations in Dallas phase burials from the Hiwassee Island and Toqua sites. Some of these shells had been intentionally modified: hinge teeth were ground off and anterior ventral margins were cut and ground to form a handle. Presumably mussel shells, with and without handles, were used as ladles or spoons to remove materials from pots.

Whole Mussel Shell

A complete valve of a large freshwater mussel (*Lampsilis* sp.) was present in Burial 226 in physical contact with two tabular polishing stones and one circular polishing stone. All four items were located at the feet of the 40-year-old male interment. The completeness of the shell and its physical association with three stone tools suggest that it was an intentional inclusion and functioned as a tool of some sort.

8
Household and Community

Domestic structures, public architecture, and the King site burial sample are described in earlier chapters and several appendixes. In the present chapter, we will bring these different sets of data together and look at them from the perspective of the site as a whole. Among other things, we will investigate how domestic structures relate spatially to one another; how domestic structures vary in form through time and synchronically across the site; how specific burials relate to specific domestic structures and groups of structures; and how the site's size and layout changed through time.

The results of these investigations will be interpreted within the conceptual framework of household and community. This means that we will use patterns evident in the architectural and burial data to (1) identify households and the specific structures and burials that belong to them; (2) understand how and why household size changes through time and varies across the community; and (3) reconstruct the life history of the community, that is, how the community was founded, grew in size through time, subsequently declined in size, and was ultimately abandoned.

Several characteristics of households and the community as a whole can be investigated only after we have some understanding of the complex relationships between burial age, sex, location, pit form, body treatment, and grave goods. Analysis of these variables will be described in Chapters 9–11. With these data in hand, it will then be possible to consider in Chapter 12 how individuals and households differed from one another in wealth, status, and rank.

It will also be possible to consider the question of political leadership at the community level.

Households

Households are represented in the archaeological record at King by primary domestic structures (PDS), rectangular structures (RS), outdoor work areas, and human burials. Primary domestic structures, as described in Chapter 5, are large, substantially constructed buildings that were the locus of food preparation and consumption, sleeping, and various craft activities for all households at King. More domestic activities probably took place inside the PDS during the colder months of the year than in the summer, but even in the latter season the building probably continued to have important domestic uses. Rectangular structures probably served as corn cribs throughout the year and in the summer as shaded places for domestic activities performed outside the PDS.

All households would have required a certain amount of outdoor space immediately adjacent to the PDS and RS for domestic activities such as corn grinding and animal-skin tanning. Bartram (Waselkov and Braund 1995:180) is probably describing such spaces for the late eighteenth-century Upper Creek when he reports that domestic structures were laid out so as to enclose "a square area, exactly on the plan of the Publick Square." A number of rectangular open spaces, located in front of or adjacent to PDS, can be identified in the eastern and northeastern sectors of the habitation zone at King and will be described below.

Human burials are located within the walls of PDS and RS and in the outdoor spaces surrounding these buildings. Most of the former were interred while structures were occupied and include individuals of all ages and both sexes. We can be fairly confident that these "inside" burials represent deceased members of the households living in the PDS and RS in which they were interred. Outside burials exhibit several spatial patterns suggesting that they too represent deceased members of specific households. These patterns are described in Chapter 7 and will be elaborated upon in later sections of the present chapter.

It is possible that all households at King were single conjugal families, consisting of a husband, wife, unmarried coresident children, and perhaps one or more peripheral relatives (Hammel and Laslett 1974:89). Households of this size and composition would be likely to have utilized only one PDS and one RS, have their own outdoor work area, and have interred deceased members in and around these facilities. Ethnological and ethnohistorical evidence, how-

ever, suggests that some, perhaps many, households consisted of multiple conjugal families that were related through matrilineal descent. Multiple or joint family households were characteristic of large numbers of aboriginal societies throughout the world at the time of European colonial expansion, and a significant percentage of them were structured by rules of matrilineal descent and matrilocal postmarital residence (Murdock 1949). Matrilineal descent and matrilocal multiple family households were characteristic of most Southeastern aboriginal societies in the late nineteenth and early twentieth centuries (Urban and Jackson 2004). While there is only limited ethnohistorical evidence for such institutions earlier in the contact period (Moore 1988:66), there is no reason to suspect that they did not have considerable antiquity and were not characteristic of late prehistoric chiefdoms in the Southern Appalachian region.

According to Swanton (1928a:170–171), the typical Creek household in the early twentieth century was a matrilocal multiple-family household in which newly married couples took up residence in structures they built near the wife's parents' home. If such households occurred at King, they should manifest a number of distinctive architectural and spatial characteristics. They should have two or more PDS, the number approximating the number of conjugal families present. These PDS should be arranged around a common outdoor work area. There should be one or more RS, the number depending on factors such as household size and the size of individual RS. The PDS of the founding conjugal family should be occupied longer than—or should at least be constructed prior to—the residences of junior families. This structure, furthermore, might be larger than the others and likely to occupy more favorable, auspicious, or desirable locations within the habitation zone. Finally, multiple-family households should produce a larger number of deceased household members. The extent to which a particular household will manifest these characteristics, of course, is contingent upon a number of factors, chief among them being where the household is in its developmental cycle (Goody 1958) and the availability of space within the habitation zone.

Several types of evidence are available in the archaeological record at King that can be used to distinguish multiple-family households from those consisting of only a single conjugal family. These include number and location of PDS relative to large open spaces, number and location of RS relative to PDS and large open spaces, compass orientation of PDS and RS, location of PDS entrance passages, number of PDS construction stages, size of PDS, number of inside burials, and location of PDS within the habitation zone relative to the plaza, the palisade, and other PDS.[1]

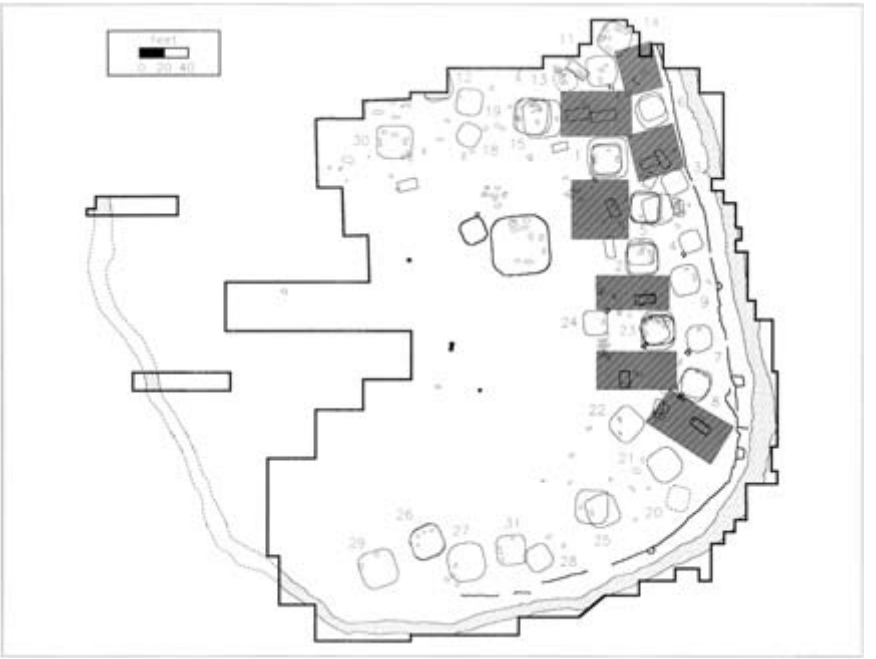


Figure 8.1. Rectangular open spaces (shaded areas) adjacent to primary domestic structures.

Figure 8.1 shows the location and configuration of open spaces in the habitation zone that may have served as outdoor work areas or courtyards. These spaces range between 40 and 75 feet in length and 30 and 40 feet in width and usually contain burials and one or more RS. They were identified using several criteria. They should be relatively large; they should be located adjacent to one or more PDS; they should have a compass orientation that is roughly similar to adjacent PDS; and there should be some indication, usually in the form of entrance passages, that one or more PDS actually faced toward the space. Architectural features are too poorly preserved in the northern and southern sectors of the habitation zone to attempt open-space identification in those areas.

Seven PDS (Structures 1, 4, 7, 8, 11, 23, and 24) have preserved entrance trenches (Figure 8.2). Several patterns evident in the location of these entrances have been described in Chapters 5 and 7. These include a tendency to point toward the household's outdoor work space; a tendency to avoid PDS floor sectors that contain inside burials; a tendency to point toward the plaza rather than the palisade; and a tendency to be oriented toward the south. Of these, the last two are likely to vary depending on the location of the PDS

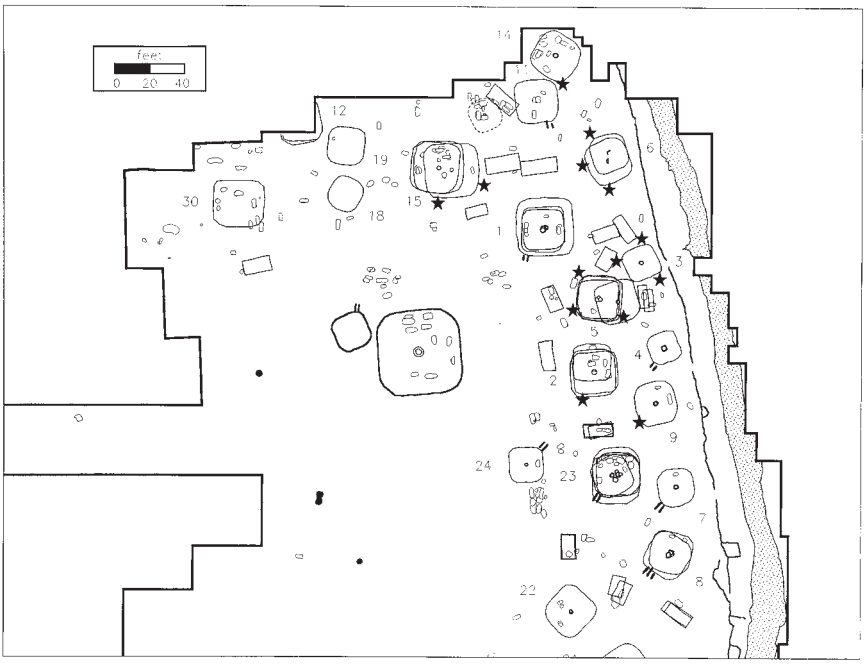


Figure 8.2. Entrance passages and possible locations of entrance passages (marked with stars) for primary domestic structures.

within the household building complex and the habitation zone. Most well-preserved PDS are located in the eastern and northeastern sectors of the habitation zone and lie either north or east of large outdoor work spaces. If their entrances open onto those open spaces, they will perforce point toward the plaza and to the south, west, or southwest. Structure 24 is the sole known exception to this pattern. Being located on the southwest side of the Household 2 building complex, its entrance points away from the plaza and to the northeast. In the southern sector of the habitation zone, PDS cannot face both south and toward the plaza. Unfortunately, there are no PDS with preserved entrance trenches on the southern side of the site. As a result we cannot know for certain which factor, if either, was more important in determining how entrances were oriented. The proximity of most preserved PDS in this sector to the palisade, however, indicates that outdoor work areas were generally located on the north side of residences and, therefore, that entrances generally were oriented northward toward the plaza.

Star-shaped symbols have been placed next to PDS in Figure 8.2 to indicate

possible locations for entrance passages. The proposed entrance location for Structure 9 reflects the fact that the structure is adjacent to the palisade on the east and a large open area to the west. Structure 5 has a somewhat analogous location, although it is much farther from the palisade. An open area exists to the east of the structure, but it is not very large, and it is against the palisade. The existence of a large open area to the west suggests that Structure 5 faced in this direction. The entrance passage could have been located at the southeastern or northeastern corner, but the former is more likely. Like Structure 4, Structure 3 could have faced toward the open space located some distance to the west. There is, however, a large open area north of the structure and a smaller one to the south, both of which it was well situated to use. Structure 2 probably had an entrance passage located at its southwestern corner. There is a large open area south of the structure, and its northern floor sectors are filled with burials. Structure 14 probably had an entrance at its southern corner pointing southeast or in the adjacent southwestern wall pointing southwest. Structure 15 could have faced south toward the plaza or toward a large open area to the east. There appears to have been another large open area to the north, but given the prominent location of Structure 15 on the plaza edge, it probably did not face in that direction. Finally, there are three possible locations for Structure 6 entrances. With large open areas located to the north, south, and west, it could have faced in any of these directions. Unfortunately, there is no additional direct evidence favoring one direction over the others. If there was a strong preference for south-oriented entrances, then the southern corner of the structure may be the best choice.

Approximately one-third of all excavated PDS have been rebuilt one or more times (Table 8.1). Rebuilding may have been required for a number of different reasons: decay of wooden structural elements; frequency of vermin; accidental destruction by fire; or intentional destruction prompted by the death of an important household member. Whatever the reason, all PDS at King were probably equally likely to require rebuilding if they were utilized for a sufficiently long period. To the extent that this is so, PDS with multiple construction stages were probably occupied on average for a longer time than single-stage PDS, and those that were rebuilt the most times were probably occupied the longest.

Number of construction stages is strongly correlated with number of inside burials ($r = .810$, $p < .001$).[2] PDS with the most construction stages have the most household members interred beneath their floors. If all households at King experienced approximately the same mortality rate among their members and if all households were interring the same proportion of their dead in

Table 8.1. Relationship between primary domestic structure size, number of construction stages, and number of burials

Structure	Number of Construction Stages	Number of Inside Burials	Average Size
3	1	0	—
4	1	0	306
7	1	1	443
9	1	2	573
11	1	0	593
13	1	0	322
14	1	3	668
18	1	0	365
19	1	1	462
20	1	1?	—
21	1	0	684
22	1	5	627
24	1	1	388
27	1	1	927
28	1	0	441
29	1	1	894
31	1	1	594
6	2	0	507
8	2	2	568
25	2	2	691
26	2	4	673
1	3	6	750
2	3	6	590
15	3	4	861
5	4	6	589
23	4	12	637

Note: Measurements in feet. Dashes indicate no data available.

PDS, then the number of inside burials is a measure of structure longevity and supports the construction-stage evidence for how long individual PDS were occupied. While probably true, the relationship is more complex and will be returned to in a later section of this chapter.

Multistage PDS tend to be larger than single-stage PDS. The latter average 569 square feet, while two-stage structures average 610 square feet and three- to four-stage structures average 677 square feet. The size difference between single- and multiple-stage PDS is significant at the .062 level ($t = 1.57$). The

size difference between structures with one construction stage and those having three to four is significant at the .051 level ($t = 1.68$).[3]

The size difference between single-stage and multiple-stage PDS is actually more robust if we look beyond the figures for average size. Six of the 14 single-stage structures are smaller than 500 square feet. No multistage PDS has construction stages that are consistently this small. Structure 6 has one stage measuring 416 square feet, but the other stage is 598 square feet. The first stage of Structure 2 is 464 square feet, but the others measure 632 square feet and 674 square feet. The structure begins small, but its second stage is 36 percent larger. The last stage of Structure 23 measures 428 square feet, but the others average 707 square feet. The last stage of Structure 23, as discussed in a later section, probably postdates the formal abandonment of the King site and would have been constructed under different social conditions and spatial constraints. Thus, while there are a couple of very large single-stage PDS (Table 8.1), equal in size to the largest multistage structures, most are quite small. Multistage PDS, on the other hand, are in the 500- to 700-square-foot range or larger.

The habitation zone along the better-preserved eastern side of the King site is approximately 120 feet wide and bounded on the east by the palisade and on the west by the plaza (Figure 6.1). Single-stage and multistage PDS are distributed differently within this relatively narrow space. All three- to four-stage structures are located either some distance from the palisade or are separated from it by another PDS. Four of them, furthermore, are part of the first tier of PDS bordering the plaza. Three of the smallest (<500 square feet) single-stage structures (Structures 4, 7, and 28), on the other hand, are located adjacent to the palisade. Structures 3 and 20 fall into this category as well, assuming their size estimates are correct. Structures 18 and 24 are also small single-stage PDS, but they are located on the other side of the habitation zone, at the edge of the plaza. Structure 19 is the only small PDS that is not located on one edge of the habitation zone or the other.

Not only do small single-stage PDS tend to have marginal locations within the habitation zone, but they also give the appearance in some cases (Structures 3, 4, and 20) of having been squeezed into small spaces. Structure 24 is not so restricted, but it does encroach on the plaza. We might speculate that it and the other small PDS are located where they are because no other nearby spaces were available.

Bringing these various kinds of evidence together, it is possible to identify six different architectural complexes that may represent distinct households (Figure 8.3). These households and the evidence upon which their identifica-

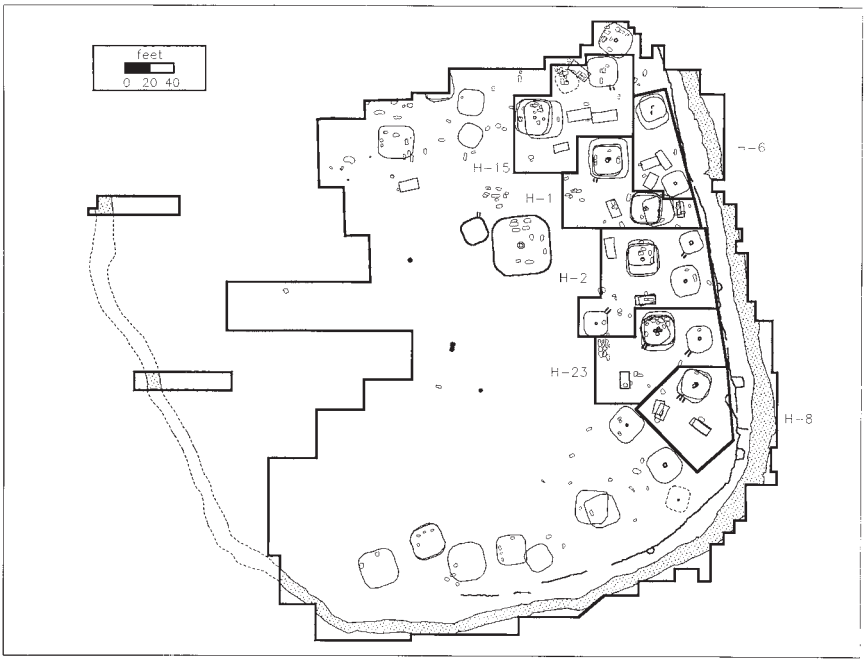


Figure 8.3. Household architectural complexes (enclosed by heavy lines).

tion is based are described in the following section. Their order of presentation parallels the strength of the evidence upon which they are based.

Structure 2 Household (Household 2)

Household 2 is at once the most complex or largest household and the most clear-cut case of a multiple-family household (Figures 8.3 and 8.4). It gets its name from Structure 2, the largest and only multistage PDS in the complex. There is no extant entrance passage for this structure, but the building's proximity to Structure 5 and its location on the north side of a large open space indicate that it faced south. Structure 9, a fairly large single-stage PDS, lies at the eastern end of the open space. The structure has no entrance passage, but given its proximity to the palisade, we can be fairly certain that it faced westward. Its compass orientation is a little different from that of Structure 2 (77 vs. 85–89 degrees), but like most PDS located next to the palisade, it matches the orientation of the palisade fairly closely. The entrance passages of Structures 4 and 24 indicate that both of these small, single-stage PDS faced onto the same open

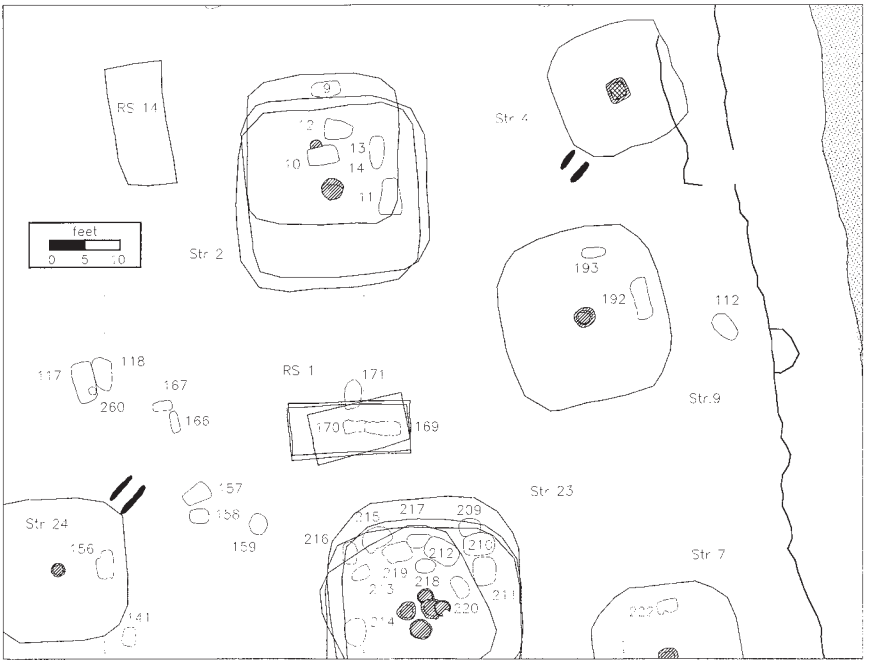


Figure 8.4. Household 2 architectural complex.

space as Structures 2 and 9. The compass orientation of Structure 24 (85 degrees) matches that of Structure 2, while that of Structure 4 (67 degrees) probably reflects the nearby palisade. RS 1 is located close to the center of the open space. Its three construction stages suggest that it was in use for most of the time Household 2 was in existence. The compass orientation of its first two stages (86 degrees) parallels that of Structure 2. RS 14 may also belong to the household, but its location to the side of and slightly behind Structure 2 raises the possibility that it belongs to Household 1. There are a fairly large number of postholes in the western portion of the open space that may represent one or two additional RS.

Given its size and number of construction stages, Structure 2 was probably the residence of the conjugal family that founded the household. With only one construction stage, Structure 9 was probably built sometime after Structure 2 and would be the residence of a daughter and her conjugal family. The relatively large size of the structure and its prominent location at one end of the common work area suggest that this family unit was the first to be added to the original household. Following this line of reasoning, Structures 4 and

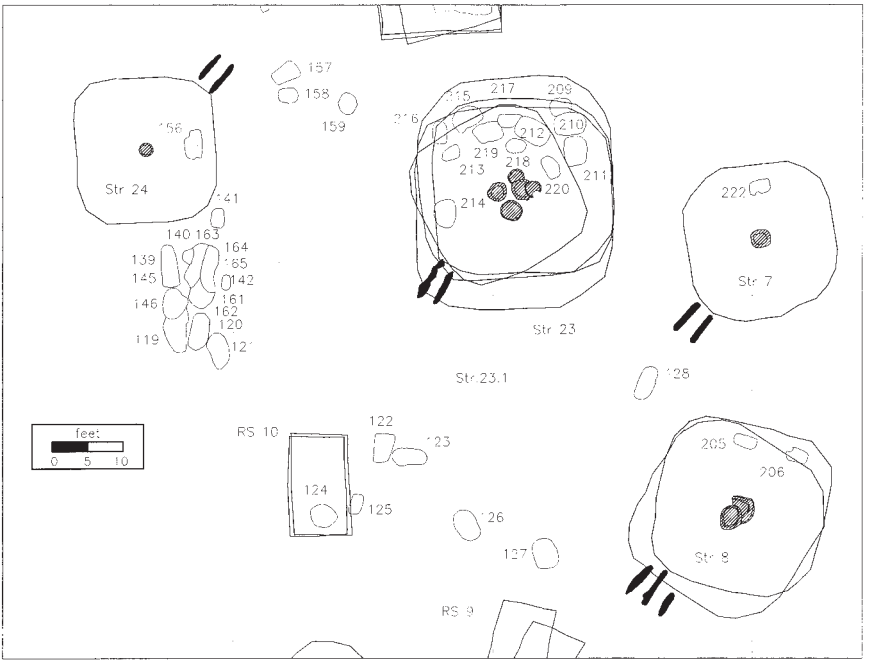


Figure 8.5. Household 23 architectural complex.

24 were constructed for daughters who were married later. The small size and out-of-the-way location of the two may reflect the fact that space in this part of the habitation zone was by then in short supply.

Structure 23 Household (Household 23)

Household 23 consists of two PDS and a single RS (Figures 8.3 and 8.5). Structure 23 is a large, multistage PDS with entrance passages directed toward a large open space to the south and west. Structure 7, a small single-stage PDS, faces onto the same open space. Its compass orientation of 81 degrees is fairly close to that of the first three stages of Structure 23 (86–88 degrees) but is also close to that of the adjacent palisade section. RS 10 is located near the center of the open space. Its compass orientation of 0 degrees is fairly close to that of Structure 23.1–23.3. RS 10 has two construction stages, suggesting that it was in use for a relatively long time. There are a large number of postholes in the open area to the east of RS 10. Some of these may belong to additional RS.

With four construction stages, Structure 23 is probably the residence of the conjugal family that founded the household. Its first three construction stages

are relatively large. Structure 7, with its single construction stage and relatively small size, probably was constructed sometime after Structure 23 and presumably housed the family of a married daughter. Structure 23.4 is quite different from the three construction stages that proceeded it. Its orientation is 64 degrees and it is 45 percent smaller than Structure 23.3. Evidence presented in a later section indicates that this last stage was constructed after the King site had been formally abandoned as a town.

Structure 8 Household (Household 8)

As identified here, Household 8 consists of only one PDS and two RS (Figures 8.3 and 8.6). Structure 8 was built in two stages, and its compass orientation changes from 12 degrees to 32 degrees. A large open area is located immediately south and southwest of the structure. Preserved entrance trenches demonstrate that the structure faced onto this open area. RS 9 is located almost directly in front of Structure 8 and has two construction stages. The orientations of these (13 degrees and 25 degrees) parallel the orientations of the two Structure 8 stages, suggesting that each was in use during only one stage of the PDS. RS 2, located south but still in front of Structure 8, has two construction stages with compass orientations of 34 degrees and 38 degrees. This RS may be contemporary only with Structure 8.2.

As reconstructed, Household 8 was a single-structure household that may have consisted of only one conjugal family. There is a possibility, however, that either or both Structure 21 and 22 were part of a larger household. Both are located approximately 40 feet southwest of Structure 8 and lie on the southwest side of the open space associated with that structure (Figure 8.1). The compass orientation of Structure 22 (46 degrees) is not too different from that of Structure 8, but at 60 degrees Structure 21's orientation is quite different. We cannot make a stronger case for either structure's being part of Household 8 because we do not know what kinds of architecture existed to the west of them. There is a large open space in that direction that could be an outdoor work area for households focusing on Structure 21 and/or Structure 22. Erosion may have destroyed buildings in that space or others beyond it to the west that might have helped us understand the household affiliations of these structures.

Structure 6 Household (Household 6)

Household 6 consists of two PDS, a common work area lying between them, two or three RS, and a small number of burials (Figures 8.3 and 8.7). Structure 6 was constructed in two stages, its size increasing 44 percent from 416 square feet to 598 square feet and its compass orientation changing from 72

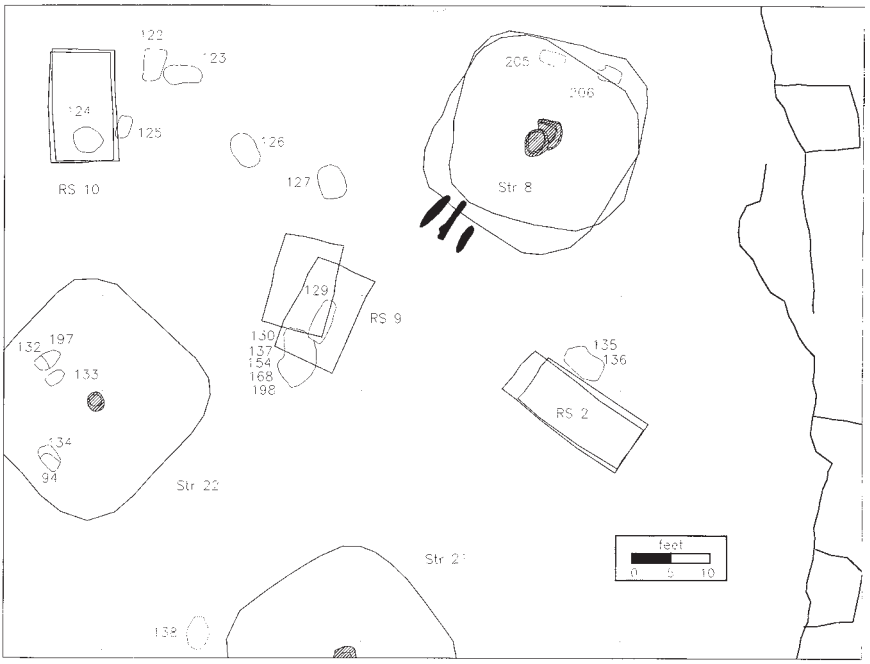


Figure 8.6. Household 8 architectural complex.

degrees to 67 degrees east of north in the second stage. Structure 3 is located 40 feet to the south. It is a single-stage PDS and, at approximately 365 square feet, considerably smaller than Structure 6. Structure 3 presumably was occupied for a shorter period than Structure 6. We might expect, therefore, that it was constructed after Structure 6 had been in use for a while and been rebuilt. Its compass orientation of 65 degrees supports that interpretation, as does its proximity to the first construction stage of Structure 5. We probably should not put too much weight on PDS compass orientation in this case, however, because both structures may be affected by the orientation of the adjacent palisade section.

The three RS located in the open space immediately north of Structure 3 have compass orientations of 65 degrees (RS 3), 28 degrees (RS 4), and 56 degrees (RS 12). RS 3 matches the two PDS fairly closely; RS 12 is reasonably close; but RS 4 is quite different. The latter could belong to Household 1, but it does not match the compass orientation of any PDS there either and it is not located in the open work space associated with Structures 1 and 5. If RS 4 is indeed a rectangular structure, it probably goes with Household 6.

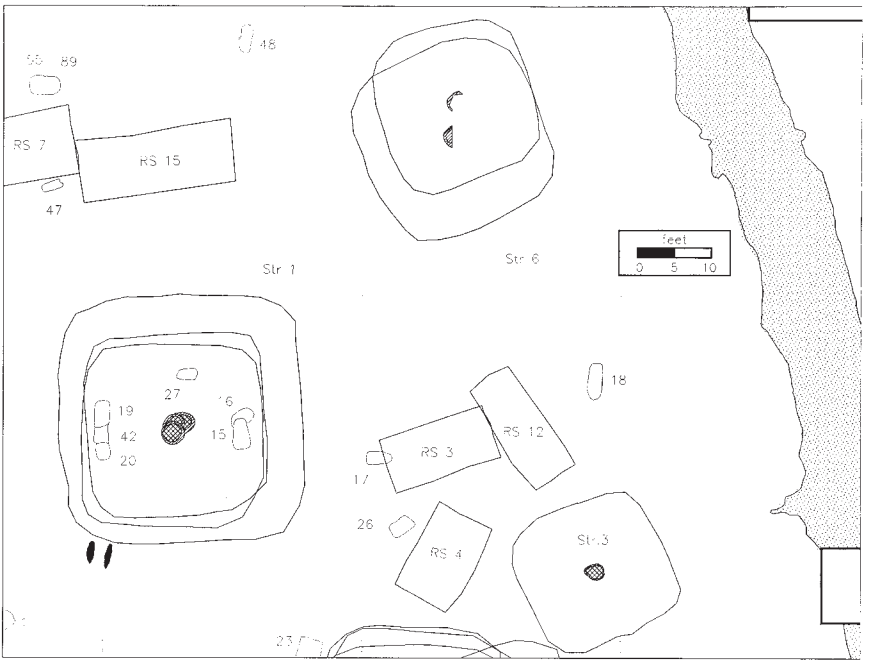


Figure 8.7. Household 6 architectural complex.

There are three problems with this household reconstruction. As the residence of the probable founders of the household, we might expect Structure 6 to have some inside burials, but there are none. RS 3 and RS 12 present a further problem in that together they almost totally block any entrance location in the northern wall of Structure 3. We might question, furthermore, why such a small household should have three granaries.

There are several reasonable alternatives to identifying Structures 3 and 6 as making up a separate household. Structure 3 could belong to Household 1. Its different compass orientation is not a problem because of the effect proximity to the palisade seems to have on PDS orientation. We might question why the structure was not located 10–15 feet farther north and west, where it would be closer to the outdoor work area for Household 1. If Structure 6 was a separate household facing south, however, such a location would place Structure 3 squarely in the middle of its outdoor work area.

Structure 6 may have faced north, where there is a large open area with Structure 14 on the opposite side (Figure 8.1). Structure 6 may well have faced

this way, but Structure 14 was not part of the household equation, as it postdates the formal abandonment of the town (see last section of this chapter).

Finally, it is possible that Structure 6 faced onto the large open space to the west and was part of Household 15. In this case, Structure 6 would have housed a junior family in the household, and the lack of inside burials would be less of a problem. The lack of congruence in compass orientations would not be a problem because of the palisade effect. As we shall see in the section on Household 15, there is no evidence that fatally undermines this interpretation. Such an association, however, leaves unaccounted for Structure 3, RS 3, RS 4, and RS 12 and the large open area south of Structure 6. If Structure 6 is not part of a household that includes these features, then the household affiliation of Structure 3 becomes a problem. With the large open space and the three RS to account for, it seems very unlikely that Structure 3 would be part of the Structure 1 household to the west. Of course, Structure 3 could be part of a relatively short-lived, single-family household—but then why would it have three RS? Another possible household affiliation for Structure 3 will be discussed in the next section.

Structure 1 Household (Household 1)

Household 1 consists of Structures 1 and 5, a large open space, RS 6, and possibly RS 14 (Figures 8.3 and 8.8). The eight burials (Burials 1–8) located southwest of Structure 1 are almost certainly outside burials associated with that structure. Their location suggests that the outdoor work area for Household 1 extended fairly far to the west, as shown in Figure 8.1. A wall-trench entrance located at the southwest corner of Structure 1.1 indicates that this building stage faced south. Given that there was a preference for PDS to face south and toward the plaza, we can assume that the entrance passages for Structures 1.2 and 1.3 were located along the southern wall as well. The several stages of Structure 5 probably faced onto this same open space and had their entrances located at the northwest or southwest corners. It is less likely that the structure faced eastward toward the palisade and the small intervening space or southward toward Structure 2 located just 14–20 feet away. The building's four stages could have faced north onto the open area between Structures 3 and 6, but there are several burials located in the north-central floor sectors of Structure 5 and the outside space immediately north of the structure is fairly crowded with burials, RS, and Structure 3.

Structure 5 shifted more than 11 feet to the west following its first construction stage. From this point on, Structures 5 and 1 have comparable com-

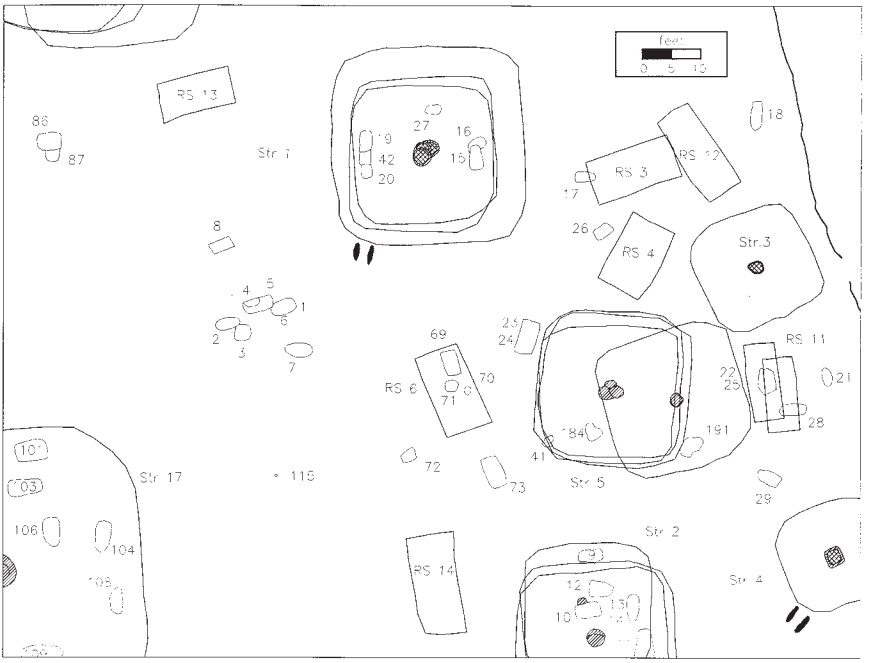


Figure 8.8. Household 1 architectural complex.

pass orientations, ranging between 85 degrees and 6 degrees east of north. The compass orientation of RS 6 (67 degrees) matches that of Structure 5.1 (77 degrees) most closely, suggesting that it was used early in the household's existence. RS 14 may supersede it, but we may question whether an RS would be so far removed from its associated PDS. There are a fairly large number of postholes in the open space around RS 6. An additional rectangular structure or two are almost certainly located here, even though no alignments stand out clearly enough to merit identification as a structure.

Structure 1.1 is unusual among PDS. As described in Chapter 5, it is the largest PDS and ranks second in relative amount of central floor space, with 23 percent. This figure exceeds that for Structure 17 (20 percent), although the latter has more actual central floor area (458 square feet vs. 246 square feet). Structure 1.1 also has the largest number of exterior wall posts of any PDS, with 44, a figure that matches the probable number in Structure 17. These architectural characteristics and similarities to Structure 17 suggest that Structure 1.1 was more than an ordinary PDS. It may have served as a council house prior to the construction of Structure 17, but there are no good posthole align-

ments within the structure that could have served as bench supports. Alternatively, Structure 1.1 may have served as the residence of the town's first chief. This latter interpretation follows from Polhemus's (1987) observation that domestic structures on the summit of Mound A at Toqua had much larger central floor spaces than non-mound residences.

Following the first construction stage, Structure 1 resembles other PDS in size (581 square feet) and number of exterior wall posts (32), suggesting that its role in the community has changed in some fashion. At approximately the same time, Structure 5 shifts 11 feet to the west and changes its orientation from 77 degrees to 2–6 degrees east of north. This brings it into closer conformity with the compass orientation of Structures 1.2 and 1.3. These changes may be in response to site-wide changes in settlement plan accompanying the formal layout of the town (discussed in a later section), but they may also reflect an attempt to make Structure 5 conform more closely to the spatial characteristics of Structure 1. Such changes, if that is what they are attempting to do, might signal the formation of a new multiple family household.

There is one major problem with having Structures 1 and 5 belong to the same household. Both are multistage structures, which suggests that their first construction stages may have been contemporary. This situation could have arisen if the household was a multiple-family household at the time it first settled at King. A second, related problem is that there is no architectural evidence in the form of small, single-stage PDS that the household grew at all during its existence. Of course, it is possible that no additional female offspring lived to a marriageable age or married matrilocally.

Structures 1 and 5 will be treated as members of a single multiple-structure household in the remainder of this book. It is possible, however, that the two structures represent different households. Structure 1 may be a single conjugal family household oriented toward the open space to the south. Structure 5, in turn, may face onto the small open space located to the east (Figure 8.2). In this scenario, Structure 5 may have faced westward during its first construction stage. When the second stage was built, the structure was reoriented to face east and it was shifted 11 feet to the west to make room for Structure 3, the latter being a later addition to a growing Structure 5 household. This interpretation is compatible with the relatively large number of inside burials associated with Structure 5 and it would account for RS 11, which otherwise is located in a unique position between Structure 5 and the palisade.

Placing Structure 5 in its own household with Structure 3 does have several problems. To begin with, it seems unlikely that Structure 5 would face away from the plaza. Second, the outside space east of the structure is rather

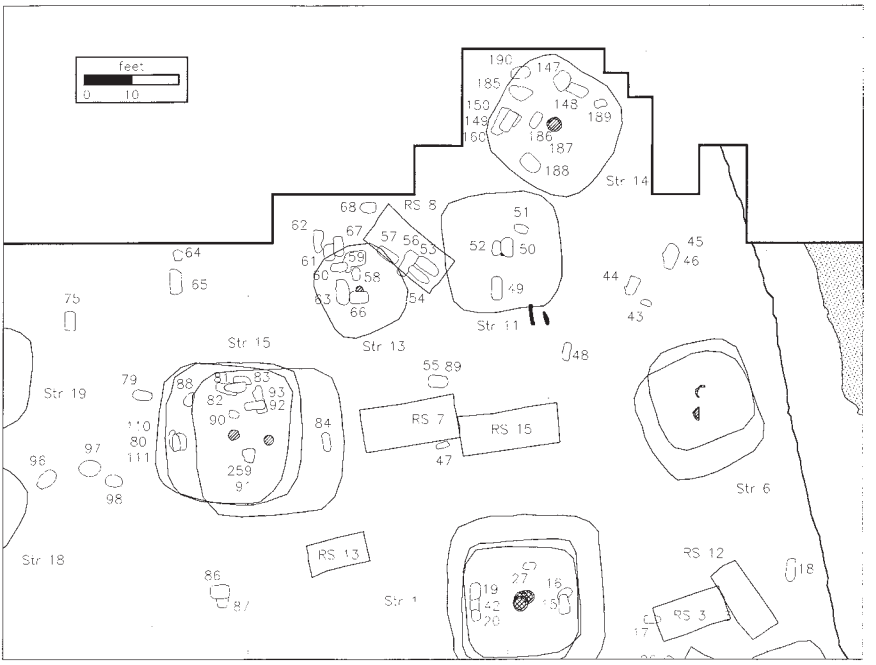


Figure 8.9. Household 15 architectural complex.

small. Third, there is no large outside burial cluster for the household. Fourth, given the distance between Structure 1 and RS 14, 49 feet, the assignment of RS 14 to Household 1 becomes even more tenuous. Finally, the identification of RS 11 is not at all certain because of the incomplete nature of its posthole alignments.

Structure 15 Household (Household 15)

Household 15 consists of two PDS (Structures 11 and 15), three RS (RS 7, 13, and 15), and a large open space (Figures 8.1 and 8.9). The latter is bounded by Structure 15 on the west and Structure 11 on the north. Structure 11 has a wall-trench entrance in its south wall and therefore faces onto the open area. Structure 15, unfortunately, does not have a wall trench entrance. It is unlikely to have faced west because the proximity of Structures 18 and 19 precludes a large open area in that direction. There is a large open space north of Structure 15, but it is unlikely that the structure would face away from the plaza, especially since its occupants appear to have been important members of the community (see Chapters 11 and 12). The structure may have faced the plaza like

Structure 5, but unlike the case of the latter building, there are few postholes or burials in that direction and only one small RS. Structure 15 also appears to be closer to the actual edge of the plaza than Structure 5, leaving less space for an outdoor work area. Structure 15 most likely faced east: there is a large open space there, Structure 11 faces that space from the north, and two large rectangular structures (RS 7 and 15) are located in the center of it.

Four of the buildings that make up Household 15 have similar compass orientations: Structure 15 varies between 87 degrees and 5 degrees, Structure 11 is 85 degrees, RS 7 is 81 degrees, and RS 15 is 82 degrees east of north. RS 13, located approximately 5 feet southeast of Structure 15.1, is slightly different in orientation (76 degrees). Given its location relative to other buildings in the area, however, RS 13 is best assigned to Household 15.

Structure 15 was constructed in three stages and throughout its lifespan is one of the largest PDS recorded at King. It was probably the residence of the conjugal family that founded the household. With one construction stage and no inside burials, Structure 11 was clearly occupied for a shorter period. Presumably, it was constructed for a married daughter. RS 7 and 15 overlap at one end and therefore were constructed and used sequentially. The westernmost, RS 7, was probably built after RS 15 because it is located only 4 feet from Structure 15.1. Structure 15.2 was shifted 8 feet to the west, making plenty of room for RS 7.

There are three problems with this reconstruction of Household 15. First of all, there are four burials located within the walls of Structure 11 that appear to postdate the building. Burials 50 and 52 cut through the central hearth and Burials 49 and 51 have unusual locations south of the hearth and immediately northeast of it, suggesting that they were not interred while the building was occupied. These four burials indicate that Structure 11 was abandoned while other nearby buildings were still occupied. It is not clear which household these burials belong to. They may be outside burials associated with a PDS located northeast of Structure 11, beyond the site excavation. More likely, they belong to Structure 14, which postdates the formal abandonment of the town. Evidence for the temporal position of Structure 14 within the King site occupation and for Burials 49–52 being contemporary with the structure is presented in later sections of this chapter. The important point here is that if Structure 14 is the source of Burials 49–52, Structure 11 could still be contemporary with one or more of the later stages of Structure 15.

The second problem is that Structure 6 is located at the eastern end of the outdoor work area used by residents of Structures 11 and 15. It could, therefore, be part of Household 15. It differs in compass orientation (72 degrees and

67 degrees) from Structures 11 and 15, but this is not a problem given that its orientation may have been affected by the nearby palisade. Although Structure 6 probably belongs to a separate household, we need to keep the possibility of its association with Household 15 in mind in future discussions.

The third problem is the existence of Structure 13. Located between Structures 11 and 15 on the north side of the outdoor work area, the structure could be part of Household 15. Its compass orientation of 65 degrees, however, does not match that of the other PDS, and it appears to predate a large outside burial cluster that probably belongs to Household 15. The chronological position and household affiliation of Structure 13 are discussed in a later section.

Household Burial Assemblages

Six household building complexes, consisting of one or more PDS and RS and an outdoor work area, have been identified in the preceding pages. Household burial assemblages, representing the deceased members of individual households, can be reconstructed by combining all inside and outside burials identifiable with a single household. To the extent that household burial assemblages can be reliably reconstructed, we have the unique opportunity to investigate household demography and variation in characteristics such as wealth, hierarchical status, craft production, and political power. Unfortunately, household burial assemblages can be completely and reliably reconstructed in only a few cases at King because of differential preservation of burials and buildings, incomplete exposure of household building complexes, and difficulties in assigning some buildings and burials to specific households. Complete and partial household burial assemblages are identified below.

Household 1

Sixteen burials were interred within the three to four structures that make up Household 1 (Figure 8.8, Table 8.2). Burials 261–265, located within or immediately adjacent to Structure 5, were looted by pothunters (Appendix A, Figure A.10). Four of these burials were located within the walls of various construction stages, while one appeared to overlap the north walls of Structures 5.2–5.4 and may be an outside burial.

At least 12 outside burials can be assigned to Household 1 on the basis of location and compass orientation (Table 8.3). This is essentially the same number as were interred within the two PDS. Burials 1–6 form a tight cluster located 16–18 feet southeast of Structure 1. Burials 7 and 8 may be part of the cluster, but they are separated from the others by 6–10 feet. The location of

Table 8.2. Burials interred inside Household 1 buildings

Structure	Structure Orientation	Burial	Burial Orientation	Depth	Sex	Age
1.3	3	15	353 (83)	3.4	I	A
1.2	85	16	—	—	I	1–6
1.1–1.3	85	19	180 (90)	—	I	A
1.3	3	20	172/352 (82)	—	I	S-A
1.3	3	27	90/270 (90)	—	I	1–6
1.1	86	42	0/180 (90)	—	I	A
5.2–5.4	2, 5, 6	184	90 (90)?	2.3	I	3
5.1	77	191	250 (70)?	1.7	M	22
5.2–5.4	2, 5, 6	261[1]	—	—	I	I
5.2–5.4	2, 5, 6	262[1]	—	—	I	I
5.2–5.4	2, 5, 6	263[1]	—	—	M	22
5.2–5.4	2, 5, 6	264[1]	—	—	I	>19
5.2–5.4	2, 5, 6	265[1]	—	—	F	50
RS 6	67	69	162 (72)	0.6	F	27
RS 6	67	70	—	0.1	I	I
RS 6	67	71	—	0.1	I	I

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; A = adult; S-A = subadult. Dashes indicate no data available.
1. Looted burial.

these eight burials places them in what could be considered the plaza zone, only 20 feet from Structure 17, and in an area devoid of postholes. Yet their position relative to the entrance of Structure 1, their general lack of grave goods, and their demographic characteristics suggest that they represent a family burial plot rather than a select group of individuals.

The individuals interred in Burials 1–8 may have resided in Structure 1 or both Structures 1 and 5. The number of burials is comparable to the number inside either structure. Compass orientations, however, do not conform very well with those of either PDS. This reflects at least in part the fact that pit orientation was difficult to measure as a result of poor preservation and inadequate field records.

Burials 23 and 24 are reasonably similar to Structures 5.3 and 5.4 in their compass orientation, but their proximity to them makes it unlikely that they were contemporary. More likely, they date to Structure 5.1. They would have been situated directly in front of an entrance passage if one were located at the northwest corner of Structure 5.1. Burials in the same location relative to other

Table 8.3. Outside burials located in the vicinity of Household 1

Burial	Household Affiliation	Burial Orientation	Depth	Sex	Age
1	1	238 (58)	—	F	A
2	1	255 (75)	—	I	>22
3	1	90	—	F	27
4	1	—	—	I	3
5	1	250 (70)	—	M	>21
6	1	238 (58)	—	I	A
7	1	272 (2)	—	M	33
8	1	64/244 (64)	—	I	A
21		158 (68)	1.8	M	22
22		165 (75)	1.7	I	20
23	1	196 (16)	0.9	M	32
24	1	196 (16)	0.9	M	30
25		165 (75)	1.7	F	42
28		270 (90)	1.6	I	A
29		116 (26)	0.6	M	42
72	1	65	0.1	I	I
73	1	156 (66)	0.7	I	15

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. A = Adult; I = Indeterminate. Dashes indicate no data available.

PDS (Structures 7, 8, 11, and 24) are not oriented parallel to those structures either. Burials 72 and 73 have compass orientations reasonably similar to that of Structure 5.1 and, therefore, may be contemporary with it.

Burials 21, 22, 25, 28, and 29 are located between Structure 5 and the palisade. In this location, they are close to the rear wall of three PDS, Structures 3, 4, and 5. Burials 21, 22, and 25 have compass orientations that are reasonably similar to those of Structures 3 (65 degrees) and 4 (67 degrees) and 5.1 (77 degrees) but quite different from those of Structures 5.2–5.4 (2–6 degrees). Burial 28, on the other hand, matches the orientation of Structures 5.2–5.4. Given these characteristics, it is not possible to make a reliable household assignment for any of the five burials.

One of the looted burials (Burials 261–265) appears to have overlapped the northern walls of Structures 5.2–5.4, although we cannot rule out the possibility that it was entirely within the perimeter of Structure 5.3 or 5.4 and thus was an inside burial. In the former case, affiliation with Household 1 or any household is difficult to establish.

Table 8.4. Burials interred inside Household 2 buildings

Structure	Structure Orientation	Burial	Burial Orientation	Depth	Sex	Age
2.1	89	9	264 (84)	1.9	F	45
2.3	85	10	81 (81)	1.3	I	7
2.2–2.3	85	11	90	1.5	I	A
2.2–2.3	85	12	90	1.1	I	2
2.1	89	13	180 (90)	2.1	F	18–30
2.1	89	14	180 (90)	2.1	I	22
9	77	192	163 (73)	2.8	I	>12
9	77	193	86	2.2	I	3
24	85	156	176 (86)	2.0	F	22
RS 1	86	169	270 (90)	0.6	F	20
RS 1	86	170	90	0.5	I	7

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; A = adult.

Household 2

Eleven burials were interred within four of the five structures that make up Household 2 (Figure 8.4, Table 8.4). Compass orientations of buildings and burials match well.

Nine outside burials can be identified on the basis of location and orientation as belonging to the household (Table 8.5). Burials 117 and 118 are located 23 feet southwest of Structure 2, a distance that is similar to that between several multistage PDS and large burial clusters. Compass orientations of the two burials are fairly close to that of Structure 2 as well. The high-status artifacts accompanying Burial 117 suggest that this individual was one of the most prominent members of the household and as such probably was a resident of Structure 2, where the founders of the household presumably resided.

Burials 166 and 167 lie directly in front of the entrance passage of Structure 24 at a distance of 9 feet—a location seen in at least three other instances. They may represent residents of that structure. Burial 171 slightly overlaps the wall of RS 1 but could be contemporaneous with one of its construction stages. Burials 157–159 are located on the southern edge of the Household 2 outdoor work area. In this location, they can only belong to Household 2 even though the compass orientation of one, Burial 157, does not conform to PDS orientations. Burial 112 is located between Structure 9 and the palisade. Burials 21, 22, 25, 28, and 29 had this same kind of location relative to Structure 5

Table 8.5. Outside burials located in the vicinity of Household 2

Burial	Household Affiliation	Burial Orientation	Depth	Sex	Age
112	2	138 (48)	1.5	I	I
117	2	346 (76)	1.2	I	19
118	2	350 (80)	1.4	M	35
157	2	238 (58)	0.6	I	15
158	2	270 (90)	0.7	I	5
159	2	—	0.7	I	S-A
166	2	167 (77)	0.4	F	14
167	2	83	0.3	I	8
171	2	90	0.5	I	S-A

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; S-A = subadult. Dash indicates no data available.

in Household 1 and were not assigned to a household. In the case of Burial 112, however, there is no other household that it can belong to.

Household 6

As reconstructed Household 6 consists of two PDS (Structures 3 and 6) and two to three rectangular structures (RS 3, 4, and 12). There are no interior burials associated with the household and only three outside burials can be assigned to it on the basis of location (Figure 8.7, Table 8.6). With the time depth indicated by the two construction stages for Structure 6, we would expect Household 6 to have more burials. Burials 17, 18, and 26 are located in the open space separating Structures 3 and 6. Only Burial 26 has an orientation that is close to that of the structures. Burial 17 partially overlaps the western wall of RS 3.

Burials 21, 22, 25, and 28 are located immediately "behind" Structure 3 and could belong to Household 6. Only Burials 21, 22, and 25 have compass orientations that are close to those of Structures 3 (65 degrees) and 6 (72 and 67 degrees). Given their location, the four burials could also belong to Households 1 or 2.

Household 8

Three burials were interred within two of the three buildings making up Household 8 (Figure 8.6, Table 8.7). Seven outside burials can be associated with the household on the basis of compass orientation and/or location (Table 8.8). In-

Table 8.6. Outside burials located in the vicinity of Household 6

Burial	Household Affiliation	Burial Orientation	Depth	Sex	Age
17	6	90	0.4	I	S-A
18	6	180 (90)	0.6	I	22
21		158 (68)	1.8	M	22
22		165 (75)	1.7	I	20
25		165 (75)	1.7	F	42
26	6	236 (56)	—	I	A
28		270 (90)	1.6	I	A

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; S-A = subadult; A = adult.

Table 8.7. Burials interred inside Household 8 buildings

Structure	Structure Orientation	Burial	Burial Orientation	Depth	Sex	Age
8.1	12	205	107 (17)	1.7	I	S-A
8.1	12	206	104 (14)	1.8	I	I
RS 9	13, 25	129	216 (26)	0.8	M	37

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; S-A = subadult.

trusive Burials 135/136 are located adjacent to RS 2 and resemble it (34 degrees) and Structure 8.2 (32 degrees) in compass orientation. Burials 130, 137, 154, 168, and 198 were interred in a tight cluster of parallel and right-angle-oriented pits that is located in front of and slightly to the left of Structure 8. In distance and general location, they resemble the large burial clusters that accompany Structures 1, 14, and 23 and are probably an example of that type of outside burial cluster. Compass orientation is known for only one of them, Burial 130.

Burial 129 is located within the walls of RS 9.2 and is likely to be contemporary with that building (i.e., an inside burial). It is also located directly in front of the entrance passages for Structure 8 at a distance of 14 feet. It therefore could be regarded also as an example of that type of outside burial. In addition, the burial slightly overlaps the large Burial 130 cluster and is identified in field notes as being intrusive into it.

Table 8.8. Outside burials located in the vicinity of Household 8

Burial	Household Affiliation	Burial Orientation	Depth	Sex	Age
127		340 (70)	0.7	F	18–30
130	8	90	1.5	M	27
135	8	129 (39)	2.6	M	33
136	8	129 (39)	2.6	F	40
137	8	—	—	F	22
154	8	—	1.5	I	4
168	8	—	—	I	19
198	8	—	1.5	M	27

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate. Dashes indicate no data available.

Structure 8.2 and RS 9.2 have fairly similar compass orientations and are likely to be contemporary. Structure 8.1 and RS 9.1 also have similar compass orientations and are also likely to be contemporary. The Burial 130 burial cluster overlaps RS 9.1 slightly but lies primarily south of it. The compass orientation of Burial 130 is not very close to that of RS 9.1 but is not so different that the two features could not be contemporary. Burial 129, which is supposedly contemporary with the later RS 9.2, intrudes the Burial 130 burial cluster, providing further evidence that the latter is contemporary at least in part with RS 9.1.

The compass orientation of Burial 127 is fairly close to the orientation of Structures 7 and 23.1–23.3 in Household 23 and the burial lies in front of those structures. This suggests that the burial belongs to Household 23. However, it is located only 10 feet west of the entrance passages of Structure 8, suggesting that it may belong to that household.

Household 14

Household 14 was not discussed in the previous section because of the possibility that we do not have all of the buildings and burials it comprises. Some elements may be located outside the excavated site area to the north and west. At a minimum the household is represented by Structure 14 and RS 8 (Figure 8.9). RS 8 lies 18 feet southwest of Structure 14 and has approximately the same compass orientation. Eleven burials lie within or largely within the walls of Structure 14 (Tables 8.9 and 8.10). Burials 148, 150, and 188 are definitely

Table 8.9. Burials interred inside Household 14 buildings

Structure	Structure Orientation	Burial	Burial Orientation	Depth	Sex	Age
14	31	148	116 (26)	1.3	I	A
14	31	150	215 (35)	1.3	M	37
14	31	188	135 (45)	1.8	I	18
RS 8	39	53	127 (37)	1.1	F	22
RS 8	39	54	127 (37)	1.7	F	>18
RS 8	39	56	220 (40)	1.0	M	38
RS 8	39	57	121 (37)	0.8	M	25

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; A = adult.

inside burials; Burials 185 and 190 definitely predate the structure; and Burials 147, 149, 160, 186, 187, and 189 cannot be identified with certainty as either inside interments or predating the building (see Appendix A). RS 8 encloses a tight cluster of four burials with compass orientations matching its own and that of Structure 14.

Ten outside burials are located in the vicinity of Structure 14 (Table 8.10). Burials 43–46 form a loose cluster of burials 18–19 feet southeast of Structure 14. They can be assigned to the Structure 14 household because their orientation is reasonably similar and because there is no other structure in the area that they can be assigned to as readily.

Burials 53, 54, 56, and 57 form a tight cluster located 26 feet southwest of Structure 14. Their compass orientations are unusual for burials in this part of the site but match that of Structure 14 quite well. They have all the earmarks of the large outside burial clusters associated with Households 1, 8, and 23 and probably should be seen as such. The only difference is that they appear to be enclosed within the walls of RS 8, which makes them technically inside burials. As with many RS at King, the posthole pattern for RS 8 is incomplete, making it unclear whether or not a structure is in fact represented.

Structures 11 and 14 cannot be contemporary because they lie so close to one another. Structure 11 has burials (Burials 50 and 52) intruding through its central hearth, while Structure 14 stratigraphically overlies two burials (Burials 185 and 190). While not definitive, these PDS/burial relationships suggest that Structure 11 is earlier than Structure 14. Evidence will be presented in a later section demonstrating that Structure 14 not only postdates Structure 11

Table 8.10. Outside burials located in the vicinity of Household 14

Burial	Household Affiliation	Burial Orientation	Depth	Sex	Age
43	14	—	0.1	I	3
44	14	201 (21)	0.5	M	44
45	14	20	0.9	F	42
46	14	20	0.9	I	8
49		180 (90)	1.0	M	30
50		90	0.9	I	15
51	14	283 (13)	0.4	I	1.5
52		90	0.5	I	7
147		240 (60)	3.3	I	3
149		203 (23)	1.2	F	30
160		215 (35)	1.5	I	5
185		270 (90)	0.9	F	16
186		214 (34)	0.7	I	9
187		214 (34)	0.7	I	10
189		80/260 (80)	1.2	I	26
190		270 (90)	0.5	I	26

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate. Dash indicates no data available.

but also dates to the period following formal abandonment of the town. The proximity of the two structures suggests that Structure 11 had been completely dismantled and had its basin filled in by the time Structure 14 was occupied.

Burials 49–52 lie southwest of Structure 14 and within the walls of Structure 11. They postdate Structure 11, and because of their proximity to Structure 14 could be associated with it. If the Structure 14 entrance was pointed toward the southwest, Burial 51 and perhaps Burials 50 and 52 would lie directly in front of it as in the case of Structures 7, 8, 11, and 24.

Burials 185 and 190 underlie Structure 14 but have different compass orientations and are very shallow. Burial 190 is intruded by Structure 14 wall posts. Both burials predate the structure and probably belong to a household located outside the excavated site area to the north or west. This could be the same household that produced Burials 49, 50, and 52, since compass orientation of the two sets of burials is the same. This phantom household could also be responsible for the Burial 58–63, 66, and 67 cluster located just west of RS 8.

As noted above, six burials located within the walls of Structure 14 have ambiguous stratigraphic relationships to that building. Some may be inside

Table 8.11. Burials interred inside Household 15 buildings

Structure	Structure Orientation	Burial	Burial Orientation	Depth	Sex	Age
15.3	5	80	90	0.8	I	4
15.2	0	81	90	1.4	M	35
15.1	87	92	84	2.1	M	45
15.2	0	111	180 (90)	1.8	F	23

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate.

burials. Those that are not, predate Structure 14 and must belong to another household.

Household 15

Household 15 consists of Structures 11 and 15 and RS 7, 13, and 15. There are no inside burials associated with Structure 11 or the three RS. Thirteen burials were interred within the walls of Structure 15, but only four can be identified as inside burials with certainty (Figure 8.9, Table 8.11) (see Appendix A).

Several outside burials and groups of outside burials can be associated with Household 15 (Table 8.12). Burials 86 and 87 are located 15 feet south of Structure 15 in what could be considered plaza space. They are, however, no farther from Structure 15 than the Burial 1–8 cluster is from Structure 1. If they are part of a household burial plot, their affiliation is probably with Household 15 on the basis of proximity and compass orientation.

Burials 58–63, 66, and 67 form a tight cluster that is located 16 feet northeast of Structure 15. Although this group could belong to a household located north of the excavated site area, several pieces of evidence suggest that it belongs to Household 15. Except that it lies to the left of Structure 15 (looking east from the structure across the courtyard) as opposed to the right, the group is situated in a manner similar to the outside burial clusters associated with Structures 1, 14, 23, and possibly 8. The number of burials in the cluster (eight) is about what we would expect with a PDS having three construction stages. Finally, compass orientation of the burials matches that of Structure 15. Unfortunately, without architectural evidence for the area north of the excavated site, we will never know for certain whether these burials belong to Household 15. One of the burials in this cluster, Burial 66, intrudes the central hearth of Structure 13, demonstrating that the cluster postdates the structure.

Table 8.12. Outside burials located in the vicinity of Household 15

Burial	Household Affiliation	Burial Orientation	Depth	Sex	Age
47		250 (70)	0.2	I	4
48	15	8		F	19
55	15	270 (90)	1.5	I	>18
58	15	360 (90)	0.4	I	4
59	15	270 (90)	2.3	M	22
60	15	90	0.6	I	3
61	15	180 (90)	0.8	I	3
62	15	180 (90)	0.4	I	22
63	15	360 (90)	1.5	M	19
66	15	270 (90)	1.9	F	22
67	15	180 (90)	0.6	F	27
79		277 (7)	0.2	I	A
82		—	0.7	F	22
83		295 (25)	1.7	F	47
84		349 (79)	0.6	I	31–40
86	15	360 (90)	0.3	I	I
87	15	270 (90)	0.4	I	20
88		180 (90)	0.7	I	4–5
89	15	270 (90)	1.5	I	20
90		284 (14)	1.6	I	S-A
91		360 (90)	1.6	I	6
93		348 (78)	0.8	I	15
96		—	0.1	I	I
97		—	0.2	I	>19
98		—	0.7	I	>12
110		360 (90)	0.3	I	3
259		360 (90)	1.6	I	S-A

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; A = adult; S-A = subadult. Dashes indicate no data available.

Burials 47, 48, 55, and 89 are located in the courtyard east of Structure 15 and south of Structure 11. Burial 48 lies directly in front of the entrance passage for Structure 11 at a distance of 5 feet and can be considered an example of that type of PDS/burial association. The compass orientation of Burials 55 and 89 indicate an association with Household 15, but Burial 47 is much more similar in orientation to Structure 13 (65 degrees) and may belong to that household.

Five burials (Burials 82, 88, 90, 93, and 110) located within the walls of

Structure 15 are not contemporary with the occupation of the structure and represent outside burials. Four additional burials located within the walls of Structure 15 (Burials 83, 84, 91, and 259) cannot be identified with certainty as either inside or outside burials. One of these, Burial 84, may postdate Structure 15.1 and thus could be an outside burial contemporary with either Structure 15.2 or 15.3. Four of these nine burials (Burials 82, 83, 90, and 93) are located in relatively close proximity to one another and are oriented more or less parallel or perpendicular to one another. They may represent an outside burial cluster that predates Structure 15. Structure 13 may be the structure they were associated with, although its compass orientation (65 degrees) is rather different. There are no other PDS in the vicinity that are likely to have been the source of these burials and the distance to the edge of the excavation is great enough (25 feet) that it is unlikely the associated household is located there. Burials 88, 91, 110, and 259 are spatially separated somewhat from this cluster, but their origin may be the same.

Burials 79 and 96–98 are located just to the west of Structure 15. They were probably "behind" the structure and thus probably not part of Household 15.

Finally, there is the possibility that Burials 30–40, located in the plaza north of Structures 16 and 17, are part of Household 15. As is discussed in Chapter 12, these burials may represent members of the town chief's household. Structure 15, being one of the largest known PDS at the site, located on the north edge of the plaza, and containing one of the most elaborately furnished burials known from the site, is probably the residence of the town chief.

Household 23

Household 23 consists of two PDS and one RS. Thirteen burials were interred from the floors of Structures 7 and 23, while one burial was probably interred from the floor of RS 10 (Figure 8.5, Table 8.13).

Nineteen outside burials can be assigned to the Structure 23 household on the basis of location and compass orientation (Table 8.14). Fourteen of these (Burials 119–121, 139–142, 145, 146, 161–165) form a large, tight cluster located to the side of and slightly in front of Structure 23. Most have compass orientations similar to those of the first three stages of Structure 23, but at least one (Burial 121) is similar to the final construction stage. The number of these burials is close to the number of subfloor burials associated with Structures 7 and 23.

Burial 128 is located directly in front of the Structure 7 entrance passage at a distance of 7 feet. Burials 122, 123, and 125 are located close together and near RS 10. Postholes are numerous in the area and probably represent additional stages of RS 10 or a second RS that may have enclosed the burials. The compass

Table 8.13. Burials interred inside Household 23 buildings

Structure	Structure Orientation	Burial	Burial Orientation	Depth	Sex	Age
23.1	86	209	—	2.4	I	S-A
23.1	86	210	264 (84)	2.3	I	18
23.1, 23.3	88	211	162 (72)	2.8	F	22
23.2–23.3	87	212	130 (60)	2.9	M	42
23.4	64	213	73	1.8	I	S-A
23.3	88	214	356 (86)	2.8	I	13–17
23.1	86	215	—	—	I	A
23.1	86	216	180 (90)	1.3	I	4
23.2–23.3	87	217	270 (90)	1.4	I	>12
23.2–23.3	88	218	261 (81)	1.2	I	I
23.3	88	219	254 (74)	2.2	I	4
23.4	64	220	324 (54)	1.4	I	7
7	81	222	258 (78)	2.4	I	S-A
RS 10	90	124	97? (7?)	0.5	I	>12

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; S-A = subadult; A = adult. Dashes indicate no data available.

orientations of two of the burials are fairly close to those of Structures 23.1–23.3. Burial 126 may be associated with Structure 23.4 on the basis of its compass orientation. Burial 127 could belong to either Household 8 or 23.

Poorly Defined Households

Destruction of aboriginal features by erosion and plowing prevents us from reliably identifying households over most of the southern and northern sectors of the habitation zone. Even in those cases (Structures 21, 22, and 25) in which architectural evidence might allow us to propose some household configurations, the loss of an unknown number of outdoor burials makes it impossible to fully reconstruct household burial assemblages. For households in these areas, the most we can do is list inside burials that are present in individual PDS (Table 8.15).

Patterns in Household Layout and Burial Associations

Six complete households have been identified in the better-preserved eastern and northeastern sectors of the King site. Although the sample is small, it is

Table 8.14. Outside burials located in the vicinity of Household 23

Burial	Household Affiliation	Burial Orientation	Depth	Sex	Age
119	23	3	0.7	I	>18
120	23	8	0.5	I	17
121	23	339 (69)	0.9	M	22
122	23	187 (7)	2.1	I	>18
123	23	83?	1.5	F	22
125	23	199 (19)	0.6	I	4
126	23	325 (55)	1.1	M	20
127		340 (70)	0.7	F	18–30
128	23	204 (24)	1.4	M	22
139	23	175 (85)	0.5	F	>18
140	23	—	0.7	I	22
141	23	176 (86)	2.2	I	S-A
142	23	90	0.5	I	0.75
145	23	355 (85)	0.5	M	>18
146	23	—	0.6	M	37
161	23	349? (79)?	0.6	I	>19
162	23	169? (79)?	0.6	F	>18
163	23	—	0.7	I	1–6
164	23	—	0.1	I	4
165	23	—	0.4	I	>19

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; S-A = subadult. Dashes indicate no data available.

possible to see some patterning in their spatial layout. To begin with, the large, multistage PDS where the founders of the household presumably lived and the outdoor work area or courtyard always have the same spatial relationship. Viewed from the plaza, the founder's PDS is located to the left of the outdoor work area (Figure 8.3).[4] This same relationship is present in Household 8, which probably consisted of a single PDS and a single conjugal family. In four of the five multiple-structure households, a second PDS is located on the right side of the courtyard (looking toward the founder's PDS from the courtyard). This places those structures on the far side of the courtyard, away from the plaza but facing toward it. Household 6 differs in that Structure 3 is located across the courtyard from the multistage Structure 6. This unusual arrangement is probably the result of space limitations in the habitation zone.

Excavations conducted in 1992 and 1993 were specifically targeted at find-

Table 8.15. Inside burials associated with other primary domestic structures

Structure	Burial	Burial Orientation	Depth	Sex	Age
19	78	180 (90)	0.7	I	4
22	94	—	0.9	I	1–6
22	132	49	1.1	I	<25
22	133	232 (52)	1.2	I	10
22	134	142 (52)	0.8	I	1–6
22	197	229 (49)	1.0	I	A
25.1	176	153 (63)	1.0	I	20
25.2	175	9	0.3	I	1
26	178	90/270 (90)	0.6	I	3
26	179	69	0.8	I	S-A
26	180	54	—	I	I
26	181	342 (72)	0.7	I	>12
27	202	59/239 (59)	0.9	I	I
29	256	—	0.9	I	I
30	226	177 (83)	0.4	M	39
30	227	—	—	I	S-A
30	233	88/268 (88)	—	M	>40
30	234	—	0.3	I	30
30	235	224 (44)	—	I	I
30	237	358 (88)	—	I	I
31	203	180 (90)	0.3	I	8–12

Note: Burial orientation given in parentheses as degrees east of north; measurements in feet. I = Indeterminate; A = adult; S-A = subadult. Dashes indicate no data available.

ing additional examples of these spatial patterns on the western side of the site. Unfortunately, the sought-after architectural and burial evidence had been destroyed by erosion and plowing.

Each identified household has one or more RS located in its courtyard. The number of such structures relative to the number of PDS varies considerably from one household to the next (Table 8.16). We might expect that households with more members—as indicated by number of PDS—would tend to have more RS because of a need to store more maize and other foodstuffs. The available data do not conform to this expectation. The ratio of PDS to RS in Households 1, 2, and 23 suggests that these households had more RS than we have identified. The ratio of PDS to RS in Household 8, on the other hand, suggests that household may have had more PDS than we have identified. Per-

Table 8.16. Number of primary domestic structures and rectangular structures per household

Household	Number of PDS	Number of RS
1	2	1–2
2	4	1
6	2	3
8	1	2
15	2	3
23	2	1

haps Structures 21 or 22 actually were part of the household. The only conclusion we can reasonably draw from these limited data is that multiple-structure households probably had at least two RS.

As is the case with inside burials, the sex and age distribution of outside burials associated with individual households supports the interpretation that they represent deceased household members. Among the outside burials associated with Household 1, for example, there are at least 10 adults, of which four are biological males and two are biological females, and there is one subadult. Similar adult male/female ratios occur among outside burials associated with Households 2, 15, and 23, and there are greater numbers of subadults.

The number of burials assigned to individual households ranges from 3 to 33. Most of this variability can be attributed to differences in the length of time a household existed. We saw in an earlier section (Table 8.1) that the number of burials interred inside a PDS varies directly with the number of times the structure was rebuilt. This same relationship holds for the total number of burials identifiable as belonging to a household and the number of construction stages of its most frequently rebuilt PDS (Table 8.17). As we might expect, furthermore, households tend to accumulate burials at a fairly uniform rate. With the exception of the problematic Household 6, the average number of burials per construction stage only varies between five and eight.

We might expect that the number of household burials is also determined to a significant degree by household size. Such does not seem to be the case, however, as the number of PDS assignable to a household shows little relationship to number of burials (Table 8.17).

Although there is a strong correlation ($r = .810$) between the number of times a PDS is constructed and the number of individuals interred beneath its floor (Table 8.1), the relationship is not strictly a linear one. Rather, the

Table 8.17. Relationship between number of household burials and number of primary domestic structure construction stages and number of primary domestic structures

Household	Number of Burials	Number of Construction Stages	Number of PDS	Number of Burials per Stage	Number of Burials per PDS
23	33	4	2	8.2	16.5
1	23–32	4	2	5.8–8	11.5–16
2	20	3	4	6.7	5
15	17–21	3	2	5.7–7	8.5–10.5
8	10	2	1	5	10
6	3	2	2	1.5	1.5

number of burials per construction stage increases as the number of construction stages per structure increases (Table 8.18). This could be due to a tendency for PDS with the most construction stages to have the largest number of resident members, but there is no evidence to support such a relationship. PDS with four construction stages are not necessarily larger than those with three stages, and some two-stage structures are larger than those with three or four stages (Table 8.1). Alternatively, we may speculate that there was a cultural preference for interring the household's dead in structures that are ultimately rebuilt the greatest number of times.

I have argued in this chapter that PDS with three or four construction stages were the residence of the founder and head of long-enduring multiple family households. If this is generally correct, then we may want to consider the possibility that the figures in Table 8.18 demonstrate a preference not so much for interment in multistage PDS but for interment in the residence of the household founder and head. Haviland (1988) found evidence for this practice in a household at the Classic period Maya site of Tikal in Guatemala.

Two of the multistructure households identified at King conform to the expectations of this model (Table 8.19). Structures 2 and 23 are identifiable as the residence of the founder and head of their respective households. Each contains a disproportionate number of subfloor interments. Household 1 does not conform to the model as well. The two PDS that make up the household have three and four construction stages respectively and approximately the same number of subfloor burials. This suggests either that the two structures represent distinct households or that the model is wrong or at least not applicable in all multiple family household situations.

Finally, there is some evidence that each household interred most of its out-

Table 8.18. Relationship between number of construction stages per structure and number of inside burials per stage

Number of Stages per Structure	Number of Structures in Sample	Number of Burials	Average Number of Burials per Stage
4	2	18	2.25
3	3	16	1.77
2	5	13	1.3
1	14	12	0.85

Table 8.19. Burial distribution within multistructure households

Household	Structure	Number of Construction Stages	Number of Inside Burials
2	2	3	6
2	4	1	0
2	9	1	2
2	24	1	1
23	23	4	12
23	7	1	1
1	1	3	6
1	5	4	7+

side burials in one large cluster. In several cases, households have a large outside burial cluster that is located near the founder's PDS. In Households 1, 8, and 23, the cluster is located to the right of that PDS (viewed from inside), although varying in placement relative to the "front" of the building. Household 15 differs in having its burial cluster located on the left side of the founder's PDS. Household 2 does not have a large outside burial cluster, but Burials 117 and 118 are located in the appropriate spot. Structure 14 appears to have the same spatial relationship with a cluster of burials, although we do not know for sure which direction the structure faced or whether Household 14 contained additional PDS. Also problematic is the possibility that the burial cluster may be located inside an RS.

There is a tendency among the reconstructed households for the number of burials in the large outside clusters to be approximately the same as the number of inside burials in the founder's residence (Table 8.20). Households 2,

Table 8.20. Relationship between number of inside burials and outside cluster burials

Household	Founder's Residence	Number of Inside Burials	Number of Outside Cluster Burials	Number of Other Outside Burials
1	Str. 1	6	8	4
2	Str. 2	6	2	7
6	Str. 6	0	3	0
8	Str. 8	2	5	3
14	Str. 14	3–9	4	—
15	Str. 15	4–7	8	—
23	Str. 23	12	14	4

Note: Dashes indicate no data available.

6, and 8 diverge from this pattern, but not by much. Structure 14 had at least three inside burials, but up to six additional subfloor burials could be contemporary with the structure. Similarly, Structure 15 had at least four inside burials, with up to four additional inside burials possible.

How are we to interpret these several patterns? Inside and outside interment may be related to the alternation between winter and summer seasons, with the former being the preferred location for burial in the winter and the latter that for the summer. If the two seasons are equal in length, then we can expect a roughly equal number of deaths during each season and a roughly equal number of individuals being interred in each location. The spatial proximity of the large outside burial clusters to the household founder's residence suggests that this location was considered the proper outside place to inter the inhabitants of that structure. If there was a preference for burying household members in the founder's residence in the winter months, we might expect a similar preference to exist for those individuals dying in the summer as well.

Household Identity

The question of why PDS were frequently rebuilt was addressed in Chapter 5. The argument was made that while decay and accidental fire probably necessitated the rebuilding of some buildings, a more likely cause was the death of a significant member of the family occupying the structure. A related question that has not been dealt with to this point is why PDS were rebuilt in the same location. Nine PDS were rebuilt a total of 16 times. In 12 cases, they

were erected essentially on top of their predecessor—the 2- to 3-foot displacement of central hearth, roof support posts, and outer walls being just enough to ensure that the superstructure of the new building was firmly planted in the ground. Structures 2.2, 5.2, 15.2, and 25.2 are exceptions in that they were shifted laterally between 6 and 11.5 feet at the time of construction. In each case, the argument can be made that these shifts occurred in response to space limitations within the habitation zone. In the absence of such external constraints, the goal seems to have been to build on the exact location of the previous structure.

In-place rebuilding of PDS may simply have been a practical response to limited space within the habitation zone. Kelly and I have argued that it was also the physical expression of household identity and continuity through time (Hally and Kelly 1998). Primary domestic structures were probably the residences of single conjugal families. These social units were frequently combined into larger multistructure joint family households and, in turn, into matrilineal descent groups. Both household and descent group were probably corporate groups that had communal ownership or control of various types of property, coordinated group activities, and shared traditions. If this were the case, households and their component conjugal family units would have had a strong interest in tracing their existence into the past and perpetuating their identity and existence through time. In-place rebuilding of PDS, especially the residence of the family that founded the household, would have served as a highly visible symbol of those kinds of relationships.

The practice of burying the dead in and around domestic structures probably also reflects a concern for household identity and continuity (Goldstein 1981; McAnany 1995, 1998). As with the physical structures, deceased ancestors represented the household's past. Associations of ancestors and earlier construction stages with the physical location of an existing household would have served as an effective and convenient symbol of the continuity between that household and its past.

The Town Plan

The spatial configuration of the King site has a regularity and symmetry that suggests the town was laid out according to a consciously formulated plan. The area enclosed by the defensive perimeter is almost a perfect square with rounded corners (Figure 6.1). The eastern ditch, which is straight for almost 300 feet, has a compass orientation of approximately 13 degrees west of north (77 degrees east of north). The southern ditch line is slightly more curved

but forms a 90-degree angle with the eastern ditch line. The symmetry of the square breaks down somewhat along the western ditch, which is not as straight and is oriented almost 20 degrees west of north (70 degrees east of north). Measuring across Feature 45, the large post pit in the plaza, the area enclosed by the ditch measures approximately 480 feet east–west and the same distance north–south.

The site also manifests some interesting regularities in its compass orientation. Assuming that the eastern palisade and ditch represent the site's true orientation, we can say that the town was laid out along a north–south axis that is oriented 13 degrees west of north. A line with this orientation drawn through Feature 45 divides the site into two more or less equal parts. Structures 16 and 17 are located east of this line in the northeastern quadrant of the plaza. Additional public buildings or facilities probably once existed in the northwestern quadrant. Feature 64, a large pit that is located 93 feet west of Structure 17, suggests that there was indeed some kind of public facility in this part of the plaza. The pit is not located far enough west of the site's centerline to be a symmetrical match for Structures 16 and 17, but a line connecting this feature and the central hearth of Structure 17 is oriented 82 degrees east of north, only 5 degrees off the site's east–west axis of 77 degrees east of north.

Structures and burials suggest a slightly different orientation for the site—one that is closer to the cardinal directions. Structure 17 is oriented 4 degrees west of north (86 degrees east of north). Twenty of 44 PDS construction stages have orientations falling within 5 degrees of the cardinal directions (Table 8.21).[5] All of these structures, except Structures 25.2 and 31, lie on the east or north side of the site and close to the plaza. Whether PDS bordering the plaza on its south and west sides were similarly oriented cannot be determined because of the likelihood that they have been largely destroyed by erosion.

Most of the PDS with orientations more than 5 degrees from the cardinal directions either predate (Structures 5.1 and 13) or postdate (Structures 14, 23.4, and 25.1) the main site occupation,[6] occur next to the palisade (Structures 3, 4, 6.1, 6.2, 7, 9, 27, 28, and 29), or are located in the southeast corner of the site where the defensive perimeter and habitation zone curve around to the west (Structures 8, 21, and 22). Structures predating and postdating the main occupation can be expected to have variable compass orientations because there would have been no town plan to conform to. Structures in the southeast corner of the site and adjacent to the palisade on the east and south sides of the site tend to parallel the compass orientation of the palisade in those areas and may have been affected by its alignment.

Burial pit orientation also suggests a preference for the cardinal directions.

Table 8.21. Primary domestic structure compass orientations within 5 degrees of the cardinal directions

Structure	Orientation
1.1	86
1.2	85
1.3	3
2.1	89
2.2	86
2.3	85
5.2	2
5.3	5
11	85
15.1	87
15.2	90
15.3	5
19	4
23.1	86
23.2	87
23.3	88
24	85
25.2	2
30	90
31	85

Note: Orientation given as degrees east of north.

Seventy-nine (42 percent) of 188 burials with measurable orientations lie within 5 degrees of the cardinal directions: 25 are oriented with their heads to the north, 23 to the south, 17 to the east, and 14 to the west (Figure 8.10). It is tempting to view these burials as reflecting a cultural preference for orienting interments with the cardinal directions. However, it is also possible that the orientation of these burials is a response to structure orientation. At least 45 of the 79 burials (57 percent) are associated with PDS that are oriented within 5 degrees of the cardinal directions.

Regardless of why burials are oriented the way they are, the fact remains that structures and burials show a tendency to align with the cardinal directions, while the site perimeter is offset by 13 degrees. The difference hardly seems accidental.

Traditional societies frequently reproduce elements of the cosmos in their built environment (Brady and Ashmore 1999; Heine-Geldern 1942; Knapp

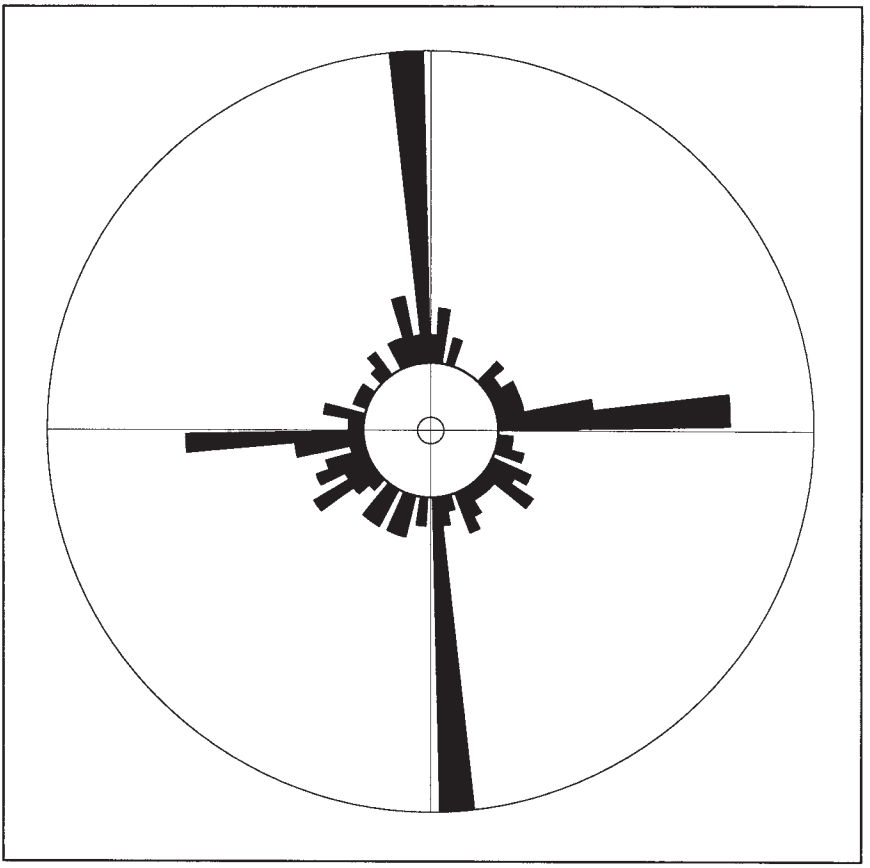


Figure 8.10. Burial pit compass orientations plotted in 5-degree increments. North is at the top.

and Ashmore 1999; Kus 1982; Lawrence and Low 1990; Wheatley 1971). Buildings, settlements, and whole territories are directionally oriented, spatially subdivided, and centrally located in conformity with the perceived structure of the cosmos. The intent of such replication is generally to bring the household, community, and/or society into harmony with the forces of nature and thereby to ensure their well-being and success.

We saw in Chapter 5 that roof support posts and wall posts in domestic and public buildings frequently incorporate the numbers four, seven, and eight. This is a clear indication that cosmic symbolism was being expressed in public and domestic architecture, since at least two of these numbers refer to the cardinal directions in Creek and Cherokee cosmography. Given the compass ori-

entation and the spatial regularity and symmetry of the King site, we should consider the possibility that the town itself was deliberately laid out in accordance with some kind of cosmic model.

Hudson (1976:122) summarizes the known elements of such a model that appears to have been rather widely held among historic Southeastern Indians: "The Southeastern Indians conceived of This World as a great, flat island resting rather precariously on the surface of the waters, suspended from the vault of the sky by four cords attached at each of the cardinal directions. Most of them evidently thought that the island was circular in shape, but that it was crosscut by the four cardinal directions, and it is reasonable to assume that each Southeastern society conceived of itself as occupying the center of the circle."

Some Southeastern Indians believed that the world was square. Several of Swanton's (1928b:477) Creek informants expressed this view, and Hudson acknowledges this in a footnote. Knight (1989), furthermore, is able to demonstrate with ethnohistoric and linguistic evidence that square Mississippian platform mounds were symbols of the earth island.

The King site conforms to this model in its square shape and the alignment of many of its buildings with the cardinal directions. The Coosa River, in turn, may represent the water upon which the earth island floated. This latter equation, in fact, provides an explanation for why the axis of the site differs from the cardinal directions and the orientation of many of its buildings and burials. The Coosa River channel bordering the site on the north is oriented approximately 77 degrees east of north and matches the site orientation (Figure 3.3). If the site had been situated a few hundred feet farther to the west, its orientation could have conformed to the orientation of both the river and the cardinal directions. That it was not may be because the floodplain in that location is more undulating and would not have provided a large, flat, and elevated surface suitable for habitation. Instead, a location was chosen where the town's axis would be close enough to the cardinal directions that other important elements of the town plan could be more accurately aligned with the cardinal directions without violating the overall site plan in an obvious way.[7]

The cosmic model outlined by Hudson does not include a center point or axis mundi. Nevertheless, there is some reason to believe that large posts such as Feature 45 were symbols of centrality in aboriginal Southeastern belief systems. Traditional societies throughout the world typically locate their mythical point of origin or permanent place of residence in the center of the world (Knapp and Ashmore 1999:13–14; Wheatley 1971). There are no ethnohistoric or ethnographic accounts that demonstrate Southeastern tribes held

a similar belief, but it is not unreasonable to expect that they did. Large posts and earthen mounds play a significant role in the origins of several Southeastern tribes. In the Choctaw migration legend recorded by Gideon Lincecum (1904), a "sacred pole" directed the people to their ultimate homeland at Nanih Waiya in northeastern Mississippi. A number of tribes appear to equate earth mounds with the place where their ancestors either emerged from the earth or decided to permanently settle (Knight 1989:281). Large posts are frequently associated physically and conceptually with such mounds. At Nanih Waiya, the sacred pole buried itself in the mound that the Choctaw built to house their ancestors' bones. We saw in Chapter 6 that large plaza-area posts may have been erected and taken down in conjunction with the addition of new construction stages to mounds and with the founding and abandonment of towns. Bartram (Waselkov and Braund 1995:154) reports that the chunkey pole located in the center of eighteenth-century Creek chunkey yards was set in a small earth mound, and in modern times, earth swept up annually from square grounds in Oklahoma is sometimes piled around the base of the ball pole (Knight 1989:284). These associations point to the possibility that large posts served as symbols of community identity and tribal origins and by extension as symbols of the center of the earth island. To the extent that this interpretation is correct, we can be reasonably certain that the King site was laid out according to the cosmic model held by its inhabitants and other contemporary people in the Southern Appalachian region.

Life History of the King Site Town

All settlements that are occupied continuously over a period of time may be said to have a life history. At some point, the first inhabitants arrive and the settlement comes into existence. This may be followed by a ceremony to mark the formal establishment of the settlement and its inhabitants as a community. The settlement may continue to grow in population and in spatial size as a result of biological reproduction and continued immigration. Ultimately, however, the population declines and the settlement is abandoned. These latter processes may take place over a few days or weeks or unfold slowly over several years. They may also be accompanied by a ceremony marking the formal closing of the community. The King site town must have gone through changes such as these during its lifetime. In this section, I will attempt to identify these changes and, in so doing, reconstruct the town's life history.

The King site was not occupied for a very long period of time—no more than 50 years and probably considerably less. We can infer this from architec-

tural evidence. Wood does not survive very long below ground in the Southeast. Controlled experiments have shown that untreated fence posts have an average service life of between 2.2 years (loblolly pine) and 6.6 years (white oak) (Vick et al. 1967). Pine was probably the most common species used for construction posts at King. Fifteen carbonized post remnants recovered from five PDS are all pine. A sample of 19 posts from Structure 1 at the contemporary Leake site were also pine (Patton 1990:26).[8] It seems unlikely that the well-built residential structures at King and other late Mississippian period sites in the region would have been occupied for only two or three years. More likely, structure roofs and earth-embanked walls would have offered some protection from the elements and increased the average service life of pine posts to 6–10 years (Patton 1990:26).

Taking 10 years as the maximum service life of wall and roof support posts, Structures 5 and 23—each with four construction stages—could have been used for up to 40 years. Other structures with fewer construction stages, of course, would have had shorter use lives. This suggests either that the duration of some Structure 5 and 23 construction stages was considerably shorter than average or that the two structures were in use for a period of time before or after the main occupation of the town. In the latter case, the formally laid-out town may have been in existence for only 30 years or so.

There is other evidence that indicates the town's life span was considerably less than 40 years. The palisade appears to have been constructed only one time. There are a few palisade-like posthole alignments adjacent to it at various places along the eastern side of the site (see Chapter 6), and there are several places along the palisade where concentrations of postholes may represent repairs. For the most part, however, the palisade is represented by a single line of postholes. Individual posts may have been pulled up and replaced as needed, but there is little evidence for such activity in the field maps.

As public buildings, Structures 16 and 17 must have been critical for the continued functioning of the King site as a community. Yet both were also constructed only one time. There is some evidence that a number of wall posts and several roof support posts were replaced in Structure 17, but these repairs may have been difficult to accomplish in the standing building. Neither building, in short, is likely to have been used for more than 20 years. They provide, then, additional evidence that the main occupation of the town lasted fewer years than PDS with four construction stages and perhaps less than some PDS with three construction stages.

There is abundant evidence that the King site settlement experienced considerable change during its relatively brief life span. To begin with, variation

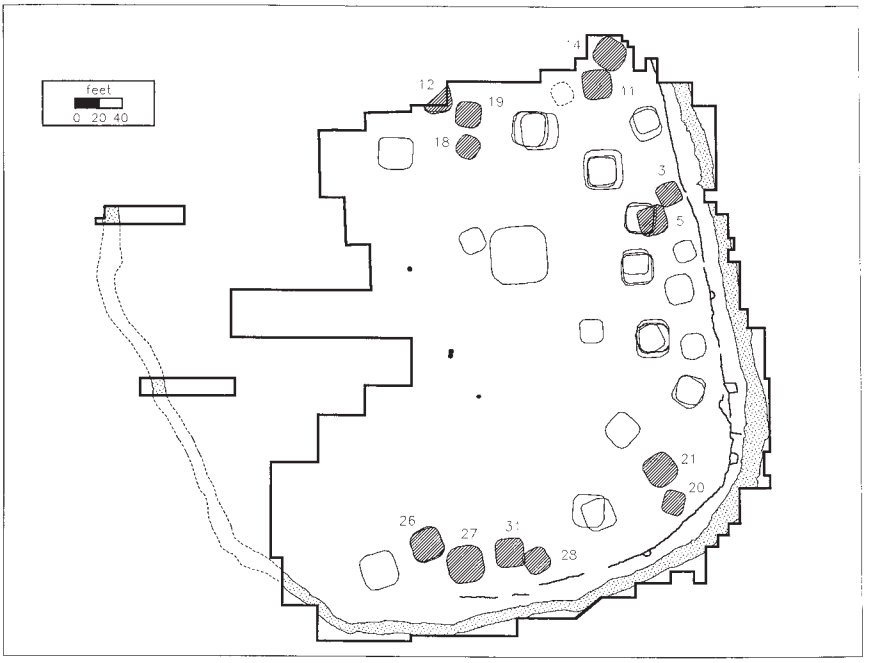


Figure 8.11. Closely spaced, noncontemporary primary domestic structures (shaded).

in number of construction stages indicates that some PDS were in use longer than others, that some were constructed before others, or that some were abandoned later than others. Structures 28 and 31 cannot be contemporary because their walls overlap. Contemporaneity is also unlikely for Structures 3 and 5.1, 11 and 14, 12 and 19, 18 and 19, 20 and 21, and 26 and 27 because they are located so close to one another (Figure 8.11). Finally, six PDS can be demonstrated to predate or postdate burials that lie within their walls: Burials 49–52 postdate Structure 11; Burials 185 and 190 predate Structure 14; Burials 82, 90, and 93 predate Structure 15; Burial 182 predates Structure 27; Burials 223–225 and 258 predate or postdate Structure 30; and Burials 199–201 predate or postdate Structure 31 (Figure 8.12 and Appendix A).

As discussed in Chapter 3, there is no evidence for human occupation of Foster Bend or the Coosa River valley in Georgia during the Early Lamar period. This means that the King site was first settled by people who moved into the area from elsewhere in northwestern Georgia or northeastern Alabama. King may have been initially settled by a small number of people, but at some point early in its life history, the town appears to have been deliberately laid

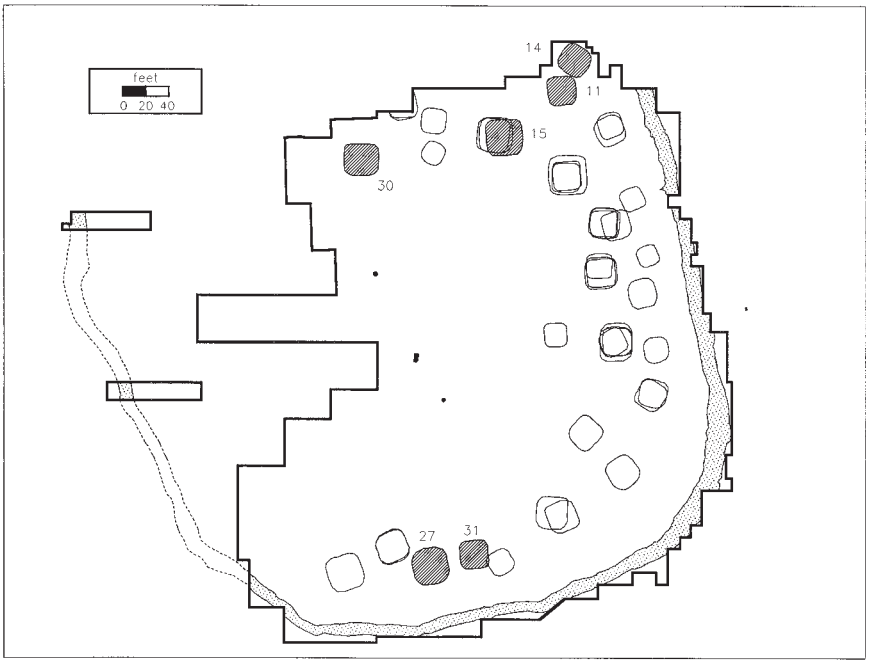


Figure 8.12. Primary domestic structures (shaded) that overlap burials that predate or postdate structure occupancy.

out in accordance with a formal plan. There is a variety of evidence supporting this latter point.

To begin with, there is the likelihood that many elements in the town's physical layout had cosmological significance. Second, there is little evidence that the town experienced haphazard, accretionary growth. There are, for example, no PDS, RS, or burials in the 10- to 15-foot-wide strip of ground separating the palisade and the ditch. This means that the palisade and ditch were not constructed across an already existing habitation area. Instead, the initial habitation area appears to have been small and compact enough that the palisade and ditch could be laid out so as to enclose all of it.[9] The same observation can be made for the plaza. With the possible exception of Burials 1–8, located southwest of Structure 1, and Burials 85–87 and 99, located south of Structures 15 and 18, there are no domestic structures or household burial plots in the plaza that would have predated its establishment.

An early date for palisade and ditch construction is also indicated by the layout of domestic structures within the town. Multistage PDS in the northern

and eastern sections of the habitation zone tend to be oriented with the cardinal directions, even though the defensive perimeter for that part of the site is oriented 77 degrees east of north. In the southeastern and southern sectors of the habitation zone, however, where the defensive perimeter curves around to form the southern side of the site, PDS have orientations that parallel the adjacent section of palisade. It is possible that these structures were laid out in this fashion before the ditch and palisade were constructed, but it is more likely the ditch and palisade were constructed first and PDS were subsequently located in conformity with the quantity and configuration of the enclosed habitation space and the compass orientation of the nearby defensive perimeter. The same process seems to have occurred along the eastern side of the site, where small, single-stage PDS located adjacent to the palisade have compass orientations that parallel it.

Structures 16 and 17 and the central post may have been constructed at the same time as the defensive perimeter and plaza, but we do not have direct archaeological evidence for this. There is ethnographic evidence from the eighteenth century, however, that suggests construction of public buildings similar to Structure 17 would have been an important element in the establishment of new towns such as King.

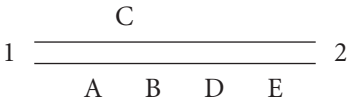
In the eighteenth and nineteenth centuries, the basic sociopolitical unit in Creek society was the *talwa.* Swanton (1928a:242) describes this as "a body of people who had their own square ground and actually formed a little state." *Talwas* often fissioned, with one group leaving to form a new settlement. These settlements might remain attached to the parent *talwa,* but sometimes they became socially and politically independent. Swanton (1968:327) describes this process as follows:

> A tŭlwŭ [*talwa*] not infrequently gave off branch settlements of temporary character which received nicknames or names derived from some natural feature but had no further independent status and were still a part of the main tŭlwŭ. From time to time, however, some of these outvillages came to acquire a permanent character and presently became sufficiently distinct in popular estimation to receive the name tŭlwŭ themselves. Sometimes such tŭlwŭs died out again or reunited with the main body, sometimes they themselves became more important than the parent town which they even absorbed, the whole then being called by the new name, and sometimes the separation became complete and permanent. It is probable that several of the independent towns recognized in later times were branches of others, their connection with which had

been lost even to tradition. The decisive point in the recognition of a new tŭlwŭ appears to have been when it established an independent ground for the performance of the annual ceremonies.

The implication is that the square ground, rotunda, and chunkey yard were physical symbols of the social and political autonomy of Creek *talwas* (Ethridge 2003:96; Haas 1940:489; Knight 1994:387). Every *talwa* also had a sacred fire burning in its rotunda. This fire was maintained throughout the year and was extinguished and relighted at the time of the Green Corn ceremony as a symbol of community renewal. Since it was related magically to the physical and spiritual well-being of the community, the sacred fire was almost certainly another symbol of a *talwa's* existence (Hudson 1976). Observations by Thomas Nairne in 1708 among the Chickasaw suggest that the founders of new towns carried sacred fire from the town they had left and used it to establish the sacred fire in the new town.

Sir that at once you may have a notion of the Indian Government and the progression of one Village out of another, I'le illustrate by an Example:



Suppose 1:2 to be a river, A: a populous flourishing Town on the river side, straightned for planting ground. Upon some disgust, or other reason 2 Leading men lead out Colonies of 30 or 40 families Each and sattle 2 New Villages B: C: Bechancing to florish and increase much, out of it by the same means arise D and E. Now the Villages D and E will respect A and all call it their grand father, B their father C their Elder Brother, and these names continue by Tradition to be given them. According to these relations, they'le give the Chiefs of these Villages respect and precidency in their Town houses, but as for authority they look on their own Village to be independent of all or either of them and free to manage their affairs as best pleases themselves. When one Village express the Deference which they owe to another upon the account of seniority, their usual expression is, our fathers brought their first fires from thence. . . . It's true after the Town is setled the headship goes in a family out of respect to him who first kindled the fire, as their phraises is [Moore 1988:62–64].

This practice continues into the present. In Oklahoma, new Creek communities are formally established by the kindling of a fire using coals carried from

the community of origin (Bell 1990:339; Opler 1952:171, 173; John Moore, personal communication 1997). Similarly, when a community ceases to exist as a distinct entity, the fire is formally extinguished or "put to sleep." This latter act suggests that there were mechanisms for formally abandoning an established community.

Swanton's and Nairne's observations concern politically independent communities in the eighteenth century, but I believe that they are applicable to towns like King that were part of larger polities. Residents of the King site would have had to conduct their own set of ceremonies to ensure success in agriculture and other endeavors and they would have needed local-level political institutions to coordinate community undertakings and ensure peace and harmony among community members. All of this would have required the town to have its own public buildings and sacred fire.

In light of these observations, I suggest that at some point the King site was formally established as a distinct community. Actions that may have taken place at that time include construction of public buildings such as Structure 17, ritual lighting of the town's sacred fire, establishment of political institutions for town governance, and establishment of an annual round of community ceremonies. To the extent that the spatial configuration of the town—with its central plaza and post and symmetrical shape—was related to cosmological beliefs about the nature of the world, we can expect that the town was formally laid out at this time as well. The palisade and ditch may not have been directly related to the symbolism involved in establishing a new town, but they would have served to physically define the town's size, shape, and compass orientation. Their construction, therefore, probably went hand in hand with the formal founding of the new community.

We can be fairly certain that the King site experienced such changes. What is not obvious is when. Spatial and architectural data presented above indicate that it did not happen too long after the site was first settled. But did it happen at the time of first settlement or sometime later? I think we can pin the timing of this event down by looking at how multistage PDS changed in size, location, and compass orientation from one construction stage to another.

Four PDS had two construction stages, three had three stages, and two had four stages (Table 8.22). Altogether there are 16 documented rebuildings of PDS. All PDS changed in size from one stage to another, but there is no pattern in the direction of these changes within or between PDS. Both two-stage PDS for which stage sequence is reconstructible increase in size from first to second stage. Among three-stage PDS, two increase in size during the

Table 8.22. Changes in size, location, and compass orientation of primary domestic structures with multiple construction stages

PDS Construction Stage	Change in Size in Square Feet	Percent Change in Size	Change in Location in Feet	Change in Orientation in Degrees
1.1 to 1.2	–498	–46	1.2	1
1.2 to 1.3	9	2	1.0	8
2.1 to 2.2	168	36	6.0	3
2.2 to 2.3	42	7	0.6	1
5.1 to 5.2	21	4	11.5	15
5.2 to 5.3	–52	–9	1.4	3
5.3 to 5.4	99	18	2.0	1
6.1 to 6.2	182	44	4.2	5
8.1 to 8.2	41	7	2.0	20
15.1 to 15.2	–105	11	7.5	3
15.2 to 15.3	–72	–8	2.0	5
23.1 to 23.2	–138	–19	2.0	1
23.2 to 23.3	168	28	3.4	1
23.3 to 23.4	–345	–45	3.1	24
25.1 to 25.2	–82	–11	9.5	27
26.1 to 26.2	70	11	1.0	0

first rebuilding and subsequently decline and one decreases in size and subsequently increases. Among four-stage PDS, one increases, decreases, and finally increases and the other decreases, increases, and finally decreases. To the extent that these size changes reflect changes in occupant number (family size) or wealth/rank/prestige, it looks like no household is continuously gaining or losing in these characteristics throughout its lifespan.

Most changes in PDS size from one stage to another were small (Table 8.22). Eleven of 16 stages changed by less than 20 percent, and the majority changed by 11 percent or less. Structures 1.2, 2.2, 6.2, and 23.4, however, were considerably larger or smaller than their predecessor.

Most PDS move laterally very little at the time of rebuilding (Table 8.22). Nine stages move so little that their hearths overlap the hearths of their predecessor. Three others move 3 or 4 feet—barely enough to prevent overlapping of the hearths. The largest moves are made by Structures 2.2, 5.2, 15.2, and 25.2, which move between 6 and 11.5 feet.

Most PDS barely change their compass orientations from one stage to the

next (Table 8.22). Twelve stages deviate from their predecessor by less than 10 degrees. The other four—Structures 5.2, 8.2, 23.4, and 25.2—rotate between 15 degrees and 27 degrees.

Most large changes in size, location, or compass orientation occur in PDS with three to four construction stages. All of them, except Structure 23, experience at least one major change at the time they are rebuilt for the first time. Structure 1 becomes much smaller (46 percent). Structure 2 moves 6 feet and increases in size by 36 percent. Structure 5 moves 7.5 feet and changes orientation by 15 degrees, and Structure 15 moves 11.5 feet. Structure 23, in contrast, undergoes its most dramatic changes when it is rebuilt for the last time: size decreases 45 percent and orientation changes 24 degrees.

With their large number of construction stages, Structures 1, 2, 5, 15, and 23 were probably the longest occupied PDS at King. To the extent that this is so, it is likely that one or two of their stages were constructed before or after the main site occupation, that is, before the town was formally founded or after it was formally abandoned. If the five structures were initially constructed at the same time, their second stages would likely have been constructed at roughly the same time as well. The fact that four of them undergo marked changes in size, location, and/or orientation in their second stage suggests there was some common factor affecting them. This factor could very well be the formal establishment of the King site community. The delineation of the plaza and the construction of the palisade and ditch would have put limits on the amount of space available for domestic structures and activity areas. In response, some structures may have been rebuilt smaller and some may have been shifted laterally to make room for new households or domestic structures. Implementation of a town settlement plan would have imposed a common compass orientation on the town as well. This, in turn, would have required some domestic structures to also change their orientation.

If the changes manifested by Structures 1.2, 2.2, 5.2, and 15.2 do reflect constraints imposed upon the use of habitation space at the time the King site was formally established as a community, then the first stages of these structures must predate that event. They may also represent the PDS of the first households to settle at King. Figure 8.13 depicts how this initial settlement may have looked. Structures 23.1, 25.2, and 13 are also shown because of the possibility that they were part of this first settlement.

Structure 23 does not change very much at the time of its first rebuilding, but with four construction stages, it is possible that the structure was in existence from the beginning. As we will see below, Structure 23.4 was constructed

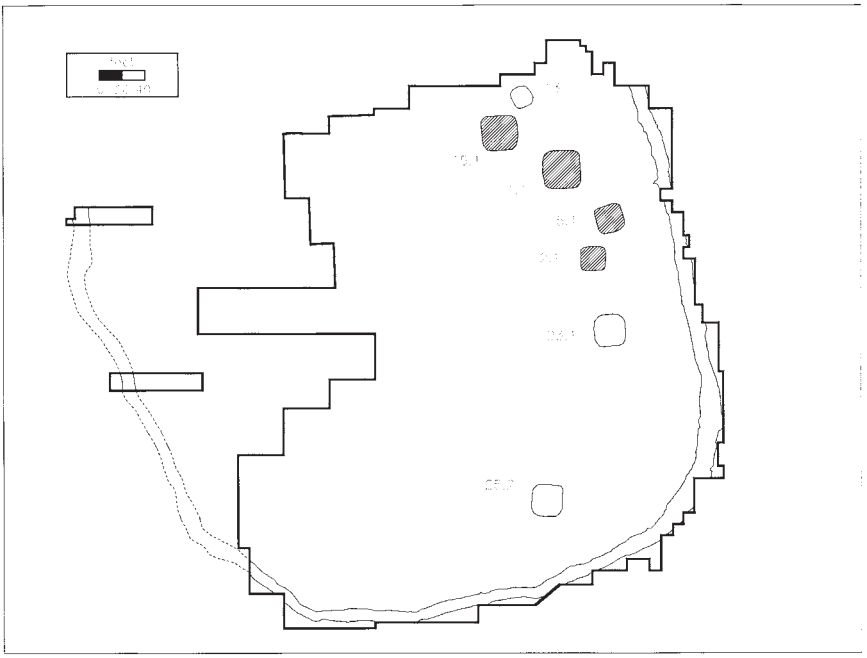


Figure 8.13. Primary domestic structures that are likely to represent the first households to settle at the King site (shaded) and others that might.

after the site was formally abandoned. This reduces somewhat the likelihood that the structure was also the residence of one of the early settlers.

Structure 25 moves approximately 9.5 feet and is reoriented 27 degrees at the time it is rebuilt, changes comparable to those seen in Structures 1, 2, 5, and 15. Since it has only two construction stages, however, and the sequential order of these stages is unknown, we cannot be certain when it was first built. It is possible that Structure 25 was built by an early settler and, following a second construction stage, was abandoned not too many years after the community was founded. Its spatial separation from Structures 1, 2, 5, and 15, however, suggests a lack of close ties with those settlers and therefore a later date of occupation.

Structure 13 apparently is earlier than Structure 15.1 and, by implication, the other pre-town structures. Its compass orientation (65 degrees east of north) differs considerably from those of Structure 15 (87 degrees, 90 degrees, and 5 degrees), indicating that the two structures are not contemporary. More

important, its hearth is intruded by Burial 66, one of eight burials forming an outside cluster that is probably associated with Structure 15 (see Figure 8.9).

Identifying Structure 13 as earlier than Structure 15 also provides an explanation for five burials (Burials 82, 83, 90, 93, and 110) located within the walls of Structure 15 that predate that structure. These burials could be outside burials associated with Structure 13. They are located 20 feet southwest of the structure, and one of them, Burial 93, is not too different in compass orientation (78 degrees compared with 65 degrees). This same burial is intruded by Burial 92, an inside burial associated with Structure 15.1. The fact that it cuts Burial 93 in half suggests that the occupants of Structure 15.1 were unaware of the existence of the earlier interment. This, in turn, suggests that the people responsible for Burial 93 were not part of Household 15 and, in fact, had ceased using the area as a cemetery before Structure 15 was erected. Structure 13 fits this description.

Figure 8.14 shows what the town may have looked like following its formal establishment. The ditch and palisade have been constructed, Structures 16 and 17 have been constructed, the plaza has been delineated, and the central post has been erected. Structures 1, 5, and 15 have been moved, reoriented, or made smaller, presumably in response to the new town plan, and Structure 2 has been enlarged. There is no direct evidence that any of the other PDS shown on the map were added at this time, but most are likely to have been. The reconstruction implies that there was a sudden, major influx of new residents following the town's founding. This need not have been the case, however. The town probably grew in size fairly quickly, and this could only be accomplished by the addition of a large number of migrants, but the process could have begun shortly before the town was formally established and continued for several years afterwards.

Over the next decade or two, population increased slowly, presumably largely through internal growth. Some or all of the shaded PDS in Figure 8.15 are the result of this growth. Their location on the margins of the habitation zone, their small size, and their single stage of construction all indicate that they date later in the town's history when residential space was becoming increasingly scarce. In most cases, they represent additions to established households.

Ultimately, King was abandoned as a town. This may have been a gradual process extending over several years, but at some point it may have been punctuated with a formal closing ceremony. This might have included one or more of the following actions: extinguishing the sacred fire in the council house, pulling up the central post, and tearing down or burning the council house and other public buildings. At King, we have two kinds of evidence indicating

Figure 8.14. Probable configuration of the town following its formal establishment. Primary domestic structures that were constructed at this time are shaded. PDS representing first households to settle at the site are unshaded.

that the community was eventually formally terminated. There was no trace of wood in Feature 45, the large post pit in the center of the site. A 2.5- to 3-foot-diameter post may have totally disintegrated over the 400 years since site abandonment, but it may also have been pulled out of the ground. The lateral trench on the south side of the post pit would have facilitated this action.

Second, there are several PDS that have architectural characteristics indicating that they continued to be occupied after the town was formally abandoned (Figure 8.16). Structure 23.4 is 45 percent smaller than its predecessor and has been reoriented to 64 degrees east of north, a change of 24 degrees. The former may be related to a reduction in household membership, but the more interesting change is in compass orientation. It suggests that the formal town plan was no longer being observed.

Structure 14 appears to also have been one of the last PDS to be occupied. It's compass orientation of 31 degrees deviates from the site's overall orientation. It stratigraphically overlies one burial (Burial 185) and probably postdates at least one other (Burial 190). The household affiliation of these earlier burials

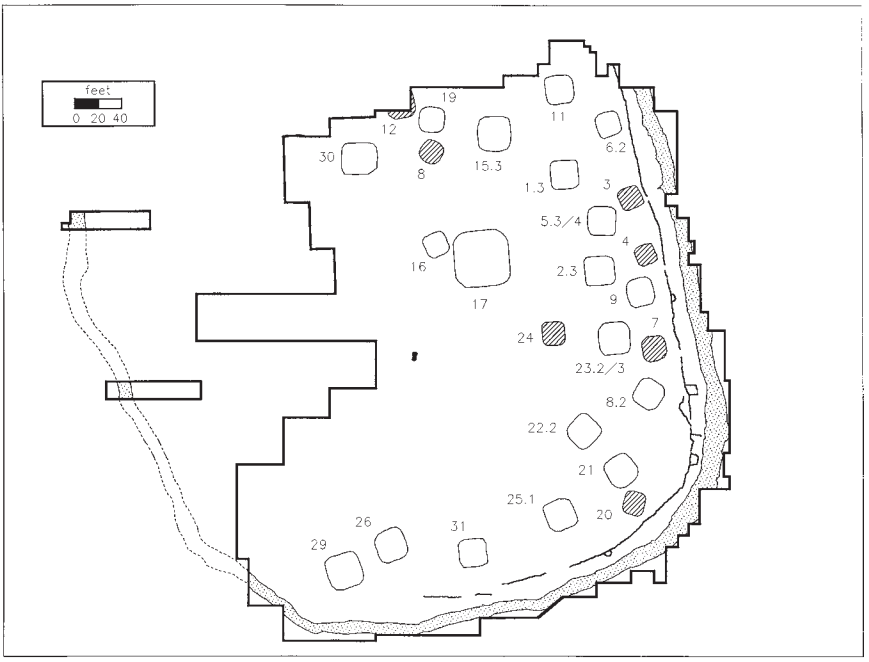


Figure 8.15. Primary domestic structures (shaded) added to the town as a result of internal growth.

is not known, but most likely they belong to a household located west of Structure 14 in the unexcavated portion of the site. Since we have not excavated any structures belonging to that household, we cannot know whether it dates to the main period of site occupation, but it certainly could have. The proximity of Structure 14 to Structure 11 and the location of its outside burial cluster west of Structure 11 mean that those two PDS cannot be contemporary. Burials 50 and 52, and probably 49 and 51 as well, are intrusive through the floor of Structure 11. They probably are part of the Structure 14 household, although again we cannot be completely certain of this identification. While there is no single indisputable piece of evidence that Structure 14 postdates the main site occupation, the available evidence in total presents a strong case.

Structure 25.2 may also postdate the formal town. There is no stratigraphic or spatial evidence for which stage was constructed first. The stage I have designated 25.1 probably dates to the main site occupation because its orientation of 65 degrees conforms fairly closely to the adjacent section of palisade. Structure 25.2 (2 degrees east of north), on the other hand, differs markedly from

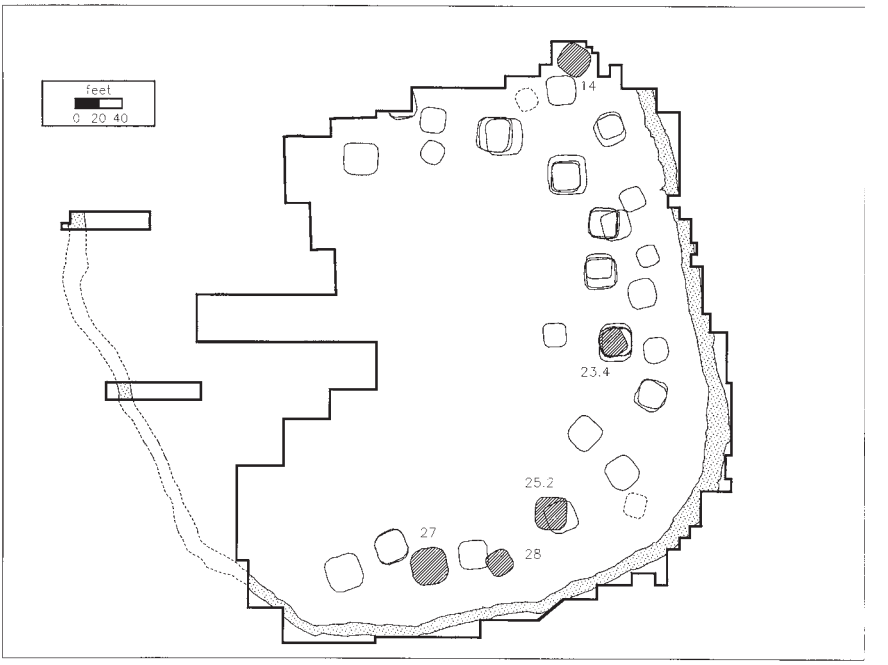


Figure 8.16. Primary domestic structures (shaded) that might postdate formal town abandonment.

other PDS in the southeastern and southern sectors of the habitation zone, suggesting that it either predates or postdates the formal town plan—the latter being more likely. If it postdates the main site occupation, its location was determined by the existence of its predecessor, Structure 25.1. If it was constructed at the time the site was first settled, we might expect it to be located farther north, where it would be closer to other first-settler households.

Structure 27 is located only 4 feet from Structure 26 and is therefore probably not contemporary with it. The structure also postdates at least one burial in the area, Burial 128. We do not know when the burial was made, but it is more likely to date to the main site occupation than earlier. If so, Structure 27 is likely to postdate Structure 26 and the main site occupation.

Structure 28 overlaps Structure 31, indicating the two buildings are not contemporary. While it may be later than the other and thus possibly late in the site occupation, there is no hard evidence favoring that chronological relationship over one in which Structure 31 is later.

In the foregoing pages, I have taken a known fact—human settlement of the

King site began at some point in time and ended a number of years later—and an ethnographically based model for how settlements were symbolically turned into distinct and independent communities and used them to reconstruct the life history of an early historic Mississippian town. Architectural, spatial, and limited stratigraphic evidence have been interpreted as showing that within a relatively short period the site (1) was initially settled by a small number of people occupying several houses and probably belonging to three or four different households, (2) was subsequently given legitimacy as an independent community by the transfer of sacred fire and the construction of essential public facilities such as a council house and defensive perimeter, (3) grew in population over a period of one or two decades, (4) was ceremonially decommissioned as a community, and (5) was ultimately abandoned by the few households that had continued to reside there.

I have tried twice to marshal independent chronological evidence to estimate the duration of site occupancy and to support the reconstructed life history sequence, but I have been unsuccessful in both cases. Mark Schurr (Schurr and Hally 1999) attempted to develop a fine-scale relative chronology of King site burials using fluoride dating. The results were generally supportive of burial sequences discussed above, but the technique was not sufficiently sensitive to reliably identify relative dates of interment for individual burials. The site's occupation span is simply too short.

In another study, Grissino-Mayer and I (Hally and Grissino-Mayer 1999) attempted to develop a chronology for PDS based on the dendrochronological analysis of charred wall posts. Ring series were obtained for 15 posts excavated from Structures 8, 14, 21, 22, and 23 in 1974. Grissino-Mayer was able to construct a robust master tree-ring sequence spanning 157 years and confidently place individual posts within it. Unfortunately, all posts were missing their last growth rings, and as a result cutting dates could not be assigned. Among the dated samples, two from Structure 23.4 come out later than samples from Structures 21 and 22, as expected. The problem is that Structure 8 was equally late in the sequence, while Structure 14 was earliest. The study demonstrates that archaeological sites in the Southeast can be dated using currently available dendrochronological techniques but that care must be used in the field to recover and preserve charred specimens intact.

Although it has not been possible to independently confirm the sequence of stages in the life history of the King site, there is little reason to doubt that it is not correct at least in general outline. The most important aspect of this life history, however, is that the town was settled by people who moved into the area from elsewhere, and this is well supported by the available site survey

and ceramic evidence. The settlers must have had a leader. According to Nairne (Moore 1988:62–64; see quotation earlier in this section), among the Chickasaw in the early eighteenth century these leaders were important individuals in their native community, they carried sacred fire from the parent town to the new town, and they became the first chief of the new town.

In the statement quoted earlier in this section, Nairne describes a situation in which politically independent communities were fissioning, and one possible outcome was the formation of a new polity. The King site town was not a politically independent community but rather one of several subordinate communities in a larger polity. The decision to establish a new town was probably encouraged and perhaps even demanded by the polity leadership. The settlement of King, in short, may have been the result of a conscious decision by the leadership motivated perhaps by a desire to expand the polity's territory or to relieve population pressure in already existing towns. As such, it is likely that the colony was led by a person of high social and political standing in the parent community who was selected by the polity chief. It is even possible that this person was a close relative of the polity chief or a member of his descent line.

Regardless of how the leaders of colonies were chosen and whether the colonists moved voluntarily or under duress, the likelihood remains that there would have been a recognized leader responsible for establishing the town and that this individual became the leader of the resulting community.

Notes

1. Kelly investigated several of these variables in her Master's thesis (1988) and was the first to recognize relationships between structure size, number of construction stages, number of associated burials, and growth of households at the King site.

2. Kelly and I (Hally and Kelly 1998:59) previously published a slightly different correlation coefficient (.90). The difference reflects several minor changes that have been made in the data since that work was completed. Specifically, Structures 3 and 20 were included in the 1998 analysis but have been excluded here because of uncertainty concerning their sizes. The sizes of Structures 2.3 and 2.4 have been recalculated and reduced a small amount. The number of inside burials associated with Structures 14 and 15 has been reduced because reanalysis has demonstrated that up to 10 subfloor burials (six in Structure 14 and four in Structure 15) cannot be reliably identified as either inside or outside burials.

3. Kelly and I (Hally and Kelly 1998) found a significant correlation between structure size and number of construction stages ($r = .47$, $p = .02$). Changes in the King data described in Note 2 have reduced these figures somewhat ($r = .29$, $p = .051$).

4. This assumes that Structure 1, and not Structure 5, is where the founder of the household resided.

5. At least three of these PDS—Structures 1.1, 2.1, and 15.1—may predate the main period of site occupation, and a fourth—Structure 25.2—may postdate the main period of occupation. See the last section of this chapter for a discussion of the life history of the site.

6. The final section of this chapter reconstructs the chronology of the King site occupation and assigns specific PDS to different periods in that occupation.

7. Payne (1994:143–147) reports that 61 percent of the 96 Mississippian mound sites in the Southeast and Midwest with measurable compass orientations were aligned with an adjacent body of water, usually a river. Fifty-two percent, she found, had their long axis aligned with the cardinal directions. She concludes that Mississippian mound centers were "primarily oriented to a feature of topography, almost invariably a water body and then usually a river . . . The apparent cardinal point orientation of mound centers appears to be a spurious correlation." She attributes this spurious correlation to the fact that many rivers in the Southeast and Midwest flow in a north, south, east, or west direction.

Payne raises the possibility that Mississippian site planners preferred to locate their mound centers along river channels and to orient the mound/plaza architectural complex with the cardinal directions and, when they could, selected locations that satisfied both conditions. She dismisses this interpretation, however, because sites not located near water show no tendency to be oriented with the cardinal directions. Another possibility, of course, is that Mississippian site planners viewed cardinal-direction orientation as appropriate or most appropriate only in those situations where water bodies could be worked into the microcosmic scheme.

8. Polhemus (1987:1205) reports that a variety of species, including pine, oak, hickory, walnut, and black locust, were used as wall and roof support posts in Dallas phase structures at Toqua.

9. This same kind of observation cannot, of course, be made for the western perimeter of the town as a result of the loss of occupation features there. Nevertheless, it is unlikely that habitation occurred beyond the palisade and ditch here because of the existence of a natural swale in the area.

9
Analysis of Burial Attribute Associations

The King site burial sample is ideally suited for in-depth mortuary analysis. It is large, consisting of approximately 250 burials. All but a handful of burials were professionally excavated and have extensive field documentation in the form of photographs, field drawings, and burial forms. With the exception of a few looted and "lost" items, all grave goods have been subjected to laboratory analysis, which, depending upon the type of artifact, involved classification, measuring, weighing, photographing, and microscopic inspection for use wear and damage. All burials have good context, meaning they can be placed in the habitation zone, the plaza, or the Structure 17 council house. Approximately half the burials in the habitation zone, furthermore, can be assigned with some certainty to a specific household. Burials differ along a number of dimensions—spatial location, pit form, body position, and grave goods—which increases the likelihood of recognizing patterns in mortuary treatment. Over a hundred burials have grave goods, and these can be assigned to more than 50 artifact types. Finally, duration of site occupation is short enough that we can be fairly certain that variability in burial characteristics and the mortuary practices that underlie them are not due to temporal change.

A number of factors reduce the research potential of the burial sample. The preservation state of human skeletal material and of artifacts made of bone, antler, and shell varies considerably from one burial to another. Overbank erosion and plowing have impacted some burials to the point that pit form cannot be reliably identified and, in more extreme cases, to the extent that human bone and artifacts have been fragmented or removed. Differences in the degree

of such destruction, furthermore, vary across the site, making it difficult to determine whether some mortuary patterns were characteristic of the whole community or only of households and kin groups residing in the eastern and northeastern portion of the town. Finally, biological sex can be determined in only about 48 percent of the adult burials and age in only about 55 percent of all burials.

The theoretical and methodological foundation for archaeological mortuary analysis was laid more than 30 years ago with the seminal work of Binford (1971), Brown (1971), Peebles (1970, 1971), and Saxe (1970). Binford and Saxe sought to identify cross-culturally or universally valid relationships between mortuary practices and social organization. By identifying patterns of covariation in mortuary practices and social organization in a number of ethnographic societies, they demonstrated that social organization could have a determinate effect on the way the dead were treated and, by implication, that mortuary patterns could be used to reconstruct some aspects of social organization. This approach has been continued by Carr (1995), Goldstein (1976, 1981), Tainter (1975), and others.

Brown and Peebles, in contrast, focused their research on archaeological data sets and attempted to identify aspects of the social organization of specific prehistoric societies from analysis of their burial practices. This approach has proven to be more popular among archaeologists and has been continued by, among others, Braun (1979), Gamble et al. (2001), Hatch (1974, 1976), O'Shea (1996), and Rothschild (1979). The analysis of King site burial practices follows in this tradition.

My goal in analyzing the King site burials is to identify the kinds of statuses individuals held, the relative frequency with which the statuses occurred in the community, and the combinations (social personas) in which they were held. I also want to identify the social groups that individuals belonged to. This aspect of social organization, what O'Shea (1996) calls the "horizontal status categories," has generally been neglected in mortuary studies because of the presumed difficulty in detecting groups such as households, descent groups, and sodalities in the archaeological record (Carr 1995; O'Shea 1984, 1996). Good burial context, however, increases the likelihood that these kinds of identifications can be made. At King, most burials are located in household cemetery plots. As a result, many burials can be assigned to individual households and in one case to a specific descent line, that of the town chief.

We can expect social ranking and even hereditary inequality (Brown 1981) to be important features of King site social organization, although probably not to the extent that they would have been at the administrative center for

the polity. It is clear from the burial data that some individuals in the King community were more prestigious and politically powerful than others. I have tried to identify these individuals and to determine why they were important. Unlike in many earlier mortuary studies, however, I have not been overly concerned with demonstrating that King site society had ascribed statuses or that it had reached a certain degree of social complexity.

Mortuary analysis, at least in America, has generally focused on reconstruction of social organization, but mortuary practices can also reflect religious and philosophical beliefs (Carr 1995). Religious beliefs may be expressed directly in mortuary practices, as, for example, the practice of orienting the body to face the land of the dead. Burial practices also may express beliefs concerning social relations and the nature of society, as, for example, beliefs about the transition from childhood to adulthood or the dual division of society into moieties. In the King site analysis, it has been possible to determine with some certainty in many cases whether a particular mortuary practice is related to the social status and rank of an individual, to religious beliefs, or to beliefs concerning the nature and organization of society. This has been possible because of the wide variety of variables that have been utilized in the analysis.

Today, most archaeologists, be they processual or postprocessual in inclination, would agree that a society's mortuary practices are the result of decisions made and actions taken by individuals over time. There is disagreement, however, over how much these decisions and actions are influenced by the norms and traditions of a society and how much they are influenced by the self-interest and competitive social strategies of its members (Hodder 1982; Parker Pearson 1982, 1999). This issue cannot be resolved with sweeping generalizations about human nature and the nature of culture. The relative importance of social norms and individual self-interest probably varies from one society to another and, within a particular society, from one type of status or set of beliefs to another. Cultural traditions and norms may place different levels of constraint on different mortuary practices—constraints that may range from inflexible prescriptions that must be followed, to cultural preferences that can be violated but usually are not, to an absence of constraint altogether. Mourners are more likely to pursue their own self-interest when society gives them some leeway to do so. Parker Pearson (1982) found that the amount of money spent on funerals and funerary markers in Cambridge, England, in the mid-twentieth century had little to do with the personal wealth of the deceased. Evidently Cambridge citizens were not very concerned with how wealth was used in funerals. One wonders, however, whether the community would have been equally tolerant of other kinds of manipulation and

misrepresentation. I doubt that it would have permitted someone to be buried with the ceremony and symbolism of an Anglican bishop or of a national war hero if he or she were neither of these.

Given the variety of conditions affecting mortuary practices, I think it is incumbent on those doing mortuary analysis to make an argument for each society, each type of mortuary practice, and in some cases each burial that details why they think traditional mortuary practices were being closely adhered to or not and why they think the social persona of the deceased is accurately represented or misrepresented by the manner in which he or she is buried. I believe that most mortuary practices evident in the King burial sample reflect cultural prescriptions or preferences. In other words, individuals who were eligible for a particular type of mortuary treatment received it, either as a result of their own expressed wishes or because their mourners felt compelled by tradition to provide it for them. I also believe that most types of grave goods in adult male burials were markers for socially recognized and valued statuses that the deceased and his mourners would want to have recognized through mortuary treatment. I will try to defend these positions and others in this and subsequent chapters.

In order to infer status positions from grave goods, we must have some understanding of the function and meaning of the artifacts that are interred with the dead. By "function" I mean the way an item of material culture was used in the daily activities of the King site inhabitants. Flaked stone points, for example, may have been used as projectiles in hunting and warfare, while *Busycon* shell beads probably functioned primarily as costume items. "Meaning" refers to the symbolic associations that an item of material culture has. If the finely made projectile points commonly found with adult male burials were used exclusively in warfare, they may have had a number of symbolic associations, including warfare, individual bravery, achievement of a specific war honor or grade, and death. *Busycon* shell beads may have had symbolic associations with the *Busycon* cup used in black drink ritual or with various mythological figures and events depicted in Southeastern Ceremonial Complex (SECC) art, or they may represent material wealth.

Most items of material culture will have both functions and meanings, but the relative importance of each will vary with the context in which an item occurs. In combat, the functional dimension of arrow points is most important: they are intended to fly straight and to kill or injure enemy. If arrow points are used in certain social or ritual situations as a sign that an individual has been in battle or achieved a particular war honor, their meaning will be more important than their functions in those contexts. For the most part, artifacts such

as arrow points were probably used as grave goods because of their meaning rather than their function. After all, what use does the deceased have for real arrows? More likely, they were placed in a burial to say something about the deceased's experiences and achievements in warfare or to represent the weapons he will need in the afterlife.

The meaning of artifacts may change when they become grave goods. Tools such as hammerstones and scrapers that are being used by an individual may communicate the fact that he is currently or frequently engaged in a particular craft activity. As grave goods, these artifacts may communicate the fact that there was something special about the way the deceased used them—that, for example, he was very skilled in their use or was a craft specialist.

We can increase the reliability with which social organization and religious beliefs can be inferred from mortuary practices if there are historically relevant ethnographic analogues to draw upon (Brown 1971; Gambel et al. 2001). In my analysis of King site mortuary practices I have made use of ethnographic analogy in two different ways. In one, a variety of ethnohistoric sources from the sixteenth to early nineteenth centuries were used to reconstruct a model of late Mississippian sociopolitical organization in the Southern Appalachian region (see Chapter 2). On the basis of this model, I can make the case that the inhabitants of the King site traced descent matrilineally and tended to reside in matrilocal multiple-family households. The model also allows me to specify some of the types of political and administrative offices and prestigious social positions that may have existed in the community.

I have also used ethnohistoric and ethnographic evidence to gain a better understanding of the function and meaning of specific grave good types. Inferences of this kind have been invaluable for identifying statuses, status hierarchies, and social groups. Several other kinds of evidence have been used to support these inferences, including the nature of the artifacts themselves, their frequency in burials and in the burial sample, their associations with other types of grave goods and other dimensions of mortuary practice such as grave location, their contexts and associations at other Mississippian archaeological sites, and their portrayal in SECC art.

Age was an important dimension of King site social organization, and age at death was an important determinant of variability in mortuary practices. In order to identify and correctly interpret such variability, it is crucial that skeletal age be categorized in as precise a manner as possible. Mortuary studies typically calibrate age at death in intervals of 10 years or more because of the imprecision of most aging techniques, especially when applied to poorly preserved skeletal material (e.g., Blakely 1988; Buikstra 1981; O'Shea 1996; Saxe

1970) and older adults (Boldsen et al. 2002). This seems to me to be a rather arbitrary and potentially misleading way to handle age estimates. It may result in individuals who differ in age by as much as 10 years (e.g., 20 years old and 29 years old) being assigned to the same age category (20–29 years) and individuals differing in age by as little as one year (e.g., 19 years and 20 years) being assigned to different age categories (10–19 years and 20–29 years).

I think the use of single-year age estimates in mortuary analysis can be justified if we recognize that estimates for adults under the age of 50 probably have a ±5-year margin of error and that estimates for subadults probably have a margin of error ranging from 1 to 3 years depending on how old they are. With these error ranges, a burial with an estimated age of 30 years could actually be as young as 25 or as old as 35 and a burial with an estimated age of 8 years could actually be as young as 5 or as old as 11. If the three burials in the example above were estimated to be 19, 20, and 29 years old, the degree to which their error ranges overlap (14–24 years, 15–25 years, and 24–34 years) would provide a reasonably accurate picture of their relative ages.

I suggest that there are two conditions under which analyses using single-year age estimates are valid: when age differences between burials being compared are fairly large and when comparison is between groups of burials and average group age is the basis of comparison. Almost all of the analytically productive comparisons I have made in this book are between groups of burials. Observations concerning single burials, when they are made, usually involve other burials that are considerably older or younger. As will be clear in the following chapters, the payoff from using single-year age estimates has been enormous. It has allowed me to identify four age-related changes in mortuary practices that are supported by multiple lines of evidence. The value of these results, I think, outweighs the possibility of being misled by spurious age-related associations that might arise from using single-year age estimates. Readers will have to judge for themselves.

In this chapter, I will begin to look at how the different dimensions of mortuary variability described in Chapter 7 relate to one another. I will do this by means of simple bivariate comparisons of variability in sex, age, health status, site location, pit form, body position, and grave goods. Each of these dimensions will be considered separately to determine how variability in it relates to or affects variability in the other dimensions. Because there is so much variability in the types of artifacts placed in burials and in the combinations in which they occur, grave goods will also be considered in a separate multivariate analysis. This latter analysis will be the subject of Chapters 10 and 11. The final step in the analysis (Chapter 12) will bring together patterns observed in each of the dimensions of mortuary variability and add the di-

mensions of time, community organization, and regional political dynamics to provide a detailed picture of the community's sociopolitical organization and historical context.

Gender as a Factor in Mortuary Practice

Historic Creek and Cherokee saw men and women as being fundamentally different. They had very different roles in society, and they were assigned to conceptually opposite categories within the cosmic order of the world—categories that needed to be kept separate and unmixed (Bell 1990; Hudson 1976:260; Perdue 1998:18). To the extent that such views were held by members of the King site community, we might expect that there would have been sharp contrasts in the kinds of material items associated with each gender role and the material symbols used to represent each gender. These contrasts should be evident in the mortuary treatment accorded adult males and females. Indeed, there is ample evidence in the King site burial sample for differences between adult males and females in grave goods, pit form, body position, and grave location. The strongest and most pervasive associations are between sex and grave goods and so it is appropriate to begin our review of mortuary patterning with this relationship.

Artifacts

Archaeologists working in the Tennessee Valley of eastern Tennessee have long recognized that certain artifact types have strong sex associations in Dallas and Mouse Creek phase burials (Hatch 1974; Kneberg 1959; Smith and Smith 1989; Sullivan 1986). Artifact associations in the King site burial sample conform to most of these patterns.[1]

I used reliable as well as disturbed burials in my analysis of the age and sex associations of grave goods in King site burials. I excluded from analysis multiple, intrusive, and looted burials in which artifacts cannot be assigned to a specific individual with certainty. One hundred forty-two burials in the resulting sample are adults, that is, 15 years of age or older. Thirty-two of these are biological females and 37 are biological males.[2] Twenty-four types of artifacts occur as grave goods in two or more adult burials (Table 9.1). In most cases, the number of burials that can be identified as biological male or female is relatively small compared with the total number of burials in which each artifact type occurs. Nevertheless, a reasonably strong argument can be made that most artifact types were interred almost exclusively with adult males and that a small number were interred with adults of both sexes. None appear to occur exclusively with adult females.

Table 9.1. Sex association of artifact types occurring in two or more burials

Artifact Type	Number of Adult Burials	Number of Biological Males	Burial 30	Burial 223	Other Biological Females	Number of Artifactual Males	Number of Artifactual Females	Ratio of Males to All Adults
Point	25	12	1	1	0	11	0	23 of 25
Flintknapper kit	12	5	1	0	0	6	0	11 of 12
Pipe or pipe fragment	10	4	0	0	0	6	0	10 of 10
Bifacial blade or blade fragment	8	5	0	1	0	2	0	7 of 8
Hematite	8	3	0	1	0	4	0	7 of 7
Antler cylinder	7	4	1	0	0	2	0	6 of 7
Beaver incisor	6	2	0	0	0	4	0	6 of 6
Iron tool	5	1	0	0	0	3	0	4 of 5
Human remains	5	3	0	0	0	1	0	4 of 5
Baculum	4	2	0	1	0	1	0	3 of 4
Stone discoidal	4	1	0	0	0	3	0	4 of 4
Bipointed bone tool	3	3	0	0	0	0	0	3 of 3
Tabular polishing stone	3	2	1	0	0	0	0	2 of 3
Circular polishing stone	2	2	0	0	0	0	0	2 of 2
Busycon shell cup	2	2	0	0	0	0	0	2 of 2
Turkey tarsometatarsus awl	2	2	0	0	0	0	0	2 of 2
Mask gorget	2	1	0	0	0	0	0	1 of 2
Bracket shell pin	2	1	0	1	0	0	0	1 of 2
Gravy boat bowl	2	1	0	0	0	0	0	1 of 2
Cylindrical bone tool	2	0	1	0	0	1	0	1 of 2
Pottery jar	3	0	0	0	0	1	0	1 of 3
Knobbed shell pin	7	1	0	0	2	2	0	3 of 7
Busycon shell bead	10	3	1	0	1	4	0	7 of 10
Pottery bowl	2	0	0	0	2	0	0	0 of 2

Six artifact types—triangular point, flintknapper kit (FKK), pipe and pipe fragment, large bifacial blade, hematite, and antler cylinder—are represented in a relatively large number of burials (Table 9.1, column 2). Approximately half the burials interred with each artifact type are biological males, but two biological females—Burials 30 and 223—also were interred with some of these artifact types (Table 9.1, columns 3–5).

Burials 30 and 223 are quite different from other adult female burials in the King site sample. The great majority of adult female burials lack grave goods. When grave goods are present, they usually are limited in number to one or two items and in variety to pottery bowls and marine shell ornaments. Burials 30 and 223, in contrast, were interred with a large number and variety of grave goods. Burial 30 has 12 points, a flintknapper kit, four bone tools, an antler cylinder, a pulley-shaped ear spool, two turtle shells, and over 200 marine shell beads. Burial 223 (Figure 9.1) has 23 points, two large bifacial blades, hematite, one baculum, one bracket type shell pin, one possible bone tool, and one turtle shell.

Burials 30 and 223 resemble adult male burials in having large amounts of grave furniture and in having several items that frequently occur in adult male burials. Given these similarities, we may well ask whether the two individuals are not really biological males. In order to answer this question definitively, I submitted femoral bone samples from the two burials to Dr. Mary Ritke at the University of Indianapolis for DNA analysis (Ritke 2006). She employed the procedure used by Haak et al. (2005) to purify DNA from the two bone samples and the amelogenin method to identify sex (Sullivan et al. 1993). The latter looks at the length of the amelogenin allele, which is longer on the Y chromosome (112 nucleotides) than it is on the X chromosome (106 nucleotides). Comparison of amplified amelogenin from Burial 223 with a control sample yielded evidence that the individual was a biological female. This result was reproduced using a second independently purified DNA sample from the burial. Unfortunately, it was not possible to amplify amelogenin using DNA extracted from Burial 30.

Given the emphasis that Creek and Cherokee placed on distinguishing and separating male and female gender categories, how do we account for the existence of Burials 30 and 223, which appear to violate those categories? Historic sources do describe men and women who crossed this boundary. Some Cherokee men preferred farming to hunting and warfare, and there are references to Choctaw and Cherokee male transvestites (Perdue 1998:37). Such individuals appear to have been looked down upon and ridiculed.

Warfare was perhaps the defining criteria for maleness among eighteenth-century Creek and Cherokee. Nevertheless, women could become involved in

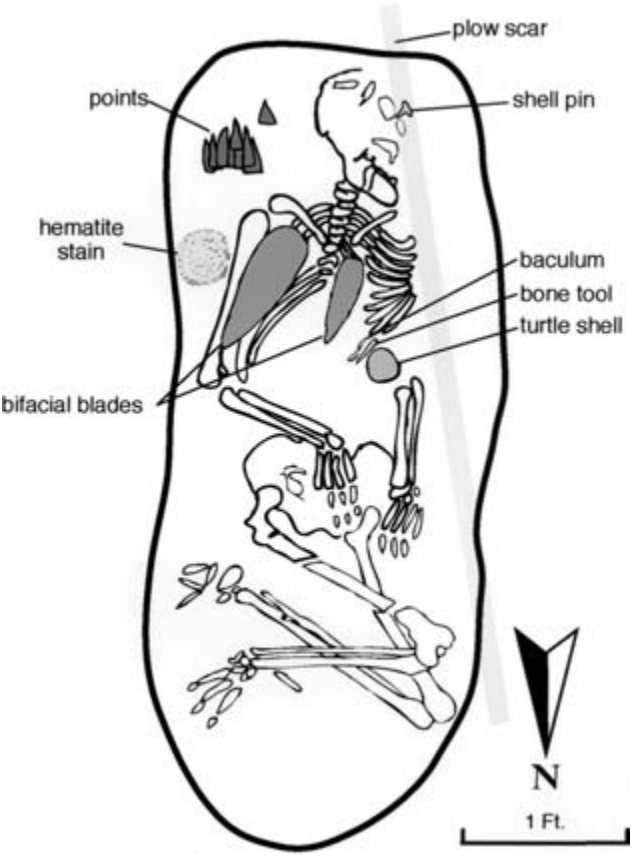


Figure 9.1. Burial 223.

warfare in various ways. They had the power to decide the fate of war captives and could influence decisions to raid enemy (Braund 1993; Perdue 1998; Sattler 1995). They could accompany war parties, but, at least in some cases, their primary responsibility may have been to carry water and prepare food (DeVorsey 1971:109; Williams 1930:275). Some Cherokee women, however, actually became warriors. Perdue (1998:38–39) cites a number of accounts of women who fought, slew enemies, or were themselves slain in battle. Such women were given the title of "War Woman" and were accorded a number of privileges usually reserved for men. They could join warriors in the war dance, publically relate their war exploits in the Eagle Dance, and on certain ceremonial occasions consume food and drinks normally reserved for men.

DeBrahm (DeVorsey 1971:109) provides the most detailed description of

Cherokee War Women: "[A] Gang or Troop take only one Woman to War with them. She is to take care of the Camp, Fire, Provisions etc. This Woman, after some Campaigns is raised to the Dignity of War Woman, to which all Prisoners must be delivered alive (without any Punishment) as her Slave, if she requires it, which is a Privilege no Man can enjoy, not even their Emperor, Kings, or Warriors; there are but few Towns in which is a War Woman." This statement suggests that there were relatively few War Women in existence among the Cherokee at any one time and that women intentionally sought the status and achieved it through a protracted apprenticeship process. Mooney (1900:395), however, describes a woman who "on seeing her husband fall, snatched up his tomahawk, shouting, 'Kill! Kill!' and rushed upon the enemy with such fury that the retreating Cherokee rallied and renewed the battle with so great courage as to gain a complete victory." It is not clear that this single act led to the woman becoming a War Woman, but, in another incident related by Mooney, a woman was elevated to that status for killing her husband's slayer in a battle. These stories suggest War Woman status could also result from a single, impetuous act that contributed to the defeat of enemy in battle.

Timberlake (Williams 1927:94) states that Cherokee women were eligible for only one title, but it is unclear whether he is referring to War Women or "Beloved Women." The latter were old women who were accorded considerable respect and appear to have had a number of ritual responsibilities, including fasting and black drink preparation during the Green Corn ceremony. According to Timberlake, War Women received the Beloved Woman title when they could "no longer go to war." Perdue (1998:39) argues that War Women became "Old Beloved Women" when they reached menopause, but it is not clear that this was the only criterion for achieving that status.

There is no historical evidence for a comparable female warrior status among the Creek (but see Feiler 1962:142). Some Creek women gained recognition as Beloved Woman, but this was evidently based on family rank and not military experience. Beloved Women, however, did play a role in Creek politics. They addressed the town council and may have been involved in Creek diplomacy with Europeans (Braund 1993).

The anomalous character of Burial 223 can be readily accommodated by the Cherokee status or gender category of War Woman. Four of the seven artifact types interred with her—points, bifacial blades, hematite, and baculum—are usually found in adult male burials. Three of these have close associations with warfare (see Chapter 11). Points and large bifacial blades were used as weapons in war and were probably symbols of warrior grades that males achieved through acts of valor. Hematite was a source of the red pigment that

warriors applied to enemy scalps and to their own bodies. Burial 223 may have earned the right to use and display these items by performing the same military feats that were required of males. Alternatively, these rights may have been awarded as a result of a limited number of military acts that led to her recognition as a War Woman or female warrior.[3] The fact that she died at a fairly young age—around 25 years—and had a severely deformed left hip suggests the latter. The average age of males interred with large bifacial blades is around 40 years, which suggests that the associated warrior grade required considerable time and/or effort to achieve. The hip deformity may not have prevented walking or even running, but it is difficult to believe that an individual with such a disability could have performed the military feats required of males to earn an advanced warrior grade.

The meaning of Burial 30 is much more difficult to pin down. Three of the artifact types interred with this individual usually occur with adult males, but only the projectile points are clearly war related. The flintknapper kit and antler cylinder suggest that the individual was a flintknapping specialist or at least highly skilled in the craft (see Chapter 11). We cannot rule out the possibility that women might become proficient flintknappers and gain community recognition for their skill, but there is no historic evidence to suggest that this status was open to women.

A case can be made for Burial 30 being a biological male. As was the case with Burial 223, skeletal preservation was not very good. Plowing had penetrated deep enough into the burial to cause damage to the cranium, upper body, and pubic region of the pelvis, the latter being one of the most reliable areas of the skeleton for sex identification. Williamson (Larsen et al. 1994) identified Burial 30 as possibly female on the basis of the presence of a wide sciatic notch and a preauricular sulcus. Blakely (ed. 1988) and Humpf (1995) independently identified the burial as male, but they did not specify which criteria they used to make this determination. The important point, though, is that the osteological evidence for Burial 30 being female is not as strong as we might wish.

In addition to having several male-related grave goods, Burial 30 also differs from other adult female burials in being interred in an extended position and in having a large number and variety of grave goods. The extended body position, discussed in a later section, is strongly associated with males. With the exception of Burial 223, no other biological female burial has more than two types of grave goods or, for that matter, more than two actual items. The uniqueness of Burial 30 suggests that if she was female, she must have had—like Burial 223—a very special and uncommon status. Unfortunately, the ethnohistoric accounts are silent on what this status may have been.

Two features of Burial 30 could be seen as additional evidence that the individual involved was a biological female. The remains of a human infant, Burial 35, are located near the feet of Burial 30 and lie within the walls of the grave pit. We might interpret this spatial relationship as representing the multiple burial of a mother and her child. However, there are no other instances in the King site burial sample of an adult and infant being interred together. Given the plow damage suffered by Burial 30, furthermore, we cannot rule out the possibility that it was intruded by Burial 35.

Finally, Burials 30 and 223 are the only burials in the King site sample known to have been interred with turtle shells. In both cases, shells of unidentified species were located in the upper body or arm area. They may represent rattles, but in the absence of spatially associated pebbles or drum teeth, this identification cannot be verified. Rattles made of box turtle shell are a common grave good in Dallas phase burials and are usually located in the upper arm area (Lewis and Kneberg 1946:127; Polhemus 1987:1035–1036, Appendix D). They occur with both female and male burials but are more common with the former. Historic-period references to turtle shell rattles invariably describe them as being worn by women and attached to their legs (Lewis and Kneberg 1946; Swanton 1946:627). The turtle shells in Burials 30 and 223 could be evidence that the two individuals were women or shared the distinction of being women who combined female and male gender characteristics, but we cannot be certain they are rattles or that such rattles were not also used by men.

Burial 30 could be a biological male or a biological female belonging to a distinct male-oriented gender category. Unfortunately, the available evidence is not strong enough to support an identification one way or the other. As a result, the burial will be treated as being of unidentified sex in the remainder of this book. Because the burial was probably a fairly prominent individual, however, we cannot ignore him or her entirely as we investigate the nature of the King site community. Instead, we will consider the implications of Burial 30's being a biological male or female or representative of a distinct gender category where appropriate in later analyses and interpretations.

A relatively large number of burials with points, flintknapper kits, bifacial blades, pipes, hematite, and antler cylinders are biological males (Table 9.1). The only definite exception to the male-only distribution of these artifacts is Burial 223, whose distinctive status of female warrior may be said to have "maleness" as one of its defining characteristics. In light of these observations, it seems reasonable to identify each of the six types of grave goods as signifying the male gender or some aspect of it. To the extent that this is correct, the occurrence of any of these artifact types in a burial of osteologically indeter-

minate sex can be used as evidence for that individual's being male. There are 15 burials in the King site burial collection that Williamson was unable to sex and that were interred with one or more of the six types (Table 9.2). I will treat these individuals as males in all future analyses and will refer to them as "artifactual males" in order to distinguish them from biological males and to highlight the criteria by which they were identified as male. This action has considerable analytical value because it substantially increases the size of the adult male burial sample. It is, of course, possible that any of the 11 burials listed in Table 9.2 as having points and/or bifacial blades were female warriors like Burial 223. Given that the status was rare in the eighteenth century, however, this seems unlikely.

Most of the 15 artifactual male burials were accompanied by additional artifacts of the types listed in the lower two-thirds of Table 9.1. The number of artifactual male burials interred with each artifact type is listed in column 7 of the table. In the last column, the frequency with which each artifact type occurs in biological and artifactual male burials is compared with the total number of adult burials that contain the type. This ratio is meaningless in the case of points, flintknapper kits, bifacial blades, pipes, hematite, and antler cylinders because these artifact types were used to identify artifactual male burials in the first place. For most of the remaining artifact types listed in Table 9.1, the great majority of burials are biological or artifactual males. On the basis of these figures, we can expand the list of male-associated artifact types to include beaver incisors, iron tools, human remains, bacula, and stone discoidals. These types are each represented in at least four burials. Bipointed bone tools, tabular polishing stones, circular polishing stones, *Busycon* shell cups, turkey tarsometatarsus awls, mask gorgets, bracket shell pins, gravy boat bowls, cylindrical bone tools, and pottery jars may also be male grave goods, but the lower frequency with which they occur increases the likelihood that observed distributions are the result of chance.

Burials 19 and 124 can be added to the lists of artifactual males. The former was interred with a single artifact, a piece of iron that may have been a knife blade. Burial 124, a heavily disturbed burial that may have lost artifacts, contained a gravy boat bowl, a Type III hammerstone that may be a remnant of an FKK, and a stone celt. Finally, three looted burials, Burials 234, 267, and 269, were interred with two or more male grave goods and can be identified as artifactual males as well.

Supporting evidence for many of these proposed associations can be found in the mortuary patterns observed in other Southern Appalachian Mississippian cultures. Pipes, bifacial blades, points, and discoidals are reported to have strong male associations in Dallas and Mouse Creek phases (Hatch 1974:120–

Table 9.2. Artifacts occurring with artifactual male burials

Burial	Biological Sex	Point	Flintknapper Kit	Pipe	Bifacial Blade	Hematite	Antler Cylinder	Beaver Incisor	Iron Tool	Baculum	Stone Discoidal	Tabular Polishing Stone	Cylindrical Bone Tool	Jar	Marine Shell Bead	Knobbed Shell Pin
15	Unknown	10	1		1	1		1	1		1					
34	Unknown	20	1		1			1								
40	Unknown	1		1					1		1					
73	Unknown			1											2	
84	Unknown		1	1										1		
87	Unknown	3													13	
93	Unknown	8														
102	Unknown	23	1	1			3									
103	Unknown		1	2		1		1								
117	Unknown	9	1			1		1	2		1		1		18	1
157	Unknown	1					9			1						
176	Unknown	4														
195	Unknown	2		1											54	2
229	Unknown	13													9	
240	Unknown					1										

124; Polhemus 1987:Appendix C; Sullivan 1986:Table 7–26). Hematite and bacula have strong male associations at Toqua (Polhemus 1987:Appendix C) and other Dallas phase sites (Hatch 1974). Smith and Smith (1989) report that mask gorgets are strongly associated with male burials at sites across the Southeast. Thomas (1996) reports an adult female burial at 31WK6 in North Carolina interred with 32 points, two spatulate celts, an FKK, red ocher, shell beads, a shell gorget, and turtle shell. This burial may be a male incorrectly identified as a female or another example of the female warrior status. The presence of a flintknapper kit and turtle shell, however, recalls Burial 30 at King.

Very few biological female burials were interred with grave goods. Excluding Burial 223, only four artifact types are definitely found with females: pottery bowl, rattlesnake gorget, knobbed shell pin, and *Busycon* beads. Because of the small number of burial occurrences, it is difficult to make a strong case for any of these artifact types being associated exclusively with females at King. The only two adult burials known with certainty to have pottery bowls are biological females, but bowls were buried with males at Toqua (Polhemus 1987: Appendix C). The only adult burial known with certainty to have a rattlesnake gorget is a biological female. Archaeologists (Hatch 1975; Smith and Smith 1989) have noted a tendency for gorgets of the rattlesnake type to be buried with females, but Kneberg (1959:23) reports a male burial with a rattlesnake gorget from a site in North Carolina. It is possible that neither of these artifact types was an exclusively female grave good at King.

Knobbed shell pins and *Busycon* beads occur in a small number of biological male and female burials (Table 9.1). Knobbed shell pins are reported to occur with male and female burials in Dallas (Polhemus 1987:Appendix C) and Mouse Creek (Sullivan 1986:Table 7:26) phases, and *Busycon* shell beads have similar associations in Dallas phase burials (Polhemus 1987:Appendix C). Presumably they were considered appropriate grave goods for deceased individuals of both sexes.

One of three adult burials with jars was an "artifactual" male. Since jars are commonly found with both female and male burials at Toqua (Polhemus 1987: Appendix C), it is possible that they had similar associations at King as well.

Pit Form

Pit form can be reliably identified in 75 burial pits that have depths greater than .8 feet (Table 9.3). Males and females are equally likely to be interred in simple pits and stepped pits. Board covers, however, may have been restricted to adult male burials, as five males occur in such pits but no females do. If all burials in Structure 17 are male, which seems likely, then 9 of 12 board buri-

Table 9.3. Variation in burial pit form by sex and age

Pit Form	Male[1]	Female	Adult	Subadult	Unknown Age
Simple	15	12	44	19	2
Stepped	5	2	11	2	0
Shaft-and-chamber	1	0	2	0	0
Boards	5	0	10	2	0
No boards	13	15	44	20	2

1. Burial counts include biological and artifactual males.

als would be male. Burial 101, the only definite shaft-and-chamber burial, is a biological male. The other burial that may be of this type, Burial 106, cannot be identified as to sex by means of osteological or artifactual evidence. Its location in Structure 17, however, suggests that it is male as well.

There are very few data concerning differences in pit depth between adult male and adult female burials. Only a small number of primary domestic structure (PDS) subfloor burials can be sexed. Two female (Burials 149 and 211) and three male (Burials 150, 191, and 212) burials from structures with preserved floors have average pit depths of 2.0 feet and 2.3 feet, respectively. In Structure 15, which did not have an intact floor at the time of excavation, pit depth for two male burials (Burials 81 and 92) averaged 1.8 feet and one female burial (Burial 111) also had a pit depth of 1.8 feet. It appears from this limited evidence that pit depth does not differ significantly between adult male and female burials.

Body Position

With a few interesting exceptions, body position does not vary significantly between the sexes. Males and females are equally likely to be flexed on their back or side (Table 9.4). On the other hand, only males occur in the partially flexed position, and females are more likely to be partially flexed with knees tightly flexed. I am hesitant to make too much of these differences because of the small number of burials involved and because I am not convinced that King site inhabitants would have recognized partially flexed burials as a separate category distinct from flexed burials. There is also a tendency for flexed and semiflexed male burials to be laid on their right side more often than females ($\chi^2 = 4.19$, $p < .05$). Another tendency is for male flexed (including all subtypes) burials to have longer pits (male = 5.0 feet, female = 4.6 feet, $t = 1.81$, $p = .04$).

Table 9.4. Variation in flexed body position by sex and age

Type	Male[1]	Female	Adult	Subadult	Unknown Age	Total
Extended	7 (17)	0	11	4	0	15
Flexed on back	13 (31)	9 (38)	33	4	0	37
Flexed on side	10 (24)	4 (17)	22	4	0	26
Flexed, side or back unknown	5 (12)	4 (17)	20	11	1	32
Partially flexed on back	4 (10)	0	5	4	0	9
Partially flexed on side	0	0	0	2	0	2
Partially flexed, knees sharply bent	2 (5)	6 (25)	10	0	0	10
Tightly flexed	1 (1)	0	1	1	1	3
Bundle	0	1 (1)	2	0	1	3

Note: Percent of burials given in parentheses.

1. Burial counts include biological and artifactual males.

Extended burials may be exclusively male. Seven of the 11 adults interred in this position are biological or artifactual males, and, except for Burial 30, none have been identified as biological females. The picture is not as clear for subadults. One of the four extended subadult burials was interred with a mask gorget, but two others had rattlesnake gorgets. While mask gorgets appear to have a strong association with male burials in Southern Appalachian Mississippian sites, rattlesnake gorgets occur almost exclusively with adult females. This latter inconsistency may be accounted for in a variety of ways. Rattlesnake gorgets may not be exclusively female grave goods (Kneberg 1959; Polhemus 1987:Appendix C); the extended body position may not be an exclusively male position; or gender may not have been an important symbolic distinction among subadults. This issue will be considered further in Chapter 10.

Cranial Deformation

The number of individuals who have been identified as having cranial deformation is quite small (Appendix C), but the sample does include adults of both sexes. Of the seven individuals with fronto-occipital deformation, four

are male and one is female. Of the three individuals with frontal deformation, one is male and two are female. Working with a much larger sample of burials from the Dallas component at Toqua, Parham (1987:483) found that fronto-occipital deformation occurred with equal frequency among males and females.

Health Status Indicators

The incidence of enamel hypoplasias is approximately the same among males and females. It was recorded in 25 male (59 percent) and 17 female (65 percent) burials and was absent in 17 male and 8 female burials. Periostitis was recorded in 5 male (13 percent) and 7 female (29 percent) burials and was absent in 34 male and 17 female burials. The differences are not statistically significant.

Burial Location

Adult males and females are equally likely to be interred within PDS as inside burials (10 males, 6 females), within rectangular structures (RS) (3 males, 4 females), and in the habitation zone outside structures (28 males, 20 females). Sex also seems to be unrelated to location within PDS (north, east, or west side of structure), body orientation within PDS (flexed burials facing toward or away from hearth), compass orientation of head, or combinations of these variables. It is possible, of course, that some strong associations have been obscured by the small size of samples.

Both sexes may have been interred in the plaza north of Structures 16 and 17, but we cannot be certain. Burials 34 and 40 are artifactual males. One adult and two infants of indeterminate sex were accompanied by rattlesnake gorgets and hence could be female. Burial 30 could be adult male or female.

Structure 17 presents a different picture. Of the 10 burials interred within that structure, three are biological males and an additional two are artifactual males. The remaining five burials had very poor bone preservation and were unaccompanied by grave goods. One of the latter (Burial 109) was probably an extended burial, indicating that it was male as well.

Age as a Factor in Mortuary Practice

We now turn to the question of whether differences in mortuary treatment are age dependent. Do grave goods, body treatment, pit configuration, and interment location vary with the age of the deceased? O'Shea (1996) uses a "cohort" approach to investigate this dimension of mortuary variability in Early Bronze

Age Moros society in Central Europe. In this approach, the different age categories into which the burial population can be divided are viewed in succession as representing the "aging and life history of a single living cohort of individuals" (O'Shea 1996:276). I have used this general approach to interpret age-related mortuary variability in the King site burial population, but rather than working with age categories such as infant, young adult, and so on, I have used the single-year composite age estimates provided by Williamson (Larsen et al. 1994).

Differences in male and female mortuary treatment indicate that the two sexes differed significantly in the types of social statuses available to them. This means that we must investigate age-related variability separately for each sex. Since the sex of subadults cannot be determined from osteological evidence, however, we are faced with the problem of integrating the younger age categories with those of the adult males and females. Body orientation was a strong predictor of sex among the Maros, and as a result, O'Shea (1996) was able to assign subadults to one sex or the other with a fair degree of reliability. Unfortunately, there are no mortuary practices characteristic of the King site population that will allow us to reliably identify the sex of subadults. With the possible exception of rattlesnake and mask gorgets, all artifact types that occur with subadults appear to occur with adults of both sexes. Among adult burials, the extended body position appears to be restricted to males, but as noted in an earlier section, there is some evidence to suggest that both male and female subadults were interred occasionally in this position. The best we can do is assume that subadult males and females were given the same mortuary treatment. Unfortunately this means we may miss some interesting contrasts between subadult males and females and between subadults and adults.

Both reliable and disturbed burials have been included in the analysis of age/artifact associations, but multiple, intrusive, and looted burials, in which artifacts cannot be assigned to a specific burial, are excluded. Forty-three adult male burials can be assigned a specific age, but only 26 females can be. In addition, no artifact type occurs with any frequency among female burials. The situation is better among males, where 14 artifact types occur with three or more burials. As a result of these small numbers, however, we cannot be certain that the absence of a particular artifact type in a particular age/sex category is not due to chance. The situation is little better with respect to pit form and body position.

Pit Form

Analysis of the age distribution of pit form is hampered by the small number of burials with pits deeper than .8 feet for which we have age estimates: 14

subadult burials, 25 adult male burials, and 14 adult female burials. Simple and stepped pit forms are represented in approximately equal proportions in both subadult (10:1) and adult male (14:5) and adult female (10:2) burials. Both pit forms occur with adult males and females ranging in age between 19 and 45 years, indicating that they were employed throughout the adult lifespan of both sexes. Presumably both forms were also used for subadults of all ages.

Pits with and without board covers are represented in approximately equal proportions among subadults (2:16) and adult males (5:21), but no adult female burials had board covers. The four adult male burials with board covers range in age between approximately 32 and 45 years, suggesting that only older individuals were interred in this manner. Since board covers do occur with subadults, however, it is probably safer to conclude that there were no age restrictions on the use of this feature.

Age at death seems to have been a major factor in determining pit depth. Table 9.5 compares pit depth for burials in those structures having at least one adult and one subadult burial that were interred during structure occupancy and have recorded pit depths. Structures that have lost their floors due to erosion and plowing are included in the list because we can assume that the sub–plow zone surface has been lowered uniformly across each structure's enclosed space.

Within the same structure, average depth of burials that were 8 years or older at death is between .1 and 1.0 foot greater than the average for burials younger than 8 years at death. For structures with at least two burials in each of these age groups, differences range between .6 and .8 feet. For the sample as a whole, the difference in average depth is .73 feet ($t = 2.49$, $p = .01$).

Structures 2, 15, 23, and 25 were constructed in multiple stages. Since the floors of later construction stages sometimes occur at slightly higher elevations than those of earlier stages, it is possible that some of the pit depth differences between the two age groups are due to more subadult burials being interred in later construction stages. Comparisons of age, pit depth, and construction stage data, however, do not support this contention.

Unfortunately, there are not enough burials from PDS to allow us to determine whether all individuals under 8 years were interred at the same depth. Infants, for example, may have had even shallower pits than older children. This would certainly account for the underrepresentation of infants in the King site burial sample.

There also are no burials between the ages of 7 and 15 years in the sample. As a result, it is not possible to say exactly when pit depth increases—it could happen gradually, perhaps in response to increasing body size in older individuals, or it may occur suddenly at around 8 years of age. As we shall see in

Table 9.5. Subadult and adult burial pit depth

Structure	Burial	Age	Depth	Construction Stage	Difference between Average Subadult and Adult Pit Depth
2	9	45	1.9	1	0.6
2	11	>18	1.5	3	
2	13	18–30	2.1	1	
2	10	7	1.3	3	
2	12	2	1.1	2	
9	192	>12	2.8	1	0.6
9	193	3	2.2	1	
15	81	35	1.5	2	1.0
15	92	45	2.1	1	
15	111	23	1.8	2	
15	80	4	.8	3	
23	210	18	2.3	1	0.8
23	211	22	2.8	1/3	
23	212	42	2.9	2	
23	214	13–17	2.8	3	
23	216	4	1.3	1	
23	217	>12	1.4	2	
23	219	4	2.2	3	
23	220	7	1.4	4	
25	175	1	0.3	1	0.7
25	176	20	1.0	2	
26	178	3	.6	?	0.1
26	181	>12	.7	?	

Note: Measurements in feet.

Chapter 10, the available evidence indicates that the change in pit depth occurred around 8 years of age.

Body Position

The relationship between body position and age at death can be investigated using all burials for which body position can be identified, regardless of pit depth. The number of such burials that can be assigned an age, however, is still fairly small: 38 adult males, 21 adult females, and 27 subadults.

All body positions represented with any frequency in the adult male burial sample—extended, partially flexed, and flexed—are widely distributed across

the 15- to 45-year age range. The same observation can be made for the two body positions—flexed and partially flexed with knees tightly flexed—that occur with any frequency in the adult female burial sample. Four body positions—tightly flexed, extended, partially flexed, and flexed—are represented in the subadult burial sample, and at least the latter two appear to be used from infancy on. The partially flexed with knees tightly flexed position is common enough among adults that we might expect to see it among subadults as well if it was used for them.

Location

The 10 inside burials in Structure 17 have been aged as follows: 45, 43, 34, 32, >18, >18, 18, >15, >12, and indeterminate. Burial 106, identified as >12 years, is represented only by one molar and two premolars. Wear on the molar indicates the individual is an adult (Williamson, personal communication 2002). Burial 106 pit length (4.7 feet) is also well beyond the range for subadult burials (range 2.1–4.5 feet, average 3.3 feet). Burial 109 yielded no bone, but its pit is 7.2 feet long, well above the average for subadults, even those in an extended position. Given this evidence, we are probably safe in concluding that only adults were interred in the structure.

The 11 burials in the plaza north of Structures 16 and 17 have the following ages: 3, 3, 4, 4, 1–6, >14, <24, 22, 42, 45, and adult. This age distribution is comparable to the demographic profile for the site as a whole (Table 7.2). Age does not appear to have been a factor in selection for interment in the plaza.

In the habitation zone, there are 73 subadult burials and 128 adult burials. Each age group is equally distributed across the northern, eastern, and southern sectors of the habitation zone. Subadults were equally likely to be interred inside a PDS as outside (32:35). Adults were more commonly interred outside PDS (29:95). The difference is significant ($\chi^2 = 11.89$, $p = .003$), but may be biased somewhat by the fact that younger subadults were interred in shallower pits than older individuals and therefore these burials were more likely to be destroyed by plowing if located outside PDS. That there was a preference for interring subadults beneath the floors of PDS is supported by the fact that young children (1–4 years) were the only individuals buried in PDS in Mouse Creek phase sites (Sullivan 1987:23).

Artifacts

Artifact distributions within the King site burial sample allow us to identify four age-related changes in the kinds of grave goods that accompany burials. One occurs between 2 and 4 years of age, one occurs at around 8 years

of age, one occurs in the mid-teens, and one affects adult males as they grow older.

Subadults were interred with 16 different types of grave goods (see Chapter 10). Most are items of personal adornment: shell beads, shell gorgets, knobbed shell pins, wolf teeth, and cut bird-bone fans. Several artifact types—dumbbell-shaped polishing stone, cobble anvil, spatulate celt–like artifact, turkey tarsometatarsus awl, and pottery vessel—probably were used as tools prior to their placement in graves.

Items of personal adornment and pots seldom occur in the same subadult burial; only four out of 24 reliable burials with either type of grave good have both. The age ranges of reliable and disturbed burials with each type of grave good overlap, but subadults with costume items are older on average than those with pots (3.5 years vs. 2.5 years). Evidently pottery vessels were considered to be appropriate grave goods for infants and young children and marine shell and bone ornaments were considered more appropriate for older children. This shift probably represents a formally recognized the rite of passage in the lives of young subadults and will be discussed in greater detail in Chapter 10.

Forty-nine subadult burials can be assigned a specific age. Twenty-four of these burials have grave goods. Figure 9.2 illustrates the age distribution of all subadult burials and those with artifacts. The former is skewed toward the lower end of the age range, with greatest mortality occurring during the fourth and fifth years. High mortality at this age is a common phenomenon among Mississippian farmers and may reflect the impact that weaning had on nutritional status and disease resistance (Blakely 1988). The low frequency of infant deaths is unexpected and, as discussed in Chapter 7, is probably due to differential bone preservation conditions. The low frequency of deaths at the other end of the subadult spectrum is not unexpected, as the second decade of life is usually characterized by low mortality.

The distribution of burials with grave goods is even more restricted to the lower end of the subadult age range. Most are younger than 4 years and none are older than 7 years. Given the small sample size, the absence of grave goods among older subadult burials may be due to chance. Nevertheless, with more than 50 percent of reliable subadult burials having grave goods, we should expect at least one or two of these older individuals to have grave goods. Four of them are reliable burials, and the other two were not sufficiently disturbed by plowing to result in artifact loss. We may infer from this that older subadults—those over the approximate age of 7 years—were not interred with grave goods.[4]

Adults were interred with 63 different artifact types. All but 12 of these

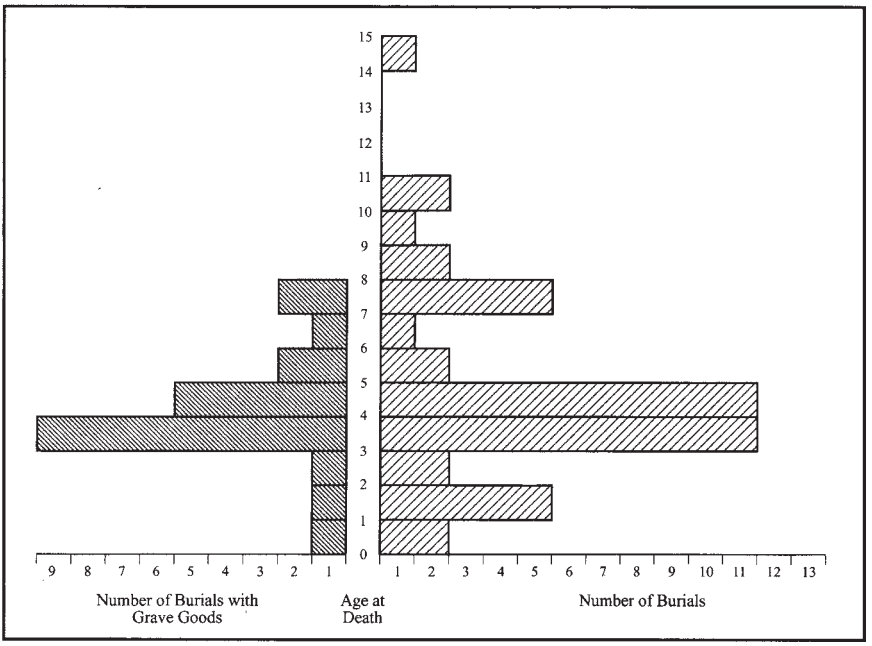


Figure 9.2. Age distribution of all subadult burials (right) and subadult burials with grave goods (left).

occur exclusively with adult burials, the exceptions being pottery jar, pottery bowl, vessel fragment, turkey tarsometatarsus awl, cut bird-bone fan, human dentition, rattlesnake gorget, mask gorget, knobbed shell pin, *Busycon* bead, *Anadara* bead, and *Olivella* bead.

Several artifact types that are common in adult male burials of all ages appear for the first time with individuals that are in their late teens. These include pipes, projectile points, bacula, antler cylinders, flintknapper kits, hematite, and beaver incisors (Figure 9.3). The paucity of burials of individuals in their early teens means that we cannot be certain these artifact types were not interred with individuals younger than 15 years. Nevertheless, their absence from all subadult burials indicates that a rather dramatic change in grave furniture does occur sometime during the adolescent years. This change probably marks a third rite of passage, one commonly associated with male puberty.

Unlike the situation for males, there is no real evidence that the transition to adulthood was marked for females by changes in the use of grave goods. The youngest biological females with grave goods are in their early twenties (see Chapter 10). Six burials of unidentified sex are in their late teens, but only

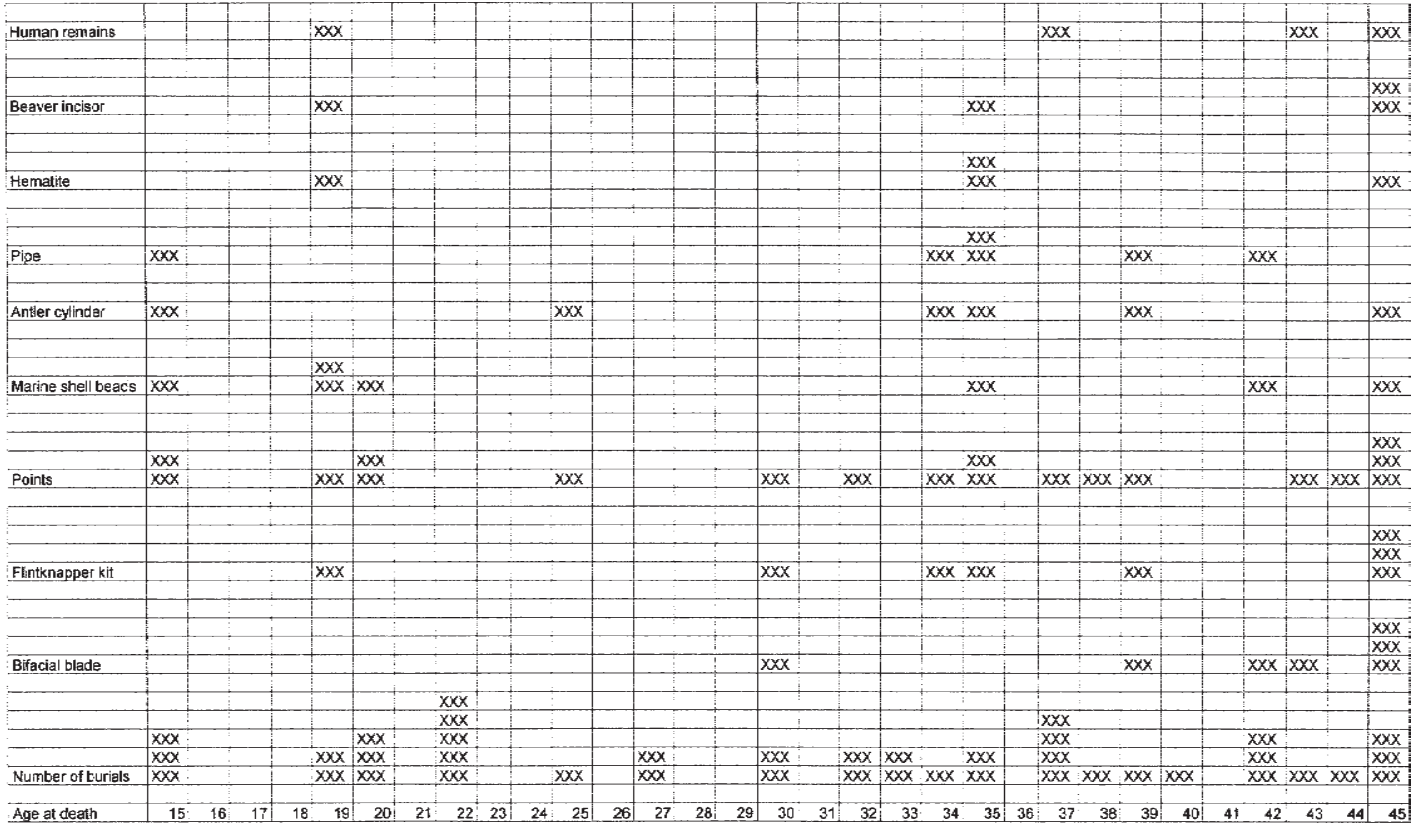


Figure 9.3. Age distribution of common grave good types among adult male burials.

Burial 120, approximately 17 years old and interred with knobbed shell pins and marine shell beads, may be female. If there is a change in grave goods at puberty, it cannot be detected because of the low incidence of artifacts among female burials in general and the small number of burials in the 10- to 15-year range.

The ethnohistorical sources are largely silent concerning the existence of puberty rites among Southeastern Indians. Swanton (1928a:360) states that there is no evidence for any distinctive ritual attending the onset of a woman's first menstruation. Siouan tribes in the Carolina Piedmont had a male initiation ritual, the *huskanaw,* but Swanton (1946:712) reports no male puberty rituals for the Creek or Cherokee. Hawkins (Foster 2003:78s), however, describes a "Ceremony of initiating Youth into Manhood" for Creek males that occurs between the fifteenth and seventeenth years, and Bell (1990:336) reports that Creek boys were given war names at puberty and thereby transformed from a female state into adult men.

Forty-one different types of grave goods were interred with adult males that can be assigned an age. Most are represented in only one or two burials, but nine types occur with four or more burials. In descending order of frequency, they are points, flintknapper kits, large bifacial blades, marine shell beads, antler cylinders, pipes, hematite, beaver incisors, and human remains. Figure 9.3 shows the age distribution of these artifact types and of adult male burials. The latter have a 5-year margin of error, but they nevertheless demonstrate a fairly uniform distribution of deceased individuals across the adult age range. Most of the more common types of grave goods have a fairly even distribution as well, although there is a tendency for some to occur more frequently in older burials. Apparently these artifact types were available to and possessed by adult males of all ages. In contrast, a few artifact types—large bifacial blades, flintknapper kits, and to a lesser extent projectile points—are more likely to be interred with older individuals in their middle to late thirties and forties, with the average age of burials with blades (41.3 years vs. 28.6 years), FKK (36.5 years vs. 29.4 years), and points (32.4 years vs. 27.6 years) being considerably greater than that of adult male burials without these artifacts. We may infer that these three artifact types represent social statuses that were earned through personal effort and achievement and that the process usually took many years. The question of adult male achieved status will be discussed in greater detail in Chapter 11.

As noted earlier, only 5 out of 26 adult female burials were interred with grave goods, and these were limited in variety to pottery bowls, rattlesnake gorgets, knobbed shell pins, and marine shell beads. All of these types also

occurred with subadults. Small sample size means that we cannot identify any patterns in the age distribution of these grave goods. The occurrence of knobbed shell pins in two burials aged approximately 22 and 47 years, however, indicates that this type of artifact at least was used by women throughout their adult lives. The single gorget and single shell bead occurred with an individual approximately 22 years old, while the single pottery bowl occurred with an individual approximately 42 years old.

Biological Pathologies as a Factor in Mortuary Practice

As noted in an earlier section, cranial deformation appears to occur with equal frequency among adult males and females. It is also widely distributed across the site, with two burials in Structure 17 and nine in the habitation zone. The latter occur in five different households (Households 1, 11, 14, 15, and 23) located in the northern, northeastern, and eastern sectors. Only two of the nine reliable burials with cranial deformation have grave goods. In contrast, almost half of all reliable burials (63 out of 141) have grave goods. The difference could be due to sampling error.

There is no evidence that enamel hypoplasia was more strongly associated with one segment of King site society than another. As noted in an earlier section, it is found with equal frequency among adult males and females. It is also widely distributed across the site, being represented in three Structure 17 burials, 2 north plaza burials, and 74 habitation zone burials. Almost every household contained two or more burials with the pathology. It also appears to occur with the same frequency among individuals interred with high-status or exotic grave goods as those without such items.[5]

Periostitis is much less common than enamel hypoplasia (15 percent vs. 64 percent). It occurs with equal frequency among males and females and is represented in six households (Households 2, 11, 14, 15, 23, and 30) widely scattered throughout the habitation zone. Fifteen habitation zone burials have periostitis, but none of the five Structure 17 burials or two north plaza burials with preserved tibia manifest it. Six burials (Burials 34, 49, 65, 92, 101, and 117) interred with high-status or exotic grave goods also have preserved tibias, but none show signs of periostitis. These latter differences may reflect the vagaries of sampling, but the fact that both types of burials—individuals interred in public locations and those with fancy grave goods—lack periostitis raises the possibility that higher-ranking members of the community may have enjoyed better health. Twelve burials have both enamel hypoplasia and periosteal reactions, but the two pathologies are not strongly associated.

Pit Form as a Factor in Mortuary Practice

Simple and stepped burial pits generally have similar associations and spatial distributions. They are equally common among adult males and females and have similar depths and each is widely distributed across the habitation zone and equally common inside and outside domestic structures. The only exception is that stepped pits are more common in Structure 17 than expected. However, with a sample size of 12, three of which occur in Structure 17, we cannot rule out sampling error as a factor.

In contrast, board burials appear to be associated exclusively with males, are significantly deeper than non-board burials (2.2 feet vs. 1.2 feet, $t = 2.7$, $p = .003$), and are unusually common (8 out of 12 examples) in Structure 17. Unfortunately, sample sizes are too small to determine whether board covers are more likely to occur with burials having high-status and exotic grave goods or whether burials with such grave goods tend to have deeper pits. The greater energy expended in digging deeper pits and the association with Structure 17, however, do suggest that board covers may have been an indicator of higher social standing in the community.

Body Position as a Factor in Mortuary Practice

As noted in an earlier section, adult males and females tend to be interred in the same positions, with two exceptions. Only males appear to be interred in the extended position, and flexed and semiflexed males are more likely to be interred on their right side than females.

With the possible exception of bundle burials, all of the more common types of body positions recognized in this analysis appear to be relatively evenly distributed across the site. Extended burials occur in Structure 17 (2) and the plaza (3), but these frequencies singly or in combination are not significantly greater than one would expect given the number in the habitation zone (14). They also appear to be widely distributed among households, with Households 1, 2, 8, 14, 15, and 30 each having at least one extended burial.

Two of the three bundle burials in the collection are from a single household. Burial 166, a tightly flexed, articulated 14-year-old female, and Burial 260, a disarticulated adult of unknown sex, are both located in the outdoor work area of Household 2. Burial 260 was interred at the foot end of Burial 117. Burial 166 was interred in its own pit. Both burials are located within 12 feet of each other. Given the rarity of this type of burial, it is probable that the presence of the two examples in the same household is not due to chance.

All pit forms, except the uncommon shaft-and-chamber type, occur with both flexed and extended burials in relatively equal numbers. The same appears to be true for the various types of flexed body positions, although numbers are very small. There appears, in short, to be no strong association between any type of body position and pit form.

Location as a Factor in Mortuary Practice

The interrelationships between burial location and burial sex and age, pit form, and burial position have been discussed above. Here we look primarily at how location relates to pit form and grave good content.

Pit Form

Structure 17 is quite distinctive in having a high proportion of the more elaborate burial pit forms. The ratio of stepped to simple pits is higher in the structure (3:5) than in the habitation zone (8:55). The difference in the ratio of board to non-board burials in Structure 17 (8:2) and the habitation zone (4:59) is even greater. In addition, both of the shaft-and-chamber burials in the burial sample are located in Structure 17. Among the structure's 10 burials, each has a stepped pit (3), a board cover (8), a shaft-and-chamber pit (2), or a combination of stepped pit and board cover (3).

Pit depth is slightly greater in Structure 17 burials than in subfloor burials in PDS (2.17 vs. 2.09 feet), but the difference is not significant.

Unfortunately, erosion and plowing have impacted the plaza burials located north of Structures 16 and 17 to the point that pit form is obscured in all but two burials, Burials 32 and 39. Both have stepped pits.

Artifacts

The distribution of different types of grave goods across the site is affected by variability in burial preservation resulting from plow disturbance and organic decay. Burials that have been impacted by plowing and erosion may have lost some or all of their grave goods. Plow disturbance increases from north to south and from east to west, and as a result, most grave goods tend to be more common in the eastern and northeastern part of the site. As described in Chapter 7, burials with skeletons showing little organic decay are more likely to have bone and shell artifacts than those showing greater organic decay. Structure 15, for example, has two subfloor burials containing bone tools and shell beads and an average preservation rank of 3.75 for its four inside burials. Structure 23, which has 12 subfloor burials and none with bone tools or shell beads, has an average preservation rank of 1.5.

Table 9.6. Spatial distribution of burials with different artifact types

Artifact Type	Structure 17	Plaza	Inside		Outside	Inside/ Outside?	Household
			PDS	RS			
Iron		1	3		1		1, 2, 15
Blade	2	1	2		4		1, 15
Point	4	3	3	2	13		1, 2, 14, 15, 25
Celt			2	1			2, 23
Spatulate celt					1		2
Discoidal	1	1	1		1		1, 2
Flintknapper kit	3	2	2		3	1	1, 2, 15
Hematite	1		2		4		1, 2, 6
Pottery bowl		1	6		1		2, 23, 25, 26, 30
Pottery jar		2	8		1		1, 2, 8, 23
Partial vessel		1	2		1		2, 15
Pipe	2	1	1		4	1	1, 2, 23
Beaver incisor	1	1	2		1		1, 2, 15
Turkey awl			2		1		2, 15
Baculum			1		3		2, 15
Antler cylinder	1	1	1	1	2		2, 14, 15
Human remains	1		1	1	1		2, 8, 15
Shell gorget		4	3		5		1, 2, 14, 15
Knobbed shell pin			1		5	1	2, 23
Marine shell bead		2	2		21	1	1, 2, 15, 23, 30

Table 9.6 summarizes information on several locational attributes of artifact types from reliable and disturbed burials. It indicates whether burials with a particular artifact type were present in Structure 17 or the plaza; whether they were interred beneath the floors of PDS and RS or outside these structures; and their household affiliation, if known. Only artifact types occurring in three or more burials are listed.

Thirteen different artifact types occur with burials in Structure 17. In addition to those listed in Table 9.6, there was one end scraper, one tabular piece of limestone, one fragment of *Busycon* shell, and one possible bear bone. No artifact types occur exclusively in Structure 17 burials, nor are any especially common. If all Structure 17 burials were adult males, they would represent 20 percent of the biological and artifactual males known from the site. In comparison, 33 percent of the FKK and 25 percent of the blades and pipes occur in Structure 17 burials, but only 18 percent of the points do. Structure 17 burials, however, do tend to have unusually large numbers of points. Three of the

seven burials with 20 or more points are in Structure 17, including Burial 105, which has the greatest number (50).

Several artifact types that are common in the King site burial sample—iron implements, pottery vessels, shell gorgets, knobbed shell pins, and marine shell beads—are not represented in Structure 17. In the latter three cases, this may be due to poor preservation conditions, as the average skeletal preservation rank (2.00) for Structure 17 burials is quite low. Bone and shell grave goods do, however, occur in three Structure 17 burials.

Preservation conditions may also have affected the distribution of burials with grave goods within Structure 17. As described in Chapter 7, the average bone preservation rank of the five burials with grave goods on the north side of the structure is significantly higher than that for the five burials on the east and south sides lacking grave goods. It is possible that any bone or shell grave goods interred with the latter burials may have disappeared through decay.

The information available on the 11 burials located in the plaza north of Structures 16 and 17, unfortunately, is rather poor in many respects. Skeletal preservation (average rank = 2.4) was above average compared with the rest of the site, but five of the burials (Burials 30, 31, 34, 35, and 40) were plow damaged and may have lost skeletal elements as well as grave goods. Burial 40, in fact, has lost most of its lower body and probably a number of artifacts. Field records for Burials 37 and 38, furthermore, are so poor that it is not possible to conclude more than that they were burials and that one may have intruded the other. For these reasons, sex could be identified biologically in only one adult burial, and body position was identifiable in only five cases.

The plaza group includes adults and subadults and probably adults of both sexes. Nine of the 11 burials (82 percent) have grave goods compared with 54 of 127 (43 percent) reliable habitation zone burials. Twenty different artifact types were interred with plaza burials. In addition to the more common artifact types listed in Table 9.6, there were single occurrences of tabular polishing stone, bird-bone tool, split bone tool, cylindrical bone tool, turtle shell, and shell ear disc, and two occurrences of shell spoons. None of the more common artifact types listed in Table 9.6 occur exclusively in plaza burials. Several, however, are relatively more common in the plaza than they are in the habitation zone. The ratio between number of plaza burials and habitation zone burials is approximately 1:21. Among the more common artifact types, the ratio of plaza burials to habitation zone burials is 1:2 for shell gorgets, 1:3 for flintknapper kits, 1:6 for pottery vessels, 1:7 for pipes, and 1:8 for points. None of these frequencies are high enough to permit statistical significance to be determined, but in aggregate they suggest that at least some of the differ-

ences are real. Burial 30 contains the only instance of *Marginella* shell beads in the burial sample.

Knobbed shell pins (seven burials), celts (five burials), and bacula (five burials) are relatively common in habitation zone burials but are not represented in the plaza group. Given their low frequencies in the burial sample, their absence in plaza burials is probably due to sampling error.

Burial 194, located 37 feet south of the central post, is the only other burial in the plaza. It is an adult of unidentified sex, placed in a flexed position on its left side with head to the east. No grave goods accompanied the interment.

Two hundred twenty-eight burials are located in the habitation zone. Including mixed and intrusive burials with poor artifact association, 91 of these have artifacts. In the sample of reliable burials, which is not biased by plow disturbance or artifact mixing, 54 out of 127 burials (43 percent) have grave goods.

With some exceptions, habitation zone burials appear to have been treated little differently from those interred in public places. Only three types of grave goods are unrepresented in habitation zone burials: bird-bone tool, pulley-shaped ear ornament, and *Marginella* shell beads. All of these occurred in a single burial, Burial 30, located in the north plaza. In addition, as noted above, pots, gorgets, and marine shell beads are not represented in Structure 17 burials, and there is a tendency for certain artifact types to occur more frequently in Structure 17 or plaza burials. Finally, there is the fact that a much higher percentage of burials in the plaza have grave goods than burials in the habitation zone.

With two exceptions, all types of grave goods appear to be interred with the same relative frequency inside PDS and RS and outside. Pottery vessels of all types occur almost exclusively with inside burials, while marine shell beads occur almost exclusively in outside burials (Table 9.7). All three of the pot burials identified as outside burials have somewhat ambiguous architectural associations. Burial 74 is located in a heavily eroded area where posthole evidence for the existence of RS is minimal; Burial 93 is located within Structure 15.1 but appears to predate the structure; and Burial 135 partially overlaps RS 2. Both bead burials identified as inside burials are also ambiguous exceptions. Burial 92 was accompanied by a larger number and greater variety of exotic and high-value grave goods than any other known burial at the site. The shell beads in Burial 92 may have been part of a headdress, whereas the beads in most other burials were probably strung as necklaces. Burial 235 is one of only two burials out of 31 interments with beads and out of 25 with pots that have both artifact types, the other being Burial 92.

Pottery vessels and marine shell beads clearly have a distinctive relationship

Table 9.7. Location of burials with pots and marine shell beads relative to primary domestic structures and rectangular structures

	Burials Inside PDS		Burials Inside RS		Outside Burials	
	No.	Percent	No.	Percent	No.	Percent
All burials	65	30	13	6	137	64
Burials with shell beads	2	8	0		24	92
Burials with pots	16	80	1	5	3	15

Note: Table lists reliable, disturbed, and mixed burials.

as grave goods. They almost never occur together in the same burial, and they have very different architectural associations. The tendency for them to occur with subadults of different ages has been described earlier in this chapter. We will come back to this relationship and what it may mean in terms of social organization and ideology in Chapter 10.

A cursory review of grave good distributions in the habitation zone suggests that several artifact types such as iron, bifacial blades, flintknapper kits, marine shell beads, and points are concentrated in the northern portion of the site. Under more thorough examination, however, these patterns fail to hold up. If the habitation zone is divided into northern, eastern, and southern sectors by drawing a line between Structures 1 and 15 and between Structures 21 and 22, there are approximately 109 burials in the northern sector, 102 burials in the eastern sector, and 36 burials in the southern sector. The small number of burials in the latter sector, of course, is the result of greater erosion and plow destruction. A tally of burials with grave goods demonstrates that several artifact types, including those listed above, are indeed relatively more common in the northern sector than in the other two sectors. In no case, however, are the differences statistically significant.

Households vary considerably in the variety and quantity of grave goods that occur in burials. Table 9.8 lists the number of burials with grave goods for six households. In the case of Households 1, 2, 8, and 23, we can be fairly certain that—with the exception of members who may have been interred in Structure 17 or the plaza—most burials representing household members have been identified. This is not the case for Households 14 and 15. These are located at the northern edge of the site and may have additional unexcavated structures and burials. In short, Table 9.8 may not list the full complement of burials with grave goods belonging to these two households.

In general, the number of burials in a household varies with the number of times the residence of the household's founders was constructed (Table 9.8).

Table 9.8. Household distribution of grave good types

Grave Good Type	Household 1	Household 2	Household 8	Household 14	Household 15	Household 23
Copper					1	
Iron	2	1			1	
Blade	1				1	
Asymmetrical blade			1			
Spatulate celt		1				
Celt		1	1		1	2
Point	2	3		3	3	2
Discoidal	1	1				
Flintknapper kit	1	1			2	1
Beaver incisor		1			2	
End scraper					1	
Circular polishing stone	1					1
Tabular polishing stone					1	
Tabular rock					1	
Tabular limestone		1				
Anvil stone			1			
Cupstone			1			
Hematite	1	2			2	
Faceted stone					1	
Pot	3	3	2		1	4
Gravy boat bowl					1	1
Vessel fragment			1		1	
Pipe	1	1			1	1

Continued on the next page

Table 9.8. *Continued*

Grave Good Type	Household 1	Household 2	Household 8	Household 14	Household 15	Household 23
Pipe fragment					1	
Bipointed bone tool	1				3	
Turkey awl		1			1	
Cylindrical bone tool		1			1	
Split bone tool					1	
Eyed bone tool					1	
Baculum		2			1	
Antler cylinders		1		1	2	
Antler tines					1	
Animal jaw					1	
Wolf teeth		1				
Bear bone					1	
Bird-bone fan					1	
Human remains		1	1		1	
Busycon cup					1	
Rattlesnake gorget	1	1			2	
Mask gorget	1			1		
Knobbed shell pin		3				2
Bracket shell pin		1				
Marine shell beads	1	3			6	2
Shell spoon	1	1				
Number of points	13	23	0	10	44	11
Bead units	0	105	0	0	1,086	106

As we might expect, the number of artifact types associated with a household tends to vary directly with the number of burials. Households 14 and 23, however, are exceptions. They have relatively few artifact types. We might also expect the number of burials with grave goods to vary directly with the number of burials identified with a household, but this is not the case. Some households have a much higher percentage of burials with grave goods than others, the range being 28 to 76 percent. Similarly, there is considerable variation in the frequency with which artifact types occur in all household burials, the range being 5 to 47. Looked at another way, Households 2 and 15 have a considerably larger variety of grave goods and a considerably higher incidence of occurrence than any other household. In large part, this is due to the association of the artifact-rich Burials 92 and 117 with the two households—but not entirely.

This latter pattern is reinforced by the quality of grave goods. Household 15 has considerably more exotic artifact types and artifact types that probably had high-status value than any other household. These include copper arrow symbol badges, iron, bifacial blade, flintknapper kit, gravy boat bowl, *Busycon* cup, pipe, and human remains. Households 1 and 2, which have the next largest variety and highest frequency of artifact type occurrence, also have interments with several of these types. Households 8, 14, and 23, on the other hand, have no copper, iron, or bifacial blades and among them only one occurrence of a flintknapper kit, gravy boat bowl, pipe, and human remains.

Points and marine shell beads are two of the most common artifact types in the King site collection, and as we might expect they are found in most household burial assemblages. Household 15, however, has by far the largest number of points and *Busycon* bead units, while Households 8, 14, and 23 generally have few or none.

In summary, Household 15 has far and away the largest, most diverse, and highest-quality assemblage of grave goods of the seven households compared. By these same standards Households 8, 14, and 23 have the most impoverished assemblages. The primary reason that Household 15 has such an impressive assemblage of grave goods is that two burials (Burials 81 and 92) each have a large number of grave goods. Burial 92, as we will see later in Chapter 11, has more artifact types and more exotic and high-value artifact types than any other burial in the King site collection. Burial 81 is not far behind in terms of variety of grave goods and actually may have had more types than are assigned to it in Appendix F.[6] The significance of these burials will be discussed in greater detail in Chapters 11 and 12.

Summary of Bivariate Analysis Results

The preceding analysis has yielded evidence for a number of important relationships between mortuary variables. These can be summarized as follows:

1. At least 10 artifact types are strongly, if not exclusively, associated with adult male burials.
2. No artifact types can be identified as occurring exclusively with adult female burials.
3. Adult males were interred with a much greater variety of nonperishable grave goods than were females.
4. Adult males were much more likely to be interred with grave goods than females.
5. One adult female, interred with several male-associated grave goods related to warfare, probably held a special female warrior status.
6. Among adults, board covers may have been used exclusively with males.
7. Among adults, the extended body position may have been used exclusively with males.
8. Adult males were more often flexed on their right side than females.
9. Burial pit length was significantly greater for flexed adult males than for females.
10. Burials of both sexes appear to have been interred in the north plaza.
11. Burials of all ages were interred in the north plaza.
12. Burials in Structure 17 were probably exclusively adult males.
13. Burial pit depth increased in subadult burials at around age 8 years.
14. Subadults interred with pottery vessels were younger than subadults interred with shell and bone ornaments.
15. Grave goods were not interred with subadults older than approximately 7 years.
16. Adult male–associated grave goods were interred only with individuals older than approximately 15 years.
17. Several artifact types—flintknapper kits, bifacial blades, points, and possibly others—occurred primarily in older adult male burials, suggesting they represent achieved statuses.
18. Subadults were equally likely to be interred within PDS and outside, while adults were more likely to be outside burials.
19. Burial pits in Structure 17 were more likely to be stepped, board covered, or shaft-and-chamber types than were habitation zone burials.

20. Burials with board covers tended to have deeper pits than those lacking such covers.
21. Structure 17 burials were more likely to have flintknapper kits, blades, pipes, and points than were burials in the habitation zone. They also tended to have large numbers of points.
22. Structure 17 burials were not interred with pots or iron and probably not with shell gorgets, marine shell beads, or knobbed shell pins.
23. North plaza burials were more likely to have grave goods than habitation zone burials.
24. Several grave good types—shell gorgets, flintknapper kits, pottery vessels, pipes, and points—were proportionately more common in plaza burials than in habitation zone burials.
25. Pottery vessels and marine shell beads seldom occurred in the same burials.
26. Pottery vessels occurred almost exclusively as grave goods with inside burials, while marine shell beads occurred almost exclusively in outside burials.
27. Two of the three known bundle burials were outside burials associated with Household 2.
28. Household 15 burials have a greater variety of grave goods and a higher frequency of occurrence of grave good types than any other household.
29. Household 15 burials have more high-value grave goods—copper arrow symbol badges, iron, blades, flintknapper kits, gravy boat bowls, *Busycon* cups, pipes, and human remains—than any other household.
30. Household 15 burials have more points and more marine shell bead units than any other household.
31. Households 8, 14, and 23 burials have few grave goods, few types of grave goods, and few high-value artifact types.

Notes

1. In this and the following two chapters, I will make frequent reference to burial patterns reported for Dallas and Mouse Creek phases to support or challenge relationships observed in the Barnett phase King site burial sample. I think these comparisons are appropriate and useful. Although there are some documented differences between the three phases—for example, in the Mouse Creek phase, only infants are interred inside PDS and the extended burial position is numerically dominant, whereas shaft-and-chamber burial pits are relatively common at the Dallas phase Toqua site—the similarities in mortuary patterns and most other facets of material culture are overwhelming.

2. Individuals identified as male or female on the basis of osteological or DNA evidence are referred to as "biological" males and "biological" females.

3. I prefer to use the term *female warrior* for this status, because we cannot be certain that it had precisely the same characteristics and meaning that the War Woman status had for Cherokee in the late eighteenth century.

4. A similar situation may exist at the Coweeta Creek site, where Rodning (2004: Figure 92) reports that 7 out of 21 child burials (<8 years) and 8 out of 17 young adult burials (15–24 years) had grave goods, but only one out of six adolescent burials (8–14 years) had grave goods.

5. The identification of high-status and exotic artifact types—bifacial blades and stone discoidals, for example—is discussed in Chapter 11.

6. Because Burial 81 intrudes Burials 82 and 83, it was not possible to assign five artifact types to it with certainty.

10
Artifact Co-occurrences

Up to this point in the analysis of King site burials, we have looked only at relationships between pairs of variables drawn from the dimensions of sex, age, demography, health status, burial pit form, body position, grave location, and grave goods. These comparisons have revealed a number of patterns in the mortuary program, including contrasts between Structure 17, the north plaza, and the habitation zone; the pervasiveness of differences between the sexes; and changes in mortuary treatment related to age. Recognition of these patterns helps to simplify the variability evident in the burial collection and provides a guide for further analysis.

In this chapter and the next, I expand the analysis to include more complex, multivariate relationships between types of grave goods and between grave goods and other mortuary practices. I will begin this task with a cluster analysis of the grave goods accompanying all 141 reliable burials in the burial sample. Characteristics such as pit form, body position, and site location are not included in this analysis because of the difficulty involved in handling them in a presence/absence format. Also, inclusion of these variables would severely reduce the number of burials that can be used in the cluster analysis. Following this initial cluster analysis, I will consider artifact type co-occurrences separately among each of three age/sex groups: subadults, adult females, and adult males (the latter in Chapter 11). Mortuary practices such as pit form, body position, and grave location will be reintroduced into the analysis of each age/sex group where appropriate.

Very few types of grave goods were interred with adult females, and those

that were occur in only one or two different burials. Subadult burials have a greater variety of grave goods and a greater proportion of subadults were interred with artifacts. Nevertheless, most subadult burials with grave goods have only one or two types. Because of these characteristics, the analysis of adult female and subadult grave goods is not complex, and it is relatively easy to identify and make sense of patterns in artifact co-occurrences.

The picture is quite different for adult males. There is a great variety of grave goods; most burials have grave goods; and many have several different types. This makes for a much more complex analysis. Adult male grave goods thus will be subjected to both multivariate and bivariate analyses. Patterns of artifact co-occurrence that are identified will then be related to other mortuary practices and ultimately to artifact function and meaning as they can be inferred from ethnographic and archaeological evidence.

My goal in this and the following chapter is to identify types of grave goods that frequently occur together or that seldom or never occur together and to explain such patterns. To do this, I have had to make several assumptions concerning the nature of burial ceremonialism and develop a number of descriptive terms and conventions. We need to consider these before proceeding.

The frequency with which two artifact types or other kinds of mortuary practices co-occur in a burial sample can vary between 0 and 100 percent but will usually fall somewhere between these two extremes. Artifact types that frequently co-occur in burials can be said to be associated. Depending upon the frequency of their co-occurrence, we can say that two artifact types or other practices have a weak or strong association. The latter designation will be used for artifact types that have a co-occurrence rate greater than 50 percent. We can also distinguish between positive and negative associations, depending upon whether two artifact types frequently occur together or seldom if ever occur together. If the proportion of two artifact types that co-occur is approximately the same for each (9 out of 10 examples of A occur with B, and 9 out of 11 examples of B occur with A) we can say that they have a mutual or two-sided association. If these proportions or strengths of association are quite different for each artifact type (9 out of 10 examples of A occur with B, but only 9 out of 20 examples of B occur with A), we can speak of an unequal or one-sided association.

Strong associations between artifact types or other mortuary practices imply that some sort of causal relationship exists between the factors causing each to be present in a burial. If we assume that a deceased individual receives primarily those grave goods that are appropriate to the social identities he or she has acquired during his or her lifetime—an assumption that is supported

by the analysis—then these causal relationships must exist between the social identities themselves. What might these causal relationships look like? A 100-percent mutual association between two artifact types would occur if two or more social identities are always acquired at the same time (for example, identities as an adult female and a marriageable female following first menstruation) or a social identity is marked in two or more ways (for example, the transition to male adulthood marked by circumcision and acquisition of a new name). Two artifact types will never occur together in the same burials if the social identities they represent are mutually exclusive (for example, membership in one matrilineal clan automatically excludes membership in any other clan).

In the more common cases, where associations are relatively strong but not 100 percent, the causal relationship between social identities will be more indirect. Among historic Plains Indians, for example, older males who had achieved prominence as warriors were more likely to gain important civil offices than were those males who had lackluster warrior records. The latter statuses were awarded to those individuals who had already demonstrated their abilities (and the assistance of guardian spirits) in warfare.

Unequal associations between grave good types and among other kinds of mortuary practices are common in most societies. There are several kinds of factors that may cause them to occur:

1. Age-related factors. Some social identities may be available to younger individuals, while others may take longer to acquire or develop. Adult males may have several opportunities to participate in war parties at a comparatively young age, whereas the chance to actually kill, scalp, or capture an enemy in battle may come only after several raids. Likewise, older individuals will have had more opportunities to develop long-distance trade contacts or intra-community exchange relationships with peers than will young males.
2. Skill/proficiency-related factors. Competency and skill in certain crafts may take a while to develop. All adult males in a community may flake stone tools from flint, but only those with long experience may develop their skills to the level that they are given social recognition as a "master flintknapper."
3. Necessary prerequisites. Some social statuses may not be available to an individual until he or she has first attained other identities. Individuals may not be allowed to lead or sponsor community religious ceremonies until they have worked their way up through a hierarchy of lesser priestly ranks.
4. Relative availability/abundance of a social identity. Some social identities

may be more limited in availability than others. A ceremonial society may have several members but only one or two leaders. All leaders will be members, but only a few members will be leaders.

When we review these different scenarios, it becomes clear that there are probably relatively few cases in which two social statuses occur completely independently of each other. It follows that there are probably few cases in which any two mortuary practices are not causally related in some fashion and to some degree.

Cluster Analysis

Artifacts represented in the reliable burial sample were analyzed using Ward's hierarchical agglomerative clustering procedure with a Euclidean distance measure. Two different kinds of analysis were run, one with presence/absence data and one with artifact counts. The former produced clusters that for the most part are readily interpretable. The only problem, and it is minor, is that the large number of burials lacking artifacts tend to affect how burials with only one or two uncommon artifact types are clustered. These latter tend to be grouped with burials lacking artifacts at a relatively low level of fusion. In order to determine what impact this distortion had on the overall results of the cluster analysis, a separate analysis was performed using only burials with artifacts. The results of this differed very little from the analysis of the full sample.

The cluster analysis using artifact counts yielded results that were quite different and for the most part unsatisfactory. Two artifact types, points and *Busycon* beads, occur with frequencies ranging as high as 50 and 224 items, respectively. Quantity of points and *Busycon* beads tended to dominate the fusion process, breaking apart artifact clusters that were formed at low and intermediate levels in the presence/absence analyses and assigning their parts to clusters formed on the basis of point and bead frequency. Most affected were burials with a variety of high-status artifacts. Burials 92, 117, and 118, for example, were linked to burials with large numbers of *Busycon* beads and little else, while Burials 15 and 102 were linked to burials having low numbers of points and little else.

While variability in number of *Busycon* beads and points probably does relate to differences in the social persona of interred individuals, it does not seem reasonable that such differences were socially significant enough to override close associations between artifacts such as blades, flintknapper kits (FKK), hematite, clay pipes, and points. In light of these divergences, only the results

of the cluster analysis based on presence/absence data will be described and interpreted.

Once it became clear that a presence/absence approach was better, I experimented with different ways of handling certain artifact types. Cluster analyses were run with all marine shell beads making up a single class and with bead types defined by mollusc species. Stone and clay pipes were assigned to different types or lumped together in a single pipe category. Pottery bowls and jars were handled as different types or lumped into a single pot class. The asymmetrical blade from Burial 49 was handled as a distinct artifact type or merged into the blade category. The best results, in terms of ease of interpretation, were obtained with classes that distinguished different mollusc species, different pipe materials, and different vessel forms and with inclusion of the asymmetrical blade in the bifacial blade category.

The resulting cluster analysis is illustrated in Figure 10.1. A 16-cluster solution has been selected as containing the optimum number of clusters based in part on the large increase in error-sum-of-squares that characterizes fusions above this level and in part on the internal logic of the resulting clusters. The contents of these clusters are listed in Table 10.1.

Cluster 1 includes only Burial 92. Seventeen different artifact types are present in the burial. Six of these—point, antler cylinder, blade, FKK, baculum, and human remains—are shared with Cluster 2 and nine—FKK, blade, point, hematite, baculum, beaver incisor, *Busycon* bead, iron, human remains—are shared with Cluster 3.

Cluster 2 contains nine burials and six artifact types. Points are the defining criterion, occurring in all burials. Antler cylinders occur in three burials, but the other five types occur in only one burial.

Cluster 3 contains seven burials and 17 artifact types (Table 10.2). Flintknapping kits and points are the defining artifact types. All burials have either one or the other and six have both. The cluster forms at a relatively low level of fusion from two clusters, one of which has four burials with FKK, points, and blades, and the other of which has three burials with hematite.

Cluster 4 contains 12 burials and 10 artifact types (Table 10.3). *Busycon* beads and *Olivella* shell beads are the defining artifact types. The cluster is formed from two clusters having predominantly *Olivella* beads in one case and *Busycon* beads in the other. The majority of artifact types are marine shell ornaments—either beads or gorgets. Burial 63, with *Busycon* beads and four animal bone artifacts not present in the other burials, is the most divergent in the cluster.

Cluster 5 contains four burials and two artifact types, both marine shell or-

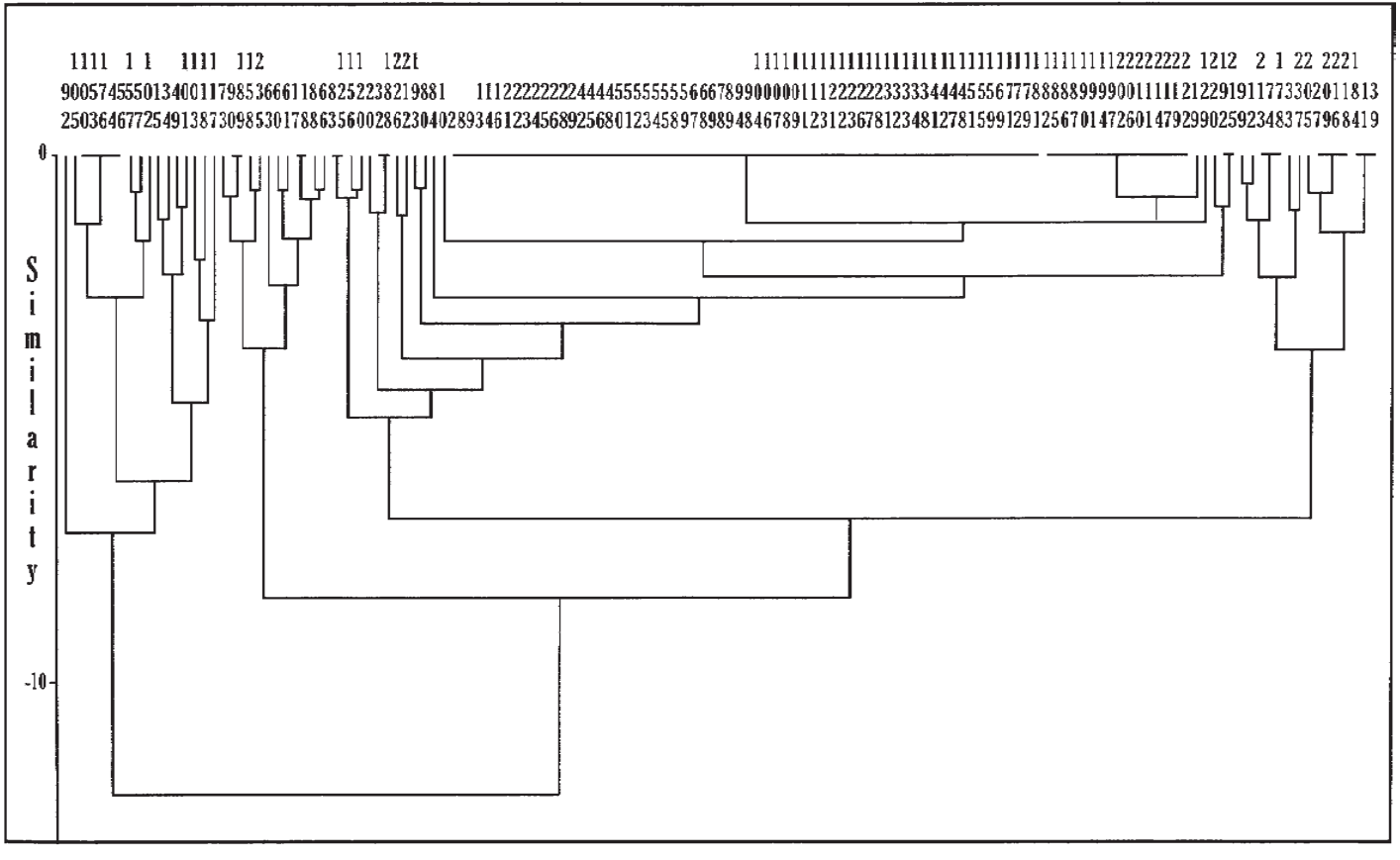


Figure 10.1. Ward's hierarchical agglomerative clustering analysis of 141 reliable burials.

Table 10.1. Results of Ward's hierarchical agglomerative clustering analysis of 141 reliable King site burials

Burial	Sex/Age	Artifacts
Cluster 1		
92	M	Copper arrow symbol badge, iron, blade, FKK, point, *Busycon* cup, pipe fragment, gravy boat bowl, hematite, faceted stone, bipointed bone tool, beaver incisor, turkey awl, antler cylinder, baculum, *Busycon* bead, human remains
Cluster 2		
105	M	Point, blade, human remains
100	M	Point
153	M	Point
176	AM	Point
44	M	Point
56	M	Point
157	AM	Point, antler cylinder, baculum
57	M	Point, antler cylinder
102	AM	Point, antler cylinder, FKK, clay pipe
Cluster 3		
15	AM	FKK, point, blade, hematite, beaver incisor, discoidal, iron
34	AM	FKK, point, blade, beaver incisor
49	M	FKK, point, blade, mask gorget
101	M	FKK, point, blade, discoidal, end scraper, *Busycon* fragment
103	AM	FKK, hematite, beaver incisor, clay pipe, bear bone
118	M	Point, hematite, clay pipe, *Busycon* bead, knobbed shell pin, bracket type pin, baculum
117	AM	FKK, point, hematite, beaver incisor, discoidal, *Busycon* bead, knobbed shell pin, iron, spatulate celt, cylindrical bone tool, human remains
Cluster 4		
73	AM	*Olivella* bead, clay pipe
90	S-A	*Olivella* bead
189	S-A	*Olivella* bead
158	S-A	*Olivella* bead, *Busycon* bead
235	S-A	*Busycon* bead, *Olivella* bead, bowl
63	M	*Busycon* bead, bipointed bone tool, eyed bone tool, animal jaw, bear bone
60	S-A	*Busycon* bead, *Anadara* bead, rattlesnake gorget
61	S-A	*Busycon* bead, *Anadara* bead
17	S-A	*Busycon* bead

Burial	Sex/Age	Artifacts
18	A	*Busycon* bead
88	S-A	*Busycon* bead
66	F	*Busycon* bead, rattlesnake gorget
Cluster 5		
83	F	Knobbed shell pin
125	S-A	Knobbed shell pin
156	F	Knobbed shell pin
120	A	Knobbed shell pin, *Busycon* bead
Cluster 6		
20	I	Mask gorget, jar, dumbbell-shaped polishing stone
32	S-A	Mask gorget
188	A	Mask gorget
Cluster 7		
226	M	Circular polishing stone, tabular polishing stone, mussel shell
212	M	Circular polishing stone, clay pipe
Cluster 8		
193	S-A	Pot fragment, wolf teeth
80	S-A	Pot fragment
Cluster 9		
84	AM	FKK, stone pipe
Cluster 10		
10	S-A	Turkey awl
Cluster 11		
2, 8, 9, 13, 14, 16, 21, 22, 23, 24, 25, 26, 28, 29, 42, 45, 46, 48, 50, 51, 52, 53, 54, 55, 58, 59, 67, 68, 69, 78, 89, 94, 98, 104, 106, 107, 108, 109, 111, 112, 113, 121, 122, 123, 126, 127, 128, 131, 132, 133, 134, 138, 141, 142, 147, 148, 151, 155, 159, 169, 171, 172, 179, 181, 182, 185, 186, 187, 190, 191, 194, 197, 202, 206, 210, 211, 214, 217, 219, 222		
Cluster 12		
19	AM	Iron
Cluster 13		
129	M	Human remains
Cluster 14		
220	S-A	Possible spatulate celt
192	A	Celt
215	A	Celt

Continued on the next page

Table 10.1. *Continued*

Burial	Sex/Age	Artifacts
Cluster 15		
99	S-A	Rattlesnake gorget
12	S-A	Rattlesnake gorget, bowl
213	S-A	Bowl
74	F	Bowl
178	S-A	Bowl
33	S-A	Bowl, shell spoon, jar, pot fragment
237	S-A	Bowl, shell spoon, fan
Cluster 16		
205	S-A	Jar, anvil stone
27	S-A	Jar
209	I	Jar
216	S-A	Jar
218	S-A	Jar
184	S-A	Jar, shell spoon
11	A	Jar, shell spoon
39	A	Jar, shell spoon

Note: A = Adult of unknown sex; S-A = subadult; F = female adult; M = adult biological male; AM = adult artifactual male; I = unknown sex and age.

naments. Knobbed shell pins occur in all burials and, except for one *Busycon* bead, are the only artifact type present.

Cluster 6 contains three burials and three artifact types. Mask gorgets occur in all burials. Only two other artifact types are present, both in the same burial.

Cluster 7 contains two burials and four artifact types. Circular polishing stones are the defining artifact type.

Cluster 8 contains two burials (Burials 193 and 80) and two artifact types. Pot fragments are the defining artifact type.

Cluster 9 contains a single burial (Burial 84) with two artifact types: FKK and stone pipe. If clay and stone pipes are collapsed into a single "pipe" category, Burials 103 and 118 are removed from Cluster 3 and merged with this burial.

Cluster 10 contains a single burial (Burial 10) with only one artifact type, turkey tarsometatarsus awl.

Table 10.2. Artifact types represented in Cluster 3

	Percentage Representation in Cluster	Number in Cluster/Number in Burial Sample
FKK	.86	6/9
Point	.86	6/17
Blade	.60	4/5
Beaver incisor	.60	4/5
Hematite	.60	4/5
Discoidal	.43	3/3
Iron	.29	2/4
Clay pipe	.29	2/5
Busycon bead	.29	2/13
Knobbed shell pin	.29	2/6
Spatulate celt	.29	1/1
End scraper	.25	1/3
Mask gorget	.25	1/4
Bracket type pin	.25	1/1
Cylindrical bone	.25	1/1
Human remains	.25	1/4
Baculum	.25	1/3

Table 10.3. Artifact types represented in Cluster 4

	Percentage Representation in Cluster	Number in Cluster/Number in Burial Sample
Busycon beads	.75	9/13
Olivella beads	.42	5/5
Anadara beads	.17	2/2
Rattlesnake gorget	.17	2/4
Bipointed bone tool	.08	1/2
Eyed bone tool	.08	1/1
Animal jaw	.08	1/1
Bear bone	.08	1/2
Bowl	.08	1/7
Clay pipe	.08	1/5

Cluster 11 contains 80 burials and is characterized by an absence of preserved grave goods. For some reason, the clustering program divided these burials into two clusters, one with 64 burials (Burials 2–181) and one with 16 burials (Burials 182–222).

Cluster 12 contains a single burial (Burial 19) with one artifact type, an iron implement.

Cluster 13 contains a single burial (Burial 129) with one artifact type, human remains.

Cluster 14 contains three burials and two artifact types. There is no reason burials with celts and possible spatulate celts should have been clustered together, because they were coded as distinct types. The possible spatulate celt is listed immediately following celts in the data entry table. This is the only case in which two distinct artifact types, each occurring by itself in a small number of burials, were listed in sequence and merged into a cluster. It is clearly a peculiarity of the clustering program.

Cluster 15 contains seven burials and six artifact types. Bowls are the defining criteria. Four of the artifact types—bowl, jar, pot fragment, and shell spoon—appear to be related to pottery vessel use.

Cluster 16 contains eight burials and three artifact types. Jars occur in all burials. Four burials have one additional artifact type.

Sixteen clusters is not a very satisfying outcome, nor is the large number of clusters with one dominant artifact type and little else or the large number of clusters containing only one or two burials. All of these characteristics result from the fact that most burials contain only one or two artifact types and the fact that many common types—for example, knobbed shell pins, marine shell beads, pottery bowls, and pottery jars—tend not to occur with other types or have mutually exclusive burial distributions.

Clusters 1, 2, and 3 each have a large number of artifact types and share many of them. Clusters 2 and 3 are merged in the cluster analysis, presumably because projectile points are the most common artifact type in each and because all artifact types occurring in Cluster 2 except antler cylinders are also found in at least one Cluster 3 burial. This new Cluster 2/3 then merges with Cluster 1. These share 10 artifact classes, of which seven—point, FKK, blade, beaver incisor, hematite, antler cylinder, and baculum—occur in a fairly large number of burials.

Clusters 15 and 16 are ultimately merged because they share shell spoons and pottery jars and have few additional artifact types. Cluster 15, however, is dominated by bowls, while Cluster 16 is dominated by jars. Burial 33 is the only burial with both vessel forms.

The remaining 10 clusters with grave goods have no artifact types in common except *Busycon* beads, which occur in Clusters 4 and 5. The merger of these 10 clusters in the cluster analysis apparently is based on variability in number of artifact types rather than variability in artifact types. Clusters 10, 12, and 13, each with a single artifact type, are the first to merge with Cluster 11, which has 80 burials and no grave goods. Clusters 14, 9, and 8, with two artifact types each, are next to merge with Cluster 10/11/12/13, followed by Clusters 6 and 7, which have three and four artifact types, respectively. They are followed by Cluster 5, which has only two artifact types but contains more burials, and finally Cluster 4 with 10 artifact types.

Cluster 1/2/3 merges with the other 13 clusters at only the highest level of fusion. Artifact classes held in common include iron, flintknapper kit, clay pipe, columella pin, bipointed bone tool, mask gorget, turkey tarsometatarsus awl, bear bone, and *Busycon* beads. With the exception of *Busycon* beads and knobbed shell pins, however, these artifact types are relatively common in one cluster group but are represented by only one specimen in the other cluster group. FKK, for example, are common in Cluster 1/2/3 but occur in only one burial in Cluster 4–16. In other words, Clusters 1, 2, and 3, characterized by an abundance of burials with points, FKK, blades, beaver incisors, hematite, antler cylinders, and bacula are quite distinct from those dominated by shell beads, gorgets, jars, bowls, shell spoons, celts, and circular polishing stones.

Approximately two dozen burials with artifacts were not included in the cluster analysis because they have been disturbed and may have lost grave goods as a result. Almost all of them can be readily accommodated by the cluster analysis on the basis of the artifacts they contained at the time of excavation. Eleven burials contain many of the more common artifact types in Clusters 1, 2, and 3 (Table 10.4). All 11 appear to resemble Cluster 3 most closely. Burial 223, the female warrior, is very similar to Clusters 1 and 3. She differs from them primarily in not having iron, craft items such as FKK and beaver incisors, or items of a more ceremonial nature such as stone discoidals and pipes. Burial 30, of unidentified sex, most closely fits Clusters 1 and 3 as well but differs from both in having a variety of bone tools and three unique or uncommon artifact types: pottery ear spools, turtle shells, and *Marginella* beads.

Three disturbed burials (Burials 160, 163, and 224) have *Busycon* beads and little else and thus conform to Cluster 4. Four burials (Burials 5, 31, 35, and 36) have rattlesnake gorgets and little else and can be included in either Cluster 4 or 15. Burial 64 has a mask gorget and *Busycon* beads and can be included in

Table 10.4. Cluster 1/2/3 artifact types occurring in disturbed burials

	Burials									Looted Burials	
Artifact Type	30	40	65	81	87	195	223	234	240	3	5
FKK	X		X	X					X	X	X
Point	X	X	X	X	X	X	X	X			X
Blade			X				X	X		X	
Spatulate celt								X			
Beaver incisor				X						X	X
Hematite							X		X		
Discoidal		X									
Clay pipe		X				X					
Stone pipe								X			
Iron		X						X			
Baculum							X				
Antler rod	X		X	X							
Knobbed shell pin						X					
Bracket type pin							X				
Busycon beads	X				X	X					

Cluster 6. Burials 149 and 175 can also be included in Cluster 6 because they have pottery bowls and little else.

Only four disturbed burials fail to conform to any one cluster or combined elements of multiple clusters. Burial 124 was very heavily disturbed and probably lost several artifacts. It has a gravy boat bowl, a Type III hammerstone, which may be part of an FKK, and a celt. Except for the celt, its known contents fit into Cluster 1. Burial 93, with points, a jar, and a vessel fragment, is difficult to assign because of the latter artifact type. Burial 76, with two deer ulna awls and an abrader, is the only burial in the King site collection with deer ulna awls. Burial 85 is unique in combining elements of Clusters 3 (bifacial blade) and 4 (*Anadara* bead). It has also been very heavily plow disturbed and is very likely to have lost artifacts.

Several of the larger clusters have strong sex and/or age associations. Six of the nine burials in Cluster 2 are adult biological males. All of the artifact types represented in this cluster have strong male associations. Three of the seven burials in Cluster 3 are also adult biological males. The cluster-defining artifact types, FKK, point, and blade, as well as several less common artifact types, have strong male associations.

Cluster 4 is the only cluster that is known to include subadults and both

adult males and adult females. Marine shell beads of one species or another are the defining artifact types for the cluster. As costume items, we might expect shell beads to be used by a wide cross section of the community.

Cluster 11 contains 48 adults and 25 subadults, a proportion similar to the burial sample from the site as a whole. The ratio of biological females to males (15:9), however, is considerably higher than for the burial sample as a whole (31:37) and is due at least in part to the fact that male burials are much more likely to have grave goods than female burials.

Six of the seven burials in Cluster 15 are subadults, and one is an adult biological female. It is possible that all burials were females. Six of the eight burials in Cluster 16 are subadults, and two are adults of unidentified sex. Given that one of three reliable and disturbed adult burials with jars is an artifactual male and none are female, it is possible that all burials in Cluster 16 are males. This would make an interesting contrast with Cluster 15. Unfortunately, a strong case cannot be made for the sex association of either cluster.

The small number of burials in all clusters except Cluster 11 means that patterns in the spatial location of cluster burials are difficult to identify and cannot be tested statistically. Nevertheless, the following generalizations are worth noting:

1. All clusters containing three or more burials have representatives in the habitation zone.
2. Clusters with three or more burials tend to occur in households that are widely distributed throughout the habitation zone.
3. The five Structure 17 burials with grave goods are from Clusters 2 and 3, defined by points and by FKK, points, and blades, respectively.
4. The north plaza burial group is represented in four clusters, three of which (Clusters 6, 15, and 16) are defined by shell gorgets and pottery vessels. Cluster 3 contains Burial 34 and probably would have contained Burials 30 and 40 if they had been included in the analysis (Table 10.4).

Sample sizes are too small to allow recognition of any associations between clusters and pit form or body position. Simple and stepped pits, board covers, and the more common burial positions (flexed, partially flexed, and extended) are all represented in most burial clusters that contain three or more burials.

Summary of Cluster Analysis Results

Cluster analysis has provided a number of insights into the nature of grave good associations among King site burials. Some are new, but most were first observed in the bivariate analyses described in Chapter 9.

1. Most burials have either no grave goods or only one or two artifact types.
2. Clusters 1 and 3 are distinctive in having large numbers of artifact types.
3. The grave goods in Clusters 1, 2, and 3 seldom occur with artifact types characteristic of other clusters.
4. Marine shell beads, knobbed shell pins, shell gorgets, jars, and bowls usually occur alone or with only one or two other artifact types.
5. Jars and bowls seldom occur together in the same burial.
6. Pottery vessels seldom occur with marine shell beads and gorgets in the same burial.
7. Adult biological male burials occur in eight different clusters: Clusters 1, 2, 3, 4, 7, 9, 12, and 13. Except for Cluster 4, all burials in these clusters are biological or artifactual males.
8. Adult biological female burials occur in four different clusters. Clusters 4 and 5 are dominated by marine shell costume items, while pottery bowls are the defining criteria for Cluster 15. The largest number of female burials is in Cluster 11, which is defined by a lack of nonperishable grave goods.
9. Cluster 4 is the only one to contain adult males, adult females, and subadults.
10. Marine shell beads, shell gorgets, and pottery jars and bowls are more likely to be interred with subadults than with adults.
11. Structure 17 burials are limited to two clusters (Clusters 2 and 3) with artifacts and one (Cluster 11) without artifacts. The former contain only adult biological and artifactual male burials.
12. Only four burials in the north plaza were undisturbed. They are assigned to four clusters (Clusters 3, 6, 15, and 16), three of which contain mask gorgets, rattlesnake gorgets, bowls, jars, and shell spoons and are dominated by subadults.

Analysis by Age and Sex Category

It is evident from the bivariate analyses in Chapter 9 and the preceding cluster analysis that sex is a major factor in the mortuary treatment of King site burials. Adult males and females share very few types of grave goods and also differ to some extent in grave location, pit form, and body positioning. Adults and subadults also differ with respect to burial furniture. Adult males are interred with a very distinct set of artifacts, and adult females differ from subadults in the paucity of grave goods they have. Given the number and variety of these differences, it makes sense to turn our attention to a consideration of the mortuary variability within each sex/age category—adult male, adult female, sub-

adult. By removing sex and to some extent age as variables, we simplify the task of identifying other dimensions of mortuary variability. Once we have identified those variables that are important within each sex/age category, the task of identifying variables that crosscut age and/or sex should be easier.

Adult Females

The adult female category is a good place to start because mortuary variability is quite limited in this group. Nineteen reliable burials have been identified as adult females on osteological evidence. Grave goods can be identified with certainty in only three of these (Table 10.5). A fourth reliable burial (Burial 138) may have been interred with a bear mandible, but the evidence is equivocal. The burial pit is 2.16 feet deep, but the mandible is located only .46 feet below the base of plow zone in what looks like a separate pit that partially overlaps one wall of the burial pit.

Seven additional adult female burials have been disturbed or are mixed. Only three have grave goods (Table 10.5). Burials 83 and 149 are mixed burials, but each was definitely accompanied by one artifact: a knobbed shell pin in the former and a pottery bowl in the latter. Burial 223 was only lightly impacted by plowing and is unlikely to have lost any grave goods.

Fifty-eight adult burials cannot be identified as male or female on osteological evidence. We can assume that approximately half of these individuals were female. Can they tell us anything about the kinds of grave goods that were interred with adult females? Before we can answer this, we need to identify those burials that are more likely to be male. These include Burials 11, 168, and 192, which were interred in an extended position; Burial 188, which had a mask gorget; and Burial 215, which had a celt.

This leaves nine burials with grave goods that could be female. Burials 140, 143, and 144 are mixed burials and have unreliable artifact associations. The others have the following types of grave goods:

Burial 18—*Busycon* beads
Burial 97—*Busycon* beads
Burial 120—*Busycon* beads, two knobbed shell pins
Burial 36—rattlesnake gorget
Burial 76—sandstone abrader, deer ulna awl
Burial 39—jar, shell spoon

Of these artifact types, only the jar, sandstone abrader, shell spoon, and ulna awl represent potential additions to the sparse inventory of grave goods listed in Table 10.5. Three of them—jar, sandstone abrader, and shell spoon—however,

Table 10.5. Grave goods occurring with adult female burials

	Burial 66	Burial 74	Burial 138	Burial 156	Burial 83	Burial 149	Burial 223
Reliability	Yes	Yes	Yes	Yes	No	No	No
Age	22	42	27	22	47	30	25
Bowl		1				1	
Knobbed shell pin				2	1		
Busycon bead	1						
Rattlesnake gorget	1						
Bear mandible			1				
Points							23
Bifacial blade							2
Hematite							1
Baculum							1
Turtle shell							1
Bracket type pin							1

Table 10.6. Number of adult male and subadult burials with grave goods of the types found with adult females

	Bowl	Rattlesnake Gorget	Knobbed Shell Pin	*Busycon* Shell Beads
Adult female	2	1	2	1
Adult male	0	0	3	9
Subadult	7	5	1	13

have been found also in adult male burials, raising the possibility that Burials 39 and 76 are males. Regardless of how many of the 58 unsexed adult burials are actually female, these burials reinforce the impression that nonperishable grave goods are, for the most part, very uncommon and of limited variety in adult female burials.

Seventy-three percent of reliable adult male burials and 52 percent of subadult burials have grave goods. In contrast, only 21 percent of adult females were interred with nonperishable grave goods. Adult female burials also differ from adult males and subadults in having a smaller variety of grave goods: four or five types (excluding Burial 223) compared with 36 and 16, respectively. The number of adult female burials interred with each of the four artifact types, furthermore, is almost always lower than it is for adult male or subadult burials (Table 10.6).

The evidence is consistent in indicating that grave goods were not an important part of adult female mortuary practices. It is possible, of course, that adult females were interred with an abundance and variety of perishable grave goods, including fur, fabric, and feather costume items and wooden, vegetable fiber, and skin containers and tools. Unfortunately, we will never know how common such items were.

Burial 223 contrasts sharply with the other female burials in quantity and variety of grave goods and in the fact that she has no types in common with them (Table 10.5). The burial contains six different types of artifacts, four of which are usually interred with adult males. The other two artifact types, turtle shell and bracket type pin, are so rare in the King site burial collection that we cannot say much about them other than they are not known to occur with female burials.

Most of the distinctive artifactual characteristics of Burial 223 can be accounted for by identifying her as having a status roughly equivalent to that of the eighteenth-century Cherokee "War Woman." The argument support-

ing this identification was made in Chapter 9 and does not need to be repeated here. To the extent that this interpretation is correct and the status was fairly widespread among late prehistoric/early historic Southern Appalachian societies, we might expect to find other examples of it in the published literature. Among the hundreds of burials reported from Dallas and Mouse Creek phase sites in Tennessee, no females are known to have been interred with large bifacial blades (Lewis and Kneberg Lewis 1995; Polhemus 1987; Sullivan 1986). Four adult females with multiple points are known, however, from Dallas phase components at the type site (40HA1) and at the Sale Creek site (40HA10) (Lewis and Kneberg Lewis 1995:Tables 23.5 and 26.2). Thomas (1996) reports an adult female burial from the Porter site (31WK6) in the western piedmont of North Carolina that was interred with 32 points, two spatulate celts, an FKK, red ocher, shell beads, a shell gorget, and turtle shell. Each of these five burials may have had the status of female warrior, but we should have DNA confirmation of sex before concluding that to be the case.

In light of the paucity of nonperishable grave goods, it may be informative to consider what kinds of artifacts were not usually interred with adult females. Except for pottery vessels and the possibility of deer ulna awls and sandstone abraders, tools and implements were not placed in adult female burials. We may infer from this that there was little or no interest in marking women's gender roles or craft skills with the tools and implements they used. Pottery vessels may have marked individuals known for their potting skills, but this seems unlikely. The vessels in Burials 74 and 149 are not especially fancy or well made. The common placement of pots in subadult burials, furthermore, suggests that craft skill is not what was being indicated by this type of grave good.

Except for Burial 223, adult females were interred with no grave goods other than marine shell ornaments that can be reasonably identified as markers of high status. Material wealth was one component of high status in the King site community, and marine shell beads were one of the major forms of material wealth (see Chapter 11). Among reliable adult female burials, there is only one *Busycon* bead, and it is worth three bead units. This compares with four reliable adult male burials with an average of 67 beads and 190 bead units and six reliable subadult burials with an average of 27 beads and 153 bead units. As measured by marine shell beads, adult females were interred with very little wealth.

Sullivan (2001, 2006) reports that the number of female burials with grave goods at the Dallas phase Toqua and Dallas sites increases with age through the fourth decade and that elderly women on average were interred with a greater

number of artifacts than males of comparable age. This demonstrates, she argues, that women were able to achieve high social standing in their community as they got older, a process that is documented ethnographically in historic Cherokee society and recognized in the status of "Beloved Woman." The adult female burials from King do not seem to conform to this pattern. Few women were interred with grave goods, and those who were had a very small number and variety. Reliable female burials 40 years and older in the King sample, furthermore, average only .22 artifacts, while male burials of similar age average in excess of 20. The near absence of female burials in the 30- to 40-year age bracket may be contributing to the low incidence of grave goods among adult female burials at King, but the fact that only two of nine female burials 40 years and older have grave goods suggests this is not the case. Unlike in the Dallas phase, there is no evidence that females in the King site community were achieving higher social status as they aged.

As noted in an earlier section, adult females appear to have been interred in the same kinds of pits as adult males, with the exception that board covers may be restricted to males. Adult female body positions are also similar to those seen in adult males except that the extended position is probably restricted to males. There is also a tendency for adult female flexed burials to be laid on their left side more than males. Burial 166 is a bundle burial, but the other examples of this position (Burials 113 and 260) are unsexed and could be males. Burial 246 is unusual in that she is the only example of a prone burial at the site and she had been rather severely abused prior to or at the time of death. Hill (1994) reports that the left humerus "showed a crushing injury" and the left ulna and radius had midshaft breaks resembling "parry fractures." In addition, the pit holding Burial 246 contained an unusually large amount of bone, shell, stone, and pottery fragments, suggesting that refuse had been thrown on top of the corpse. This is the only burial at the site known to have received such treatment.

Adult female burials were found in every recognized household on the site and in numbers that correspond with the temporal duration of the household. They also occur beneath the floors of primary domestic structures (PDS) (19 percent) and rectangular structures (RS) (12 percent) and outside (69 percent) these structures with the same relative frequency as adult males. There are no known adult female burials in Structure 17, but Burials 30 and 36, located in the north plaza, could be female.

In summary, adult female burials are seldom interred with nonperishable grave goods, and those that are have, in aggregate, a very limited number and variety of artifacts. Adult females may have had numerous grave goods made

of perishable materials, and some may have been more richly endowed than others, but there is no evidence for this. It is possible that the infrequency of nonperishable grave goods is due in part to the small number of female burials in the 30- to 39-year age range. I see no reason, however, why this should be a factor, given the paucity of grave goods interred with females who died in their forties. With the exception of Burial 223, the female warrior, social status differences among adult females are not given much recognition with grave goods. There is no evidence that adult females, unlike adult males, accumulated more grave goods and possibly more status positions as they got older.

Subadult Burials

Seventy-eight burials are subadults. Fifty-one of these are reliable burials, while the remaining 27 have been disturbed by plowing, intrusive burials, or looting. Twenty-seven reliable burials and six disturbed burials have grave goods (Table 10.7). As noted in the previous section, subadult burials are about as likely to have grave goods as adult male burials and much more likely to have them than adult female burials.

Sixteen different artifact types occur with reliable subadult burials. Disturbed burials yielded many of the same types but no additional ones. The variety of grave goods occurring with reliable burials is much less among subadults than among adult males (36 types) but considerably greater than among adult females (four or five types).

Subadult grave goods fall into two broad categories based on frequency of occurrence: those occurring in several burials and those found in only one burial. The former include pottery bowls and jars, partial vessels, shell spoons, marine shell beads, and shell gorgets. Single-burial artifacts include a possible spatulate celt, a large river cobble used as an anvil possibly in flintknapping, a dumbbell-shaped polishing stone, a turkey tarsometatarsus awl, two bird-bone fans, a knobbed shell pin, and a half dozen or so wolf teeth that appear to have been strung as a bracelet. Most of these latter artifact types are uncommon in the King site burial sample as a whole. The possible spatulate celt, cobble anvil, dumbbell-shaped polishing stone, and wolf dentition are, in fact, unique specimens. The awl is broken at the proximal end and was not recognized at the time of burial excavation as a result of wet soil conditions and poor skeletal preservation. Given these circumstances, we cannot rule out the possibility that it was an accidental inclusion in pit fill rather than an intentional grave good.

Grave goods occurring with subadults also can be divided into two groups according to function. The possible spatulate celt, dumbbell-shaped polishing

Table 10.7. Reliable and disturbed subadult burials with artifacts

Burial	Age	Disturbed	Possible Spatulate Celt	Dumbbell-Shaped Stone	Cobble Anvil	Bowl	Jar	Pot Fragment	Turkey Bone Awl	Bird-Bone Fan	Wolf Teeth	Rattlesnake Gorget	Mask Gorget	Knobbed Shell Pin	*Busycon* Bead	*Anadara* Bead	*Olivella* Bead	Shell Spoon
10	7	No							1									
12	2	No				1						1						
17		No													5			
20		No		1			2						1					
27		No					1											
32	4	No											1					
33	3	No				2	1	1										1
60	3	No										1			76	1		
61	3	No													103	2		
80	4	No						1										
88	6	No													27			
90		No															1	
99	4	No										1						
125	4	No												1				
158	5	No													12		1	
178	3	No				1												
184	3	No					1											1
189		No															2	
193	3	No						1			4							

Continued on the next page

Table 10.7. *Continued*

Burial	Age	Disturbed	Possible Spatulate Celt	Dumbbell-Shaped Stone	Cobble Anvil	Bowl	Jar	Pot Fragment	Turkey Bone Awl	Bird-Bone Fan	Wolf Teeth	Rattlesnake Gorget	Mask Gorget	Knobbed Shell Pin	*Busycon* Bead	*Anadara* Bead	*Olivella* Bead	Shell Spoon
205		No			1		1											
209		No					1											
213		No				1												
216	4	No					1											
218		No					1											
220	7	No	1															
235	3	No				1									26		2	
237	0.75	No				1				2								1
31	3	Yes										1			100			
35		Yes										1						
64		Yes											1		224			
110	3	Yes													14			
175	1	Yes				1												
224	5	Yes													13			

stone, cobble anvil, turkey tarsometatarsus awl, shell spoons, and pottery bowls and jars were all manufactured or in the process of being manufactured for use as tools or weapons. Even the vessel fragments may have served as scoops, pot lids, or cooking utensils (Hally 1983). The shell gorgets, shell beads, knobbed shell pins, bird-bone fans, and wolf teeth, on the other hand, are all items of personal adornment.

With the exception of the infant (age .75 years) with the cut bird-bone fan in Burial 237, the individuals interred with items of personal adornment ranged in age between approximately 2 and 6 years and were presumably old enough to have actually worn them—at least on certain occasions. The burials containing the polishing stone and anvil (Burials 20 and 205) cannot be assigned a specific age. The spatulate celt–like artifact and the bone awl occur with individuals who may have been old enough (approximately 7 years) to have actually used them. The eight pot burials with identifiable age, on the other hand, range between approximately .75 and 4 years. These individuals, presumably, were not old enough to actually use the vessels as tools. This suggests that pots were placed in subadult burials because of their symbolic value and not because they were the personal possessions of the deceased or used by them.

Pottery jars and bowls were interred with both subadults and adults but more commonly with the former. Fourteen reliable and disturbed subadult burials contain either bowls or jars, while only five adult burials contain them. Burial 92 is not included in the latter number because it has a gravy boat bowl, which was used for ritual purposes only.

Among subadults, pottery jars and bowls appear to have been used as grave goods only for younger children. Eight reliable and disturbed subadult burials between 1 and 4 years of age (average age = 2.5 years) have pottery vessels, but none of the 25 older subadults that can be assigned an age have them.

Bowls and jars occur with about equal frequency among subadults but tend not to occur together in the same burial. Six reliable and one disturbed burial were accompanied by pottery bowls, while seven different burials had jars. Adults show this same pattern. Burial 33, a subadult accompanied by two bowls and a jar, was the only individual of any age to be interred with both vessel forms. It also was one of only two burials in the collection to be interred with more than one vessel, the other being Burial 20, a subadult with two jars.

Thirteen of 14 reliable and disturbed subadult burials with pots are inside burials. The exception, Burial 33, is located in the plaza. Adult burials do not show this same association. Among the five reliable and disturbed adult burials with bowls or jars, one is inside, two are located outside PDS and RS, and one is located in the plaza.

Reliable and disturbed subadult burials with pots are associated with Households 1, 2, 8, 23, 25, 26, and 30. These households are found throughout the eastern sector of the habitation zone as well as in the northern and southern sectors. Household 23 has the most subadult pot burials with four, followed by Household 1 with three. The high incidence of pottery vessels in Household 23 burials is noteworthy in light of the fact that marine shell artifacts are absent from all but one of the household's 11 reliable subadult burials.

Mussel shell spoons occur in pots associated with three reliable subadult burials. Decay may have destroyed shell spoons in other burials. The fact that they are known to occur only inside pottery vessels suggests that their function was intimately tied to that of pot use.

Pot fragments occurred in three burials. Burial 33 is located in the plaza; Burials 80 and 193 are inside interments, like pot burials. The three burials all fall within the age range of pot burials, but their average age (3.33 years) is greater.

Eight reliable and four disturbed subadult burials contained marine shell beads, including *Busycon, Anadara,* and *Olivella* varieties. The presence or absence of marine shell beads is probably affected to some degree by preservation conditions in burial pits. The mean bone preservation rank of the eight reliable burials with beads is 2.62, significantly higher than the 1.68 mean for the 43 reliable subadult burials lacking beads. Only one of the former had a bone preservation rank below 2.0, suggesting that some burials lacking beads may have lost them through decay.

Six reliable and four disturbed subadult burials had *Busycon* beads. Bead frequencies range between 5 and 224, with most burials having more than a dozen beads. In all 10 burials, beads were found in the head/neck area, indicating that they were strung as necklaces.

Two reliable burials contained *Anadara* beads and four contained *Olivella* beads. These bead types each occurred in two burials with *Busycon* beads but not with each other. No burial had more than two *Olivella* or *Anadara* beads. The location of these bead types was seldom specified on burial forms, presumably because they were not distinguished from *Busycon* beads in the field. The single *Olivella* bead in Burial 158, however, was located near the distal end of the right ulna and was probably not part of a necklace.

Busycon beads occur with approximately the same number of reliable and disturbed adult burials (11) as subadult burials. A small number of adult burials also have *Anadara* and *Olivella* beads, but *Marginella* and *Noetia* beads are found only with adults. The latter are so rare (one burial each), however, that we cannot be certain that their presence only among adults is not due to sampling error.

Among subadult burials that can be aged, marine shell beads appear to have been used as grave goods only for older children. Eight reliable and disturbed burials between 3 and 6 years of age (average age = 3.9 years) have beads.

Subadult burials with shell beads have a strong tendency to be located outside domestic structures. Among reliable and disturbed burials with beads, nine are located outside, one (Burial 235) is inside, one (Burial 31) is in the plaza, and one cannot be identified as inside or outside with certainty. Burial 235, the exception, is also the only subadult to be interred with both shell beads and a pot. The distribution of reliable and disturbed adult burials with shell beads is also lopsided, with 12 outside burials and one inside burial (Burial 92).

Burials with beads are somewhat difficult to associate with specific households because of their tendency to be located outside PDS. Households 2, 6, and 30 each have one reliable subadult burial with beads, and Household 15 has two. No disturbed burials with reliable bead associations can be identified with a specific household. Households 6, 15, and 30 are located in the northern and northeastern sectors of the habitation zone, while Household 2 is in the eastern sector.

Eight reliable and disturbed subadult burials contained *Busycon* shell gorgets. Because these artifacts are made from fairly large pieces of shell, they may be less likely than the smaller beads to totally disintegrate as a result of weathering. Comparison of the preservation rank of the five reliable subadult burials with gorgets and the 46 burials without gorgets seems to bear this out. The mean rank for the former (2.60) is higher than that for the latter (1.74), but the difference is not significant. Nevertheless, we cannot rule out the possibility that gorgets have disappeared from one or more burials as a result of weathering.

Shell gorgets were more frequently interred with subadults than adults, but the difference is not significant. Among subadults, gorgets appear to be restricted in occurrence to younger individuals. Five reliable and disturbed burials younger than 5 years (average age = 3.2 years) have gorgets, while none of the 25 older subadults do.

Among reliable and disturbed subadult burials with gorgets located in the habitation area, two are inside burials and three have unidentifiable architectural associations. Burials with gorgets can be reliably assigned to only Households 1 and 2, both located in the eastern sector of the habitation zone. Three of the five subadult burials in the plaza have gorgets, a number that is greater than we might expect.

For obvious reasons, we cannot say much about the seven artifact types that occur in only a single burial (Table 10.7). The burials occur in five different households, distributed throughout the northern and eastern sectors of

the habitation zone. The possible spatulate celt, knobbed shell pin, and bone awl are the sole grave good in their respective burials. The others occur with at least a pottery vessel.

Identifiable examples of the stepped pit form (three) and board covers (two) are so few in number that no patterns in their distributions relative to presence/absence of grave goods or type of grave goods can be detected. Body position can be determined in 31 of the 78 subadult burials. All four extended burials had grave goods. Three had shell gorgets, suggesting that there might be a relationship between this body position and household wealth or high status. More interesting is the fact that two of the extended burials had rattlesnake gorgets. The extended body position is strongly associated with adult males in the King site burial sample, but rattlesnake gorgets may be female-associated grave goods. Possible solutions to this seeming inconsistency were discussed in Chapter 9.

A number of Ward's cluster analyses were run on the reliable subadult burial sample. Analyses differed with respect to whether or not burials lacking grave goods were included and whether the various pottery vessel shapes, shell bead species, and gorget forms were handled as separate artifact types or combined into the generic types of pot, shell bead, and gorget. Inclusion of the 27 burials lacking artifacts tended to group burials as much on the basis of similarities in number of artifact types as on the basis of shared artifact types, and the results do not make intuitive sense. The best results, in terms of conformity to what we already know about artifact associations among subadult burials, were obtained by excluding burials lacking artifacts and by distinguishing jars, bowls, *Busycon* beads, *Olivella* beads, *Anadara* beads, rattlesnake gorgets, and mask gorgets as separate types of grave goods. The results are illustrated in Figure 10.2 and outlined in Table 10.8. A four-cluster solution makes the most sense.

Cluster 1 contains only burials with shell beads. The cluster subdivides along the lines of shell species. Only two non-bead artifacts—a rattlesnake gorget and a pottery bowl—are included in the cluster. With the exception of the bowl, all artifact types are made of marine shell.

Cluster 2 contains almost exclusively burials with jars. Mask gorgets are the only other artifact type that occurs in more than one burial.

Cluster 3 contains five burials that, with one exception, have only a single unique type of grave good. Burial 193 has two artifact types and shares one of them with Burial 80. The cluster is sort of a catch-all category for burials that do not fit in any other group.

Cluster 4 contains almost exclusively burials with bowls. Shell spoons and

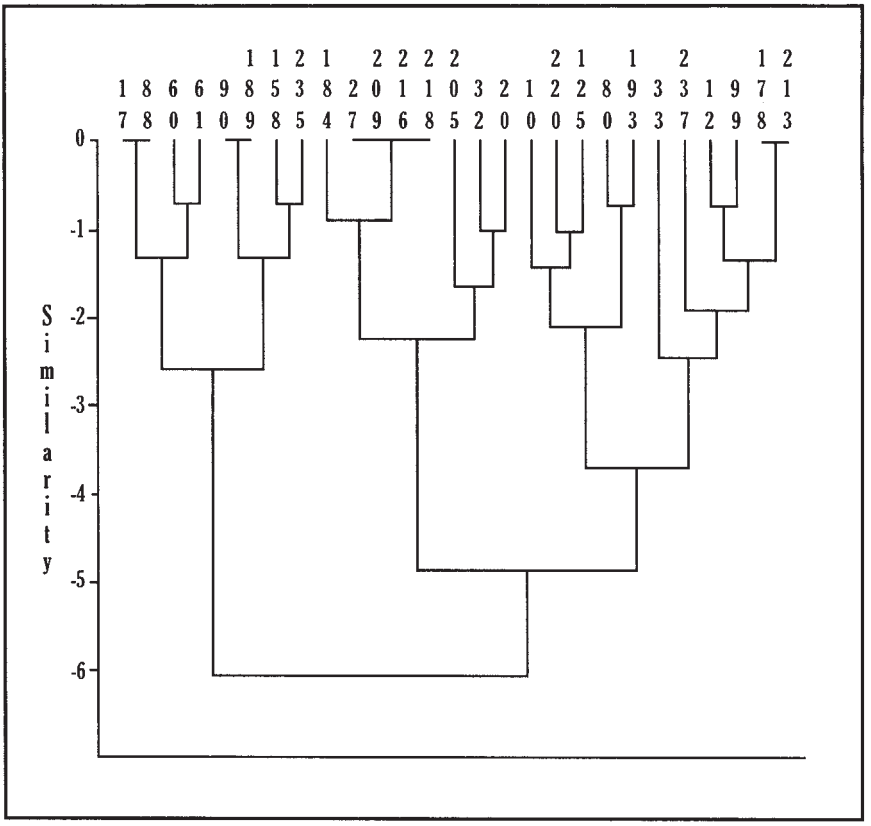


Figure 10.2. Ward's hierarchical agglomerative clustering analysis of 27 subadult burials.

rattlesnake gorgets are the only other artifact types that occur in more than one burial.

The cluster analysis confirms what we saw in the cluster analysis performed on all reliable burials (Figure 10.1, Table 10.1) and in the description of subadult grave goods presented above. Beads tend not to occur with pottery vessels; jars and bowls tend not to occur together; and gorgets can occur with both beads and pots. The analysis identifies the shell bead cluster as the most distinctive, but this is probably only because the jar and bowl clusters are linked by their common possession of shell spoons, which are frequently found inside pottery vessels used as grave goods. Of interest are the cluster assignments of Burials 235 and 33. The former, the only burial combining both beads and pots, is placed in Cluster 1 with bead burials. Burial 33, the only burial combining the jar and bowl vessel forms, is placed in Cluster 4 with bowl burials.

Table 10.8. Results of Ward's hierarchical agglomerative clustering analysis of 27 subadult burials

Burial	Artifacts
Cluster 1	
17	*Busycon* bead
88	*Busycon* bead
60	*Anadara* bead, *Busycon* bead, rattlesnake gorget
61	*Anadara* bead, *Busycon* bead
90	*Olivella* bead
189	*Olivella* bead
158	*Olivella* bead, *Busycon* bead
235	*Olivella* bead, *Busycon* bead, bowl
Cluster 2	
184	Jar, shell spoon
27	Jar
209	Jar
216	Jar
218	Jar
205	Jar, cobble anvil
32	Mask gorget
20	Mask gorget, jar, dumbbell-shaped polishing stone
Cluster 3	
10	Turkey bone awl
220	Possible spatulate celt
125	Knobbed shell pin
80	Vessel fragment
193	Vessel fragment, wolf dentition
Cluster 4	
33	Bowl, shell spoon, jar, vessel fragment
237	Bowl, shell spoon, bird-bone fan
12	Rattlesnake gorget, bowl
99	Rattlesnake gorget
178	Bowl
213	Bowl

It is not clear from a visual inspection of Cluster 2 and 4 artifact content why Burial 33 was assigned to the latter and not the former.

If bowls and rattlesnake gorgets are female-associated grave goods, then it is possible that Cluster 4 burials are all female. Likewise, if jars and mask gorgets are male-associated grave goods, Cluster 2 burials may all be male. Since

a bowl and a rattlesnake gorget each occur in a Cluster 1 burial, we also might expect that all burials in this cluster are female. This generalization, however, seems less likely, as marine shell beads, which are restricted to this cluster, are known to occur with adult males.

In conformity with the age relationships discussed above, Cluster 1 burials are slightly older on average than those in Clusters 2 and 4. Sample sizes, however, are too small in this case to rule out sampling error as a factor.

There is no evidence that any type of burial pit elaboration or body position is strongly associated with any of the clusters. Simple and stepped pit forms are both represented in Cluster 1 and 2 burials. Board covers are represented in at least one burial in Clusters 1 and 3. Flexed and extended body positions are represented in all four clusters.

Discussion

Evidence was presented in Chapter 9 indicating that burials older than approximately 7 years tend to be interred in pits that are at least .5 feet deeper than the pits of younger burials and that grave goods were not interred with subadults older than approximately 7 years. The latter observation lends support to the supposition that burial pit depth increased at around 8 years rather than later or gradually with increasing age. The possibility that these two changes in mortuary practices occurred at the same time suggests, furthermore, that they are causally related. I suggest that they both mark a single age-related change in the status of subadults that was recognized by the King site community. There is no mention of any status change or rite of passage in the Southeastern ethnohistorical documents, however, that can be equated with these changes.

In the absence of evidence to the contrary, we may conclude that this status change was marked for both males and females. Furthermore, because most of the artifact types commonly interred with subadults were also interred with adults, we cannot conclude that they were considered appropriate grave goods only for young subadults. We can say only that they may not have been considered appropriate for the years between approximately 7 and 15.

We also saw in Chapter 9 that subadults with pots were on average younger than individuals with shell and bone costume items, and this was interpreted to mean that the King site inhabitants may have recognized another rite of passage change in their children at around 4 years of age. Drawing on the information presented above it is now possible to explore this and other age/sex/artifact relationships further.

A relatively large number of reliable and disturbed subadult burials (25)

have pots and/or marine shell beads. The sample is large enough that four patterns can be recognized in the way these artifact types are distributed among burials.

1. Individuals interred with jars and bowls tend to be younger (average 2.5 years) than those interred with marine shell beads (average 3.9 years).
2. With one exception, jars and bowls do not occur in the same burials as beads.
3. Burials with bowls and jars located in the habitation zone occur only beneath the floors of PDS, while, with one exception, burials with shell beads occur only outside domestic structures.
4. With one exception, jars and bowls do not occur in the same burials.

The first three patterns together suggest that funerary practices for some children changed at around 3–4 years. Pottery vessels and inside interment evidently were considered to be appropriate mortuary treatments for individuals under that age, while marine shell beads and interment outside domestic structures were considered appropriate for older individuals.

Burial 235, with a bowl, shell beads, and a subfloor location, does not conform to two of these patterns. It is possible that this child, with a skeletal age of approximately 3 years, was in the process of making the age-related status change when he or she died and as a result was interred with both artifact types in recognition of the transitional state.

Southeastern ethnohistoric sources make no mention of any rite of passage for males and females at around age 4 years, but there are indications that a status change did occur at about that time. Swan (Swanton 1928a:363) reports that among the Creek, "[t]he invariable custom is, for the women to keep and rear all the children, having the entire control over them until they are able to provide for themselves." This seeming unremarkable observation takes on significance in the context of Timberlake's statement that among the Cherokee, "[a]t the age of 4 or 5, boys come under the supervision of their fathers or elder brothers and learn to handle bows and arrows, while girls help their mothers and elder sisters" (Swanton 1946:714).

Bell's (1990) ethnographic research with Oklahoma Creek indicates that present-day Creek recognize the same kind of status change in young males. Her insights into Creek beliefs concerning childhood and gender provide a logical basis for the changes we see in King site mortuary practices at around age 3–4 years. According to Bell (1990:335), the primary role of women is that of "foodmaker" or cook, while that of men is "townsmen" or "warriors." This

distinction is central to Creek social beliefs and is given special meaning in the case of infants. Creek babies of either sex are considered to be female: "The Unmarked category of Creek life is female. Men are 'made' through ritual processes that separate them physically and existentially from their mothers. A Creek baby is considered to be female and part of its mother, suckling the *sofki*-like milk from her body, as did the sons of Corn-Mother. In the Creek idiom, babies. . . . have no bones. Creek babies of either gender are female and ideologically lack the 'phallus.' That is, they are female until transformed into men" (Bell 1990:336). Male children are transformed into men at puberty when they receive a war name from their father's clan, but an earlier step in the transformation occurs when babies begin to speak.

> [W]hen the child begins to speak, primordial (female) knowledge is forgotten and the founding connection with the mother is severed. When a child speaks, it is defined as a visible social being, under control of male social ordering.
>
> Until the child talks, it is carried almost exclusively by mothers, grandmothers, and sisters. "It has no bones." When it begins to speak coherently, it demonstrates its control by male defining order and is almost immediately encouraged to walk by itself—it now has "bones." Older siblings are scolded for carrying a "speaking child." The act of speaking Creek forces an initial separation between child and mother because it "gives the child bones." For Creek, bones are equivalent to wood and other hardened implements identified with males [Bell 1990:338].

We will probably never know for certain what meaning the changes in grave goods and burial location described above had for the inhabitants of the King site. A reasonable supposition, though, is that they symbolized a transition not unlike that described by Bell for the Oklahoma Creek: a transition from a stage of childhood marked by maternal supervision and identity with the female gender, the mother, and the maternal household to a stage in which other adults took increasing responsibility for socialization and in which children—at least male children—began to identify with the larger social world of men and community.

Several features of King site mortuary practices are logically consistent with this interpretation. As tools used in food preparation, bowls and jars would have been an appropriate symbol of the infant's "female" nature. Interment within the primary residential structure also would have been an appropriate symbol of the infant's close association with its mother and the mater-

nal household. As costume and wealth items, marine shell beads, on the other hand, are more likely to have derived their meaning in the social context of the community. Interment with beads and in locations outside the PDS may have symbolized the child's new ties with the larger community. Speech acquisition in humans generally begins during the second year of life. Present-day Creek—and their prehistoric forebears—may apply a more rigorous definition to coherent speech, however, which could postpone its acquisition to age 3 or 4.

One of the problems with interpreting these several mortuary practices as reflecting two stages in the life history of King site children is that many subadult burials do not have age-appropriate mortuary characteristics. While there are seven reliable subadult burials under approximately 5 years of age interred inside PDS with pottery vessels, there are four in this same age range interred inside PDS that lack pots. And while there are four reliable subadult burials in the 3- to 7-year age range with marine shell beads interred outside domestic structures, there are also five reliable burials in this age range that are interred outside and lack shell beads. How are we to explain these burials? If all infants were closely identified with their mothers and the female gender and if this identity was believed to change at around 3–4 years of age, why were these beliefs not given symbolic expression for all individuals? A number of different answers can be given to this question, but none is entirely satisfactory.

To begin with, it is reasonable to suppose that only biological male children went through this gender transformation and had their gender status symbolically expressed with pottery and shell bead grave goods and burial location. This explanation is supported by the relatively equal numbers of inside burials with (seven) and without (four) pots and outside burials with (four) and without (five) shell beads. There are, however, some problems with this solution. To begin with, rattlesnake gorgets are found with one inside pot burial and one outside bead burial. As noted elsewhere, rattlesnake gorgets may be associated with female burials. In addition, several inside burials have pottery bowls, which may be a type of grave good associated with females. Wouldn't jars, which may be associated with males, be a more logical choice if all inside burials with pots were biological males? Finally, the fact that marine shell beads occur with adult females suggests that the artifact type was not restricted to male burials.

We cannot rule out the possibility that it was female subadults who were interred inside PDS with pots and outside with beads. This alternative, however, seems unlikely for several reasons. To begin with, it was males who were presumably changing their gender status, not females. Second, one inside burial with a pot and one outside burial with beads also have mask gorgets, which are

likely to be male grave goods. Finally, seven inside burials have jars, which may be male grave goods.

Another possible explanation is that pots and beads had meanings and communicated types of status in addition to gender. This seems unlikely in the case of pottery jars and bowls because there is nothing unusual about the subadult burials containing them. They are widely distributed throughout the habitation zone in at least seven households. The pots themselves are ordinary domestic vessels. It is difficult, therefore, to argue that they were markers of household wealth or high status, and, because the deceased were too young to make or use pottery vessels, it is unlikely that they represented potting or culinary skills. Marine shell beads are a different story. They almost certainly had ideological and symbolic associations that went beyond their use as items of costume. *Busycon* beads may have had symbolic associations with the *Busycon* conch itself, and shell beads were important costume elements in Southeastern Ceremonial Complex (SECC) depictions of mythological characters. The religious beliefs underlying these associations may have influenced decisions regarding the use of shell beads as grave goods.

Wealth may also have been a factor in decisions to place shell beads in burials. Marine shell beads were, in some manner, costly to procure because they were made of shell imported from the South Atlantic or Gulf coast. A person's ability to obtain shell beads was probably determined by his or her personal material wealth and trading contacts or those of his or her household. To the extent that possession of beads depended upon one's access to material wealth, we might expect that one of the more important functions beads had was to advertise wealth. This could be accomplished by wearing the beads, having one's children wear them, and by using them as grave furniture. We see only the latter use directly in the archaeological record. Distributional evidence reviewed in Chapter 12 demonstrates that households differed greatly in the amount of shell wealth interred with the dead. It is likely, then, that household wealth and the desire to display it were factors involved in the decision to use shell beads as grave goods in subadult burials. It was not the only one, however, as there are subadult burials lacking shell beads even in the wealthiest households.

The mutually exclusive distribution of pots and beads among subadult burials ultimately comes down to two alternative explanations. In one, changes in type of grave goods and burial location at 3–4 years are mandatory for all individuals of one sex—presumably males. In the other, grave good type and burial location may express several different shared beliefs and values, and mourners have some flexibility in deciding whether to express them or not. In other

words, the belief that male children change gender at around 3–4 years can be given physical symbolic expression but does not have to be. Shell beads can be placed in a burial to express this belief or to demonstrate personal or household wealth, but not all mourners will have the ability or feel the need to do so.

I think the latter type of explanation is the correct one, and I base this on the different spatial distribution of subadult burials with pots and beads (Figure 10.3). Pot burials are widely distributed throughout the habitation zone. Burials with beads, in contrast, are largely restricted to the northern third of the site, including the north plaza. The latter distribution could be due in part to differential preservation conditions, since human skeletal preservation was significantly greater in the northern half of the site. Cultural factors, however, appear to be at least as important, since the great majority of subadult burials with beads in the northern part of the site are located in the immediate vicinity of Structure 15. The important point, though, is this: if interment of pots and beads is determined solely by the age of an individual—older or younger than 3–4 years—the two artifact classes should have similar distributions across the habitation zone. The fact that they do not indicates that at least one other factor is involved in decisions to use them as grave goods or not.

The distribution of bowls and jars and marine shell beads among adults conforms in most ways to that among subadults and therefore may be said to strengthen the patterns seen in the latter. Eighteen reliable and disturbed adult burials have either shell beads or pottery jars or bowls, but none have both. Thirteen of 14 adults with shell beads are outside burials. These relationships indicate that pots and beads have mutually exclusive symbolic associations and that beads are related symbolically to outside burial. Only in the case of pottery jars and bowls, which occur in two outside adult burials, do adult mortuary practices appear to really differ from the subadult pattern.

Jars and bowls also have an interesting distribution among subadults. Of the 14 reliable and disturbed subadult burials with one or the other vessel form, only Burial 33 has both. This situation could simply reflect the fact that multiple pots were not considered to be necessary or appropriate grave goods for subadults, or it could be due to other more interesting factors. It is possible, for example, that bowls are a female grave good and jars are a male grave good. Among adult burials at King, bowls are known to occur only with adult females (two burials) and jars are known to occur only with adult males (one burial). One subadult burial (Burial 12) with a bowl has a rattlesnake gorget; another (Burial 20) with a jar has a mask gorget. As we have seen, there is some

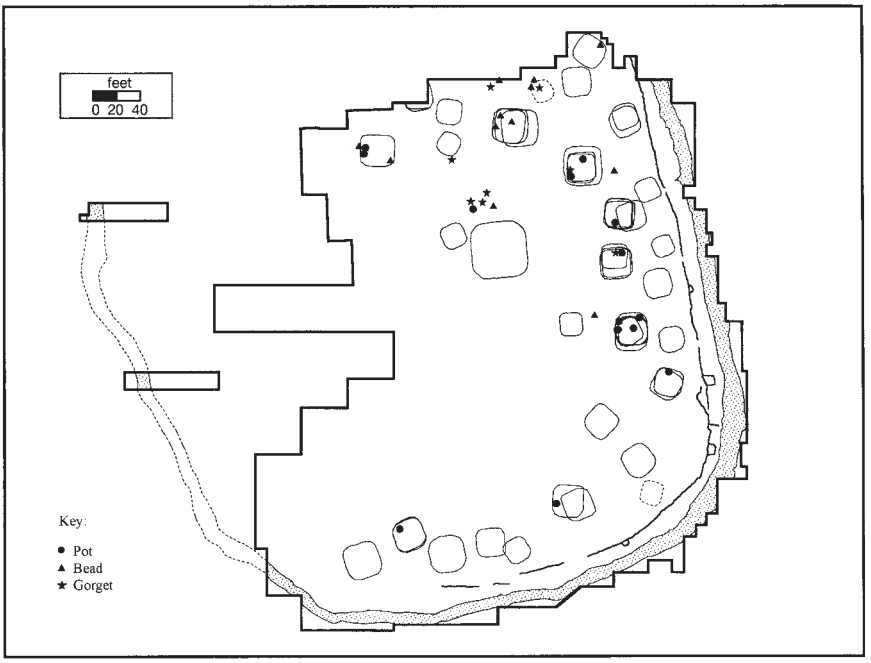


Figure 10.3. Spatial distribution of subadult burials with beads, pots, and gorgets.

evidence to suggest that the former gorget type is associated with females and that the latter is associated with males.

It is also possible that the mutually exclusive distribution of jars and bowls relates to descent group affiliation. If King site society was divided into moieties, each vessel form could be symbolic of a different moiety. This explanation can be rejected because at least one household has both vessel forms represented in subadult burials. In Structure 23, inside Burial 213 has a bowl and inside Burials 209, 216, and 219 have jars. If vessel form was associated with moiety divisions at King, individual households should have subadult burials with only one or the other vessel form, not both.

Shell gorgets are one of the more common types of grave goods in subadult burials, but there is some evidence that they were restricted in occurrence to individuals younger than approximately 5 years. Shell gorgets accompany shell beads in one reliable and two disturbed subadult burials and accompany pots in two reliable subadult burials. The numbers are not large, but, unlike shell beads and pots, they do not indicate a tendency for mutually exclusive burial

distributions. The two styles of gorgets, rattlesnake and mask, each occur in one burial with a pot and one burial with beads.

Why were gorgets used as grave goods, and why were they placed with some subadults and not others? There is a tendency among archaeologists to think of gorgets as costume items, equivalent in use and meaning to beads and ear pins. As we will see, they may not have this equivalence.

We generally think of shell gorgets as being suspended on necklaces of marine shell beads around the neck of the wearer. This image, rendered artistically by Madeline Kneberg in reconstructions of Dallas phase inhabitants of the Hiwassee Island site (Lewis and Kneberg 1946:Plates 102, 103, and 105), is due in large part to the co-occurrence of gorgets and beads in the chest area of burials at a number of Mississippian sites.

At King, gorgets and marine shell beads are invariably found in the chest area. The two artifact types, however, do not always occur in the same burial, indicating that they do not necessarily constitute a single costume item. One reliable subadult burial has both a gorget and shell beads, but four burials with gorgets lack beads, and we can be fairly certain in at least two of these cases (Burials 12 and 99) that beads were not destroyed by weathering. Adults present the same picture, with only one of three reliable gorget burials having shell beads. Illustrations from the sixteenth through early nineteenth century (Swanton 1946:Plates 20.1, 32, 33, 44, 45.1, 68) show individuals wearing both bead necklaces and metal or shell gorgets but the latter are suspended on separate strings or ribbons that lack beads.

It is important that shell beads and gorgets be seen as separate items of costume, because they almost certainly had different meanings and symbolism and were, therefore, probably worn and placed in burials for different reasons. Marine shell beads probably have several different ideological and symbolic associations and probably also served as markers for personal or household wealth. Gorgets, on the other hand, are more likely to have had their major significance as expressions of religious beliefs and/or social and political identity. There is good reason for thinking this is so. Gorgets are engraved with a variety of naturalistic designs, including human figures, spiders, turkey cocks, and rattlesnakes and geometric designs such as cross-in-circle, sunburst, and filfot cross. The former may depict mythological characters and events (Knight et al. 2001), while the latter are likely to have cosmological referents. Gorget designs change through time, but at any point there appears to be one type of human figure, one animal species, and at least one geometric design in use (Hally 2007). This pattern suggests that gorget designs reflect a larger structure that in itself is likely to be cosmological or mythical in nature.

The symbolic nature of gorgets and their engraved designs is evident in their nonrandom distribution among burials. Among subadults, they are restricted to younger children, and among burials of all ages, the rattlesnake and mask designs may each be restricted to a single sex. While we may not know exactly what symbolic statements are being made by these age/sex associations, their mere existence is evidence that statements were being made.

Hudson (1976:387) notes that the rattlesnake, especially in the form of the *uktena,* had important supernatural associations in Southeastern Indian belief systems and was used in curing and disease-prevention rituals. He suggests that rattlesnake gorgets may have been worn as protection against witchcraft and disease. This suggestion is interesting in light of the restricted age distribution of rattlesnake gorgets among subadults, as young children may have been considered more vulnerable to these threats. We might question, however, whether male and female children might not have had equal need for such protection and why individuals who have already died would need protection at all.

Mask gorgets are usually considered to depict a human face and are frequently embellished with a weeping eye motif. A number of symbolic associations have been proposed for this gorget type, including warfare, the role of war captain, trophy heads, and the Thunderbird/Thunder deity (Smith and Smith 1989). Smith and Smith (1989) suggest that mask gorgets were most likely involved in the quest for supernatural power to aid in hunting or warfare. It seems odd, however, that young children, albeit male children, would be interred with such aids, given that the quest for supernatural aid in hunting or warfare probably did not begin until they were much older, perhaps entering adolescence.

The contrast between rattlesnake and human face designs raises the possibility that the two gorget forms were symbols of moiety affiliation. This seems unlikely, however, because each gorget type is represented in burials from a single household—Households 1 and 14—and from the plaza. Moiety association would also conflict with the possible association of rattlesnake gorgets with female burials and of mask gorgets with male burials.

Shell gorgets would have been more costly to procure than marine shell beads. In contrast to beads, only one or two gorgets can be cut from a single *Busycon* conch. Add the cost of labor involved in shaping gorgets and engraving designs on their surface, and it becomes likely that fewer individuals or households would have been able to afford these objects. This would seem to be borne out by the fact that burials with shell gorgets are fewer in number than those with beads (13 vs. 35 burials of all ages and both sexes).

Subadult burials with gorgets are concentrated in the northern third of the site, with three in the plaza and most of the rest concentrated in the vicinity of Structure 15 (Figure 10.3). This is approximately the same distribution as that of marine shell beads. The same pattern holds for adult burials with beads and gorgets. It is likely, then, that gorgets were an indicator of material wealth and that individuals would have been motivated to demonstrate their personal or household wealth by, among other things, using gorgets as grave goods.

As with marine shell beads, it is likely that the decision to place a shell gorget in a burial was determined by ideology and wealth considerations and that personal preference played a role as well. Given the elaborate iconographic content of gorgets, however, ideology probably played a larger role than wealth display.

Summary

More than 50 percent of subadult burials were interred with grave goods. Most were accompanied by pottery vessels, vessel fragments, shell beads, or shell gorgets. The frequency of these artifact types, accounting for 24 of the 50 reliable burials, suggests that both male and female subadults were interred with grave goods. Beads and gorgets occur with equal frequency in adult and subadult burials, but pots are two to three times more common in subadult burials.

Approximately one-third of subadult burials had either pots or marine shell beads. Among these, jars and bowls were interred with younger children than were shell beads. The shift from pottery to shell beads as grave goods appears to have occurred around 3–4 years of age and was accompanied by a shift in burial location from beneath the floors of domestic structures to outside them. The shift in mortuary practices may reflect a rite of passage recognized by the King site community in which childhood ties to the women and the maternal household were superseded by increased ties to the larger male-dominated world of the community.

There is also a possibility that bowls and jars were being used as grave goods to mark gender, but the evidence for this relationship is not very strong. Shell gorgets crosscut the age and location associations of pots and shell beads. They occur with both types of grave goods, and their age distribution overlaps that of burials with pots and shell beads.

Grave goods, at least of the nonperishable kind, appear not to have been interred with individuals older than approximately 7 years. Burial pit depth increases by a half foot or more at approximately this age as well. This corre-

spondence suggests that the two changes mark a second rite of passage in the lives of King site subadults.

Pot burials are widely distributed among the community's households. Shell beads and gorgets, on the other hand, are restricted to households in the northern third of the site and, more specifically, to the vicinity of Household 15. The absence of shell grave goods from burials in the southern portion of the site may be due to poor preservation conditions, but cultural factors such as differences in individual or household wealth appear to have been important determinants as well.

The age, location, and artifact associations of pots, marine shell beads, and shell gorgets indicate that all three artifact types had ideological associations that affected how they were treated as grave goods. Decisions concerning the placement of all of these artifact types in subadult burials were probably influenced by ideological and wealth considerations and to some extent by personal preference.

Finally, the occurrence of only one artifact type in most subadult burials contrasts with the situation in adult male burials. As we will see in the next chapter, there is quite a range in the number of artifact types among adult male burials, with many individuals—especially older males—having half a dozen or more. Subadults apparently have a smaller variety of status positions available to them, and they do not seem to accumulate these positions as they get older.

11
Artifact Co-occurrences among Adult Males

Including the looted burials reported by Little (1985), there are 57 identifiable adult male burials in the King site collection. Thirty-seven of these are biological males and 20 are artifactual males. Thirty-three of the 57 burials are reliable, 12 are disturbed, 8 are mixed, and 4 are looted (Appendix C). Four additional unsexed adult burials may be males, given that they were interred in an extended position (Burials 11, 168, and 192) or had a mask gorget (Burial 188) as grave goods. Most of the following analysis will focus on the reliable burials, but disturbed and looted burials and those that are possibly male also will be considered where appropriate. Most of the grave goods recovered from the partially mixed Burial 81 can be confidently assigned to that burial (Appendix F) and will be included in some analyses as well. One disturbed burial (Burial 65) was only lightly impacted by plowing and is unlikely to have lost any grave goods. This burial is not included in the cluster analysis of reliable adult male burials but will be included in other analyses of reliable burials. In those cases, it will be referred to as a "lightly disturbed burial" to distinguish it from the 11 "disturbed burials."

Twenty-four reliable burials and the lightly disturbed Burial 65 have grave goods. Thirty-six different artifact types occur with these burials.[1]

copper arrow symbol badge
iron tool
bifacial blade
point
cougar radius tool
bone handle
turkey tarsometatarsus awl
eyed bone cylinder

end scraper
spatulate celt
stone discoidal
flintknapper kit (FKK)
circular polishing stone
tabular polishing stone
tabular limestone
faceted stone
hematite
gravy boat bowl
pipe
pipe fragment
bipointed bone tool
beaver incisor
cylindrical bone tool
os baculum
antler cylinder
antler tine
animal jaw
bear bone
human remains
mask gorget
Busycon cup
bracket shell pin
knobbed shell pin
Busycon bead
Olivella bead
mussel shell

The eight more heavily disturbed burials contain many of these types. Five of them each contain one artifact type—celt, pottery jar, vessel fragment, *Anadara* shell bead, and *Noetia* shell bead—not represented in reliable and lightly disturbed burials.

Cluster Analysis

Reliable burials were subjected to cluster analysis using Ward's method. The nine reliable burials lacking artifacts were not included in the analysis because of the effect such burials have on how burials with only one or two unique artifact types are grouped. A six-cluster solution makes the most sense based on increases in error-sum-of-squares and ease of interpretation (Figure 11.1, Table 11.1).

Cluster 1 contains eight burials, six of which have points. Five of the latter have points only, while the sixth has points, human remains, and a bifacial blade. Burial 19, with an iron tool, is probably added to the cluster because it has only one artifact type. As we saw in the cluster analysis in Chapter 10, the cluster program does consider number of artifact types as well as types of artifacts in forming clusters. The program, in fact, has split Burial 176 off from the other four burials with points and merged it with Burial 19 (Figure 11.1).

Cluster 2 contains three burials with points and antler cylinders and in two cases one or two additional artifact types. Clusters 1 and 2 are merged at a higher level to form a larger cluster that is characterized by a predominance of points and a very low number of artifact types per burial.

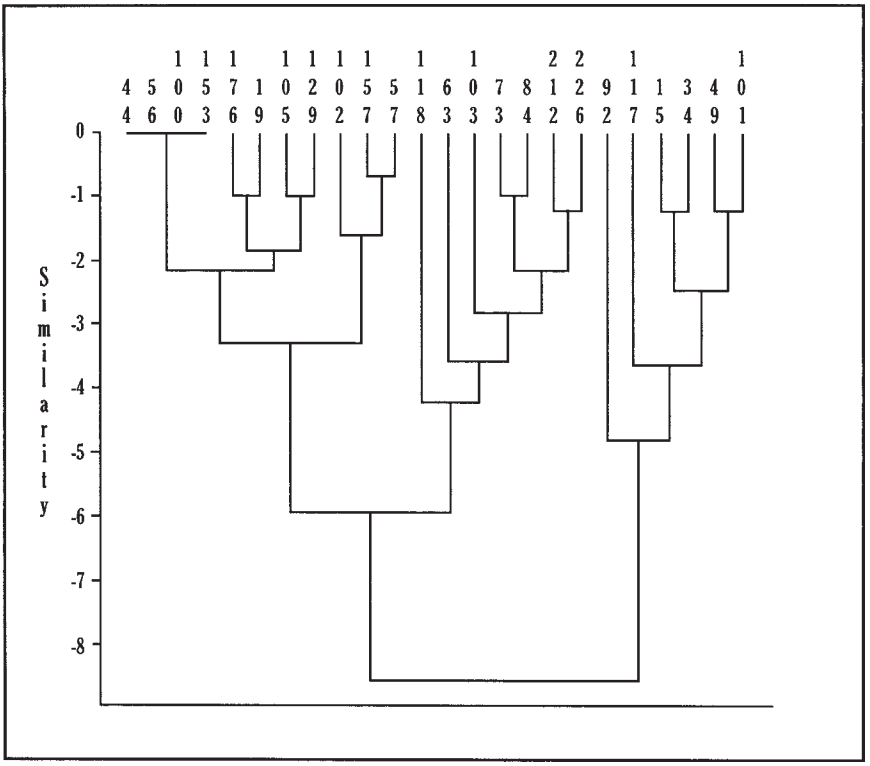


Figure 11.1. Ward's hierarchical agglomerative clustering analysis of 33 reliable adult male burials.

Cluster 3 contains seven burials and is defined by the occurrence of pipes in five of them. The cluster contains all but one of the six reliable adult male burials with pipes (Table 11.2).

The cluster is rather loosely defined. Seventeen artifact types are represented in it, but except for pipes, none occurs in more than two burials. No burials, furthermore, share more than two artifact types. These conditions result in a cluster in which individual burials that are rather different from one another in artifact content are linked by a third burial that shares one or two artifact types with each. The steplike structure of this portion of the dendrogram is indicative of this condition (Baxter 1994:146). Six artifact types are unique to the cluster. In contrast, Cluster 1 has no unique artifact types and Clusters 2, 5, and 6 each have only one.

Cluster 4 contains only Burial 92. The burial has the largest variety (18) of grave goods in the adult male sample. Five types are unique to the burial.

Table 11.1. Results of Ward's hierarchical agglomerative clustering analysis of 33 adult male burials

Burial	Artifacts
Cluster 1	
44	Point
56	Point
100	Point
153	Point
176	Point
19	Iron
105	Point, human remains, blade
129	Human remains
Cluster 2	
102	Point, antler cylinder, FKK, pipe, tabular limestone
157	Point, antler cylinder, baculum
57	Point, antler cylinder
Cluster 3	
118	Pipe, *Busycon* bead, point, hematite, baculum, bracket type pin, knobbed shell pin
63	*Busycon* bead, bipointed bone tool, eyed bone tool, bear bone, animal jaw
103	Pipe, FKK, hematite, bear bone, beaver incisor
73	Pipe, *Olivella* bead
84	Pipe, FKK
212	Pipe, circular polishing stone
226	Circular polishing stone, tabular polishing stone, mussel shell
Cluster 4	
92	FKK, point, beaver incisor, hematite, *Busycon* bead, iron, human remains, end scraper, antler cylinder, *Busycon* cup, copper arrow symbol badge, pipe fragment, gravy boat bowl, faceted stone, bipointed bone tool, turkey tarsometatarsus awl, baculum, blade
Cluster 5	
117	FKK, point, beaver incisor, hematite, *Busycon* bead, iron, human remains, discoidal, cylindrical bone tool, knobbed shell pin, spatulate celt, tabular limestone
Cluster 6	
15	FKK, point, blade, beaver incisor, discoidal, hematite
34	FKK, point, blade, beaver incisor
49	FKK, point, blade, mask gorget
101	FKK, point, blade, discoidal, end scraper

Table 11.2. Artifact types represented in Cluster 3

	Percentage Representation in Cluster	Number in Cluster/ Number in Adult Male Burial Sample
Pipe	.71	5/6
Circular polishing stone	.29	2/2
Hematite	.29	1/5
FKK	.29	1/9
Bear bone	.29	2/2
Busycon bead	.29	2/4
Point	.14	1/16
Tabular polishing stone	.14	1/1
Baculum	.14	1/3
Bracket type pin	.14	1/1
Knobbed shell pin	.14	1/2
Bipointed bone tool	.14	1/2
Eyed bone tool	.14	1/1
Beaver incisor	.14	1/4
Animal jaw	.14	1/1
Olivella bead	.14	1/1
Mussel shell	.14	1/1

These are *Busycon* cup, copper arrow symbol badge, pipe fragment, faceted stone, and turkey tarsometatarsus awl.

Cluster 5 contains only Burial 117. The burial has the second-largest variety (12) of grave goods in the adult male sample but only the spatulate celt is unique to it.

Cluster 6 contains four burials that each have between four and six artifact types. All four burials have FKK, points, and bifacial blades. Beaver incisors and discoidals each occur in two burials.

Clusters 4, 5, and 6 are merged into a single cluster at a moderate level of fusion. The six burials in this cluster share a basic set of artifacts consisting of FKK (six burials), points (six burials), blades (five burials), beaver incisors (four burials), and discoidals (three burials). Clusters 4 and 5 diverge from this most by having large numbers of additional artifact types. They share seven artifact types and have six and five artifact types, respectively, in common with Cluster 6. The cluster analysis does not merge them sooner because of the even larger number of artifact types that are not shared between them (14) or between them and Cluster 6 (17).

At a more general level, the cluster analysis distinguishes three different

groups of burials: those with points and little else (Cluster 1/2); those with pipes and a number of unique artifact types (Cluster 3); and those that share FKK, points, and blades and have large numbers of artifact types (Cluster 4/5/6). The latter grouping contains a number of artifacts made from exotic materials (iron, copper, and marine shell) and artifacts with probable ideological significance (bifacial blades, spatulate celt, hematite, *Busycon* cup, gravy boat bowl, and discoidals). Cluster 1/2 and Cluster 3 each contain one or two of these artifact types but in nowhere near the numbers they occur in Cluster 4/5/6.

Nine reliable burials lack artifacts. Had they been included in the analysis, they would have been assigned to a cluster of their own—one that contrasts markedly with the other three larger clusters.

The separation between Cluster 3 and Clusters 1/2 and 4/5/6 suggests that points and pipes have quite different burial distributions. Indeed, points occur in 16 reliable burials and pipes occur in six, but only one burial (Burial 118) has both. We have to be careful not to make too much of this contrasting distribution, however, as it appears to be, at least in part, the result of sampling error. The four disturbed (Burials 40, 65, and 195) and mixed (Burial 81) burials that have pipes also have points. The fact remains, however, that the artifact types occurring with pipes are on the whole quite different from those occurring with points.

The lightly disturbed Burial 65 resembles Clusters 4, 5, and 6 in having points, blades, and FKK but differs in having a variety of bone tools.

Perhaps the most striking thing about the cluster analysis of adult male burials is how few artifact types consistently occur together in the same burials. Points, FKK, and to a lesser extent blades and beaver incisors usually occur together. The great majority of artifact types, however, seem to vary in their distributions independently of one another. We will look more closely at this phenomenon in the following section.

Bivariate Analysis

In this section, artifact types that occur with adult male burials will be reviewed with respect to their age distribution, spatial distribution within the site, associated burial pit form and body position, and co-occurrence with other artifact types. The co-occurrences of pairs of artifacts are difficult to describe and interpret because there is relatively little obvious pattern to them. All artifact types, except the bracket type pin, occur with one or more other types in at least one adult male burial. The frequency with which specific types co-occur, however, varies considerably. Some types never occur in the same

Table 11.3. Co-occurrence of artifact types represented in two or more reliable and lightly disturbed adult male burials

	Point	FKK	Bifacial blade	Pipe	Antler cylinder	Hematite	Beaver incisor	*Busycon* bead	Iron
Number of burials with artifact type	17	10	7	7	5	5	5	4	4
Point	17	8	7	3	5	4	4	3	3
FKK	8	10	6	4	3	4	5	2	3
Bifacial blade	7	6	7	1	2	2	3	1	2
Pipe	3	4	1	7	2	2	1	1	0
Antler cylinder	5	3	2	2	5	1	1	1	1
Hematite	4	4	2	2	1	5	4	3	3
Beaver incisor	4	5	3	1	1	4	5	2	3
Busycon bead	3	2	1	1	1	3	2	4	2
Iron	3	3	2	0	1	3	3	2	4
Human remains	2	1	1	0	0	2	2	1	1
Baculum	3	1	1	1	2	2	1	2	1
Discoidal	3	3	2	0	0	2	2	1	2
End scraper	3	3	3	0	1	1	1	1	1
Bipointed bone tool	1	1	1	0	1	1	1	2	1
Circular polishing stone	0	0	0	1	0	0	0	0	0
Tabular limestone	2	2	0	1	1	1	1	1	1
Turkey awl	2	2	2	1	2	1	1	1	1
Bear bone	0	1	0	1	0	1	1	1	0
Busycon cup	2	2	2	1	2	1	1	1	1
Knobbed shell pin	2	1	0	1	0	2	1	2	1

burial, some occasionally or frequently occur together, and a few almost always occur together. In no case, however, do two artifact types always occur together in the same burial, not even those comprising flintknapper kits.

Artifact co-occurrences are summarized in Table 11.3 and Figure 11.2. For the most part, consideration will be limited to artifact types that occur in three or more burials, although selected types occurring in fewer burials will also be discussed. Table 11.3 lists the frequency with which all artifact types present in two or more reliable and lightly disturbed adult male burials occur together. The table is arranged so as to show how frequently two artifact

Human remains	Baculum	Discoidal	End scraper	Bipointed bone tool	Circular polishing stone	Tabular limestone	Turkey awl	Bear bone	*Busycon* cup	Knobbed shell pin
4	3	3	3	2	2	2	2	2	2	2
3	3	3	3	1	0	2	2	0	2	2
2	1	3	3	1	0	2	2	1	2	1
1	1	2	3	1	0	0	2	0	2	0
0	1	0	0	0	1	1	1	1	1	1
1	2	0	1	1	0	1	2	0	2	0
2	2	2	1	1	0	1	1	1	1	2
2	1	2	1	1	0	1	1	1	1	1
2	2	1	1	2	0	1	1	1	1	2
2	1	2	1	1	0	1	1	0	1	1
4	0	1	0	0	0	1	0	0	0	1
1	3	0	1	1	0	0	1	0	1	1
1	0	3	1	0	0	1	0	0	0	1
1	1	1	3	1	0	0	1	0	1	0
1	1	0	1	2	0	0	1	1	1	0
0	0	0	0	0	2	0	0	0	0	0
1	0	1	0	0	0	2	0	0	0	1
1	1	0	1	1	0	0	2	0	2	0
0	0	0	0	1	0	0	0	2	0	0
1	1	0	1	1	0	0	2	0	2	0
1	1	1	0	0	0	1	0	0	0	2

types occur with one another in comparison to the total frequency of each type among analyzed burials. The number at the top of each column gives the frequency of burials with the artifact type listed in that column. The number in each cell gives the number of burials with artifacts of the type listed in the cell's row that also have the artifact type in the cell's column. The number 8 in the second cell of the first row, for example, tells us that eight of the 10 burials with FKK in the burial sample also have points. Likewise, the number 8 in the second cell of the point column tells us that eight of the 17 burials with points also have FKK.

Burial number	129	226	63	19	73	212	84	103	44	56	100	153	175	57	157	118	105	102	117	49	101	34	15	65	92
Human remains	XXX																XXX		XXX						XXX
Antler tine																								XXX	
Cougar radius tool																								XXX	
Bone handle																								XXX	
Mussel shell		XXX																							
Olivella beads					XXX																				
Mask gorget																				XXX					
Small animal jaw			XXX																						
Eyed bone tool			XXX																						
Pipe fragment																									XXX
Faceted stone																									XXX
Spatulate celt																			XXX						
Gravy boat bowl																									XXX
Copper symbol badge																									XXX
Cylindrical bone tool																			XXX						
Turkey awl																								XXX	XXX
Tabular polishing stone		XXX																							
Bear bone			XXX					XXX																	
Bracket shell pin																XXX									
Knobbed shell pin																XXX			XXX						
Bipointed bone tool			XXX																						XXX
Tabular limestone																		XXX	XXX						
Circular polishing stone		XXX				XXX																			
Busycon cup																								XXX	XXX
End scraper																				XXX	XXX				XXX
Discoidal																			XXX		XXX		XXX		
Iron				XXX															XXX				XXX		XXX
Os baculum															XXX	XXX									XXX
Busycon beads			XXX													XXX			XXX						XXX
Beaver incisor								XXX											XXX			XXX	XXX		XXX
Hematite								XXX								XXX			XXX				XXX		XXX
Antler cylinder														XXX	XXX			XXX						XXX	XXX
Pipe					XXX	XXX	XXX	XXX								XXX		XXX						XXX	
Bifacial blade																	XXX			XXX	XXX	XXX	XXX	XXX	XXX
Flintknapper kit							XXX	XXX										XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Point									XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Figure 11.2. Artifact co-occurrences among reliable and lightly disturbed adult male burials.

Table 11.4. Burials with dominant and multiple point microstyles

Burial	Number of Points[1]	Dominant Style[2]	Number of Points in Dominant Style	Number of Points in Each Minority Style
15	9	15A	4	1, 1, 1
34	20	34C	14	2
65	11	65A	8	2
92	31	92A	17	3, 3, 2, 1, 1
100	22	100A	11	5, 2
101	18	101A	10	3, 2, 1
118	13	118A	12	1

1. Only complete points are counted.
2. Microstyle designations have been modified from the originals in Matthiesen (1994) for the sake of clarity.

Points

Occurring in 26 burials, triangular points are the most common artifact type accompanying adult males. Seventeen of these burials are reliable or lightly disturbed, and one is the partially mixed Burial 81 (Appendix C). The number of points interred with individuals ranges from 1 to 50 (Table 7.10), with the average among reliable and lightly disturbed burials being 11.

As described in Chapter 7, Matthiesen (1994) identified 13 microstyles among the points she analyzed from 19 burials having five or more points. Seven of these styles were more rigorously defined and were used in the investigation of point production and exchange. Analyzing the distribution of the seven microstyles among the 19 burials, Matthiesen found that all burials had more than one style represented: that in seven burials—Burials 15, 34, 65, 92, 100, 101, and 118—one style was significantly more common than the other styles present and that some styles were represented in as many as six different burials (Table 11.4). She interpreted this evidence to mean that each microstyle was the product of a different flintknapper, that the numerically dominant style in each burial had been made by the individual it was interred with, and that points were being exchanged between individuals. She proposed that points could have been transferred from one individual to another in at least two ways: individuals may have placed points in the grave of a deceased individual or individuals exchanged points with one another during their lifetimes. In two pairs of burials—Burials 65 and 101 and Burials 92 and 105—the dominant point style of each individual is present in the grave of the other as a

Table 11.5. Relationship between burial age and number of points and point microstyles

Burial	Age	Number of Points	Number of Point Styles
92	45	31	5
101	45	23	3
34	45	20	2
44	44	6	1
105	43	50	7
65	39	11	2
81	35	10	2
118	35	13	2
102	34	6	1
100	32	24	2
117	19	9	2
93	15	8	1

minority style. Since it is not possible for two individuals to attend each other's funeral, we may infer that the individuals represented in these two pairs of burials exchanged points during their lifetimes. With this precedent, we may assume that this was the primary mechanism whereby points made by a single flintknapper were distributed among multiple burials and why many burials were interred with points made in different microstyles.

Points occur with burials across the entire adult male age spectrum, but there is a tendency for them to occur with older individuals. Reliable, lightly disturbed, and partially mixed (Burial 81) burials with points average 32.4 years, while burials lacking points average 27.6 years. Comparison of age and number of points for the same subsample of burials indicates a slight tendency for older males to be interred with more points.

The number of different point styles represented in a single burial ranges between one and seven. If the number of styles in a burial represents the number of individuals whom the deceased received points from or exchanged points with during his lifetime, and if individuals tended to form more point exchange relationships as they aged, we might expect more point styles—as well as more points—generally to occur in older burials. Table 11.5 lists the number of point styles for the 12 burials with five or more points analyzed by Matthiesen.[2] The data indicate a tendency for longer-lived individuals to have more point exchange relationships, but exceptions such as Burials 34 and 44 suggest that other factors were also affecting the number of such relationships.

Adult male burials with points are distributed widely across the site, with four in Structure 17, two in the plaza, and 20 in the habitation zone. The number of burials with points relative to those lacking points is greater in Structure 17 and the plaza than in the habitation zone, but the difference is not statistically significant. Seven habitation zone burials with points are inside interments while 13 are located outside domestic structures (PDS). This ratio is not significantly different from that for adult males in general. Burials with points are present in all sectors of the habitation zone and in a large number of households: Households 1, 2, 14, 15, 23, 25, and 30. Burials with the largest number of points also appear to be relatively evenly distributed throughout the habitation zone.

The location of burials of individuals who exchanged points should tell us something about the kinds of individuals involved in such social relationships. Figure 11.3 plots the spatial distributions of the seven more rigorously defined point microstyles across the site. The most interesting thing about these distributions is that the great majority (16) of the point transfers involve individuals who were interred in either Structure 17 or in the plaza north of Structure 17. Only six exchanges occurred between parties who were located in the habitation zone.

Although this chapter is about adult males, we cannot fully understand points as grave goods without considering Burial 223, the female warrior. She was interred with 23 points. The most common microstyle is 223A[3] (Matthiesen 1994:Table 6.1, Appendix C), which is represented by only six specimens in the analyzed point sample. Aside from the question of female involvement in flintknapping, the most interesting feature of Burial 223 is the number of microstyles represented—seven. Only Burial 105, with 50 burial points, has this many microstyles. The implication is that Burial 223 received points from at least six other individuals. Four of these transfers, with Burials 15, 65, 92, and 101, are illustrated in Figure 11.3. With an approximate age of 25 years, the Burial 223 individual is quite young to have had so many exchange relationships. It may be that her distinction as a female warrior made her an attractive and sought-after exchange partner.

The fact that Burial 223 received points from a number of different individuals in the King site community raises the question of whether she was reciprocating with points of her own manufacture. There is some evidence that women were engaged in flintknapping in the late prehistoric Southeast (Gougeon 2002). I think it is highly likely that they were producing and maintaining many of the flaked stone tools they used in domestic activities. Whether they were also engaged in the production of projectile points of the type commonly found in adult male burials, however, is another question entirely. Later

Figure 11.3. Spatial distribution of burials sharing point microstyles: a, styles 34C and 100A; b, style 65A; c, style 101A; d, styles 15A, 92A, and 118A.

in this chapter, I will argue that burial points were used exclusively in warfare and served as a symbol of adult warrior status. Since warfare was predominantly a male activity, it seems likely that men alone were responsible for the production of burial points. The most common point microstyle in Burial 223 is 223A, but it accounts for only six of the 23 points in the burial. This is a low proportion compared to the seven dominant styles listed in Table 11.4. The six points could have been gifts from someone else. On the other hand, two specimens of 223A style points are present in Burial 101, and one point of the dominant microstyle in Burial 101 (101A) is present in Burial 223. This suggests that the two burials were involved in a reciprocal exchange of points. We cannot rule out the possibility, however, that they may each have received the points from a third individual not represented in Matthiesen's 19 analyzed burials. In the final analysis, there is not sufficient evidence to determine whether Burial 223 was making her own points.

Point burials occur with simple, stepped, and shaft-and-chamber pits and in pits with and without board covers (Appendix C). All three of the more common body positions—extended, flexed on back, and flexed on side—are represented. None of these mortuary practices appear to occur in proportions that are significantly different from those among adult male burials lacking points.

Points co-occur with 29 of the 36 artifact types found with reliable and lightly disturbed adult male burials (Figure 11.2). The artifact types they do not co-occur with—circular polishing stone, eyed bone tool, animal jaw, bear bone, *Olivella* shell bead, and mussel shell—are all uncommon ones that are represented in only one or two burials. Eleven types that are represented in three or more burials have strong associations with points, but points are not strongly associated with any types—that is, there are no artifact types that occur in more than half the burials with points (Table 11.3). Pipes are the only common grave good that is not strongly associated with points.

All reliable and lightly disturbed burials with blades, antler cylinders, baculum, discoidals, or end scrapers also have points (Table 11.3). Artifact co-occurrences among heavily disturbed, partially mixed, and looted burials support these associations—the only burials with blades (Burial 234), antler cylinders (Burial 81), and discoidals (Burial 40) also have points. The numbers of burials known to have blades (seven) is large enough that we can be reasonably confident that blades always occur in burials that have points. We cannot be as certain that the less common antler cylinder, baculum, discoidal, and end scraper types also occur always with points.

Flintknapping kits, hematite, beaver incisors, *Busycon* beads, iron, and hu-

man remains are strongly associated with points. These associations are also supported by artifact co-occurrences among heavily disturbed, partially mixed, and looted burials. Burials 81 and 269 have FKK and points; Burial 81 has hematite and points; Burials 81 and 269 have beaver incisors and points; Burials 87, 195, and 229 have *Busycon* beads and points; and Burials 40 and 234 have iron and points. Each of these artifact types usually occurs in burials that have points but may also occur in burials lacking points.

Flintknapping Kits

Flintknapping kits (FKK) are the second most common type of grave good occurring with adult males. They are represented in nine reliable burials, one lightly disturbed burial, at least one looted burial, the partially mixed Burial 81, and possibly two heavily disturbed burials (Appendix C). FKK tend to occur with older individuals. With the exception of Burial 117, all FKK burials are 30 years or older (Figure 9.3), and their average age of 36.5 years is considerably greater than the 29.4 years for adult males lacking FKK.

Four of the 12 adult male burials with verifiable FKK are located in either Structure 17 or the north plaza. The remaining eight FKK burials are distributed throughout the habitation zone, occurring in Households 1, 2, 15, 23, and 30 in the northern, northeastern, and eastern sectors. Inside and outside locations occur in approximately the same proportions as they do in the adult male population. The same is true for simple, stepped, and shaft-and-chamber pit forms. Board covers are, relatively speaking, more common in burials with FKK (three out of six burials) than in burials lacking FKK (three out of 15 burials), but the difference may be due to chance. The three common body positions—extended, flexed on back, and flexed on side—also are represented in FKK burials in approximately the same proportions they have in the adult male population.

Flintknapping kits occur with 26 of the 36 artifact types found with reliable and lightly disturbed adult male burials (Figure 11.2). As was the case with points, the only artifact types they do not co-occur with are those represented in only one or two burials. Blades are the only artifact type that has a strong mutual association with FKK. Flintknapping kits are also strongly associated with points. All burials with beaver incisors, discoidals, and end scrapers also have FKK, but given the small number of burials involved we cannot be certain that this relationship holds for the entire burial population. Pipes, antler cylinders, hematite, and iron are strongly associated with FKK. Each of these four artifact types usually occurs in burials with FKK but may also occur in burials lacking FKK. Artifact occurrences among heavily disturbed, par-

tially mixed, and looted burials support several of these associations: burials with pipes (Burial 81), antler cylinders (Burial 81), hematite (Burial 240), and beaver incisors (Burials 81 and 269) also have FKK.

Bifacial Blades

Counting the asymmetrical blade in Burial 49, bifacial blades are represented in seven reliable and lightly disturbed burials, one disturbed burial, and two looted burials (Appendix C). Blades have a strong tendency to be interred with older individuals (Figure 9.2). The average age for seven burials with blades (41.3 years) is considerably greater than the 28.6 years for adult males lacking blades.

Two blade burials are located in Structure 17 and one is in the plaza. The remaining seven are located in the northern third of the habitation zone. This restricted distribution may be due in part to differential plow disturbance of burials, but this seems unlikely. Including burials assignable to Household 1 in the eastern sector, there are 17 reliable and 10 disturbed adult male burials in the northern third of the habitation zone. In the portion of the habitation zone south of Household 1, these numbers are 10 and 7, respectively. While there are approximately one-third more burials in the northern third of the habitation zone, the difference in incidence of blade burials (7 vs. 0) seems too great to attribute solely to preservation and chance factors.

Blade burials are about as likely to be interred beneath the floors of domestic structures or in outside plots as are adult male burials in general. All varieties of pit form except stepped pits and all of the more common body positions are represented among blade burials. Sample size, however, is too small to allow meaningful comparison with adult male burials lacking blades.

Blades occur with 28 different types of artifacts in reliable and lightly disturbed burials (Figure 11.2) but have strong associations with only five artifact types. They have a strong mutual association with FKK and, as discussed above, probably always occur with points. All burials with end scrapers also have blades, but we cannot be as certain that this relationship holds for the entire burial population because of small sample size. Beaver incisors and discoidals have strong associations with blades. The latter association is supported by the looted Burial 267, which has points and a discoidal.

Pipes

Eleven burials have pipes that were probably intact at the time of interment. These include six reliable burials, one lightly disturbed burial, and the partially

mixed Burial 81 (Appendix C). Burials with pipes are on average about the same age as burials without pipes (30.9 vs. 33.3 years).

Pipe burials are located in Structure 17 (two burials), the plaza (one burial), and the habitation zone (eight burials), where they are distributed across all sectors. The relative frequencies of inside and outside location, board covers, and different body position all appear in line with those for adult male burials in general. Stepped pits outnumber simple pits three to two, but sample size is too small to rule out chance as a factor.

Pipes have very distinctive artifact associations. They are one of the most common burial artifact types, yet they co-occur with relatively few artifact types (19) in reliable and lightly disturbed burials (Figure 11.2). Along with human remains, they have the lowest number of strong associations (one) among all types occurring in three or more burials, and they are accompanied by the fewest artifact types on average (Table 11.6). On the other hand, they have been found with several types—circular polishing stone, tabular limestone, turkey tarsometatarsus awl, bone handle, cougar radius tool, bear bone, bracket shell pin, and *Busycon* cup—that occur in only one or two adult male burials. This distinctiveness is highlighted in the cluster analysis, where pipe burials are placed in a separate cluster.

Pipes have their strongest association with FKK. Counting the partially mixed Burial 81, five of eight pipe burials have FKK.

Antler Cylinders

Antler cylinders are represented in six adult male burials, including four reliable, one lightly disturbed, and the partially mixed Burial 81. The age distribution of these burials is similar to that of adult male burials lacking such artifacts (33 vs. 32.2 years).

Burials with antler cylinders occur in Structure 17 (one), the plaza (one), and the habitation zone, where they are associated with three widely distributed households: Households 2, 14, and 15. Antler cylinder burials differ from other adult male burials in having more stepped than simple pits (2:1) and a large number of extended burials relative to flexed (3:4). Sample sizes, however, are so small that the differences may be due to chance.

Antler cylinders occur with 23 different artifact types in reliable and lightly disturbed burials (Figure 11.2). All six burials with antler cylinders also have points. Given these numbers, it is possible that antler cylinders always occur with points in King site burials. The only other strong association antler cylinders have is with FKK (Table 11.3).

Table 11.6. Artifact type co-occurrences and associations for artifact types represented in three or more reliable and lightly disturbed burials

Artifact Type	Number of Burials	Number of Different Types That Co-occur	Number of Strong Associations	Average Number of Artifacts Types per Burial
Point	17	29	11	5.3
Flintknapper kit	10	26	9	7.3
Bifacial blade	7	28	5	7.4
Pipe	7	19	1	4.7
Antler cylinder	5	23	2	7.6
Hematite	5	26	7	9.8
Beaver incisor	5	25	6	9.2
Busycon bead	4	27	3	10.5
Iron implement	4	23	5	9.5
Baculum	3	21	4	9.3
Human remains	4	23	1	8.2
Discoidal	3	14	6	8.0
End scraper	3	20	3	9.0

Hematite

Hematite occurs in six adult male burials, including five reliable burials and the partially mixed Burial 81. The average age of burials with hematite is only slightly greater than that for male burials lacking hematite (33.5 vs. 30.8 years).

One hematite burial occurs in Structure 17, while the remainder appear to be distributed fairly evenly throughout the habitation zone in association with Households 1, 2, and 15. Hematite burials are located both inside and outside domestic structures, have simple and stepped pit forms, occur with and without board covers, and have extended, flexed, and partially flexed body positions. All of these characteristics occur with frequencies similar to those for the adult male population as a whole.

Hematite co-occurs with 26 different artifact types in the five reliable disturbed burials (Figure 11.2). It has a strong mutual association with beaver incisors and *Busycon* beads and one-sided associations with points, FKK, bacula, iron, and discoidals (Table 11.3). Points, FKK, and beaver incisors are also found with hematite in Burial 81, and the heavily disturbed Burial 240 has hematite and a possible FKK.

Beaver Incisors

Beaver incisors were recovered from six adult male burials. Five of these are reliable and one is the partially mixed Burial 81. Burials with beaver incisors are older on average than those lacking the artifact type (36.0 vs. 30.5 years). Given the strong association that beaver incisors have with FKK, we would expect the artifact type to occur primarily with older individuals.

Four beaver incisor burials occur in the habitation zone, while one occurs in both Structure 17 and the plaza. Beaver incisor burials appear to be fairly evenly distributed throughout the habitation zone, with associations to Households 1, 2, 15, and possibly 30. They are located both inside and outside domestic structures, occur with and without board covers, and have extended, flexed, and partially flexed body positions, but they are found only in simple pits. With the possible exception of a negative association with stepped pits, beaver incisor burials do not appear to differ in mortuary treatment from the general male population.

Beaver incisors occur in reliable burials with 25 different artifact types and have strong associations with six artifact types (Figure 11.2, Table 11.3). All five reliable burials with beaver incisors also have FKK, a relationship that is strengthened by the co-occurrence of the two types in partially mixed Burial 81 and looted Burial 269. With a total of seven co-occurrences, we can be reasonably confident that all beaver incisor burials in the King site burial population also had FKK. Beaver incisors have a strong mutual association with iron and with hematite; the latter relationship is strengthened by the co-occurrence of the two types in the partially mixed Burial 81. Beaver incisors are strongly associated with points and blades, while discoidals are strongly associated with beaver incisors. Beaver incisors and points also occur together in Burials 81 and 269.

Busycon Shell Beads

Seven adult male burials have *Busycon* beads. Four are reliable burials and three are heavily disturbed. The age distribution of burials with *Busycon* beads is similar to that of adult males lacking them (30.0 vs. 31.1 years) (Figure 9.2).

All bead burials are in the habitation zone, where they are distributed widely and are associated with Households 2, 15, and possibly 28 and 30. Six of the burials were interred outside. Burials with beads were interred in simple and stepped pits, with and without board covers, and in flexed and partially flexed body positions. Except for the unusually large proportion of outside burials—

a pattern characteristic of subadults as well—there is no indication that bead burials were treated differently from the general adult male population. Sample sizes, however, are too small for statistical verification.

Busycon beads occur in adult male burials with 27 different artifact types (Figure 11.2) and with an average of 10.5 artifact types per burial. This is the highest average for any type of grave good. They have strong associations with points, hematite, and bacula. The point association is supported by the co-occurrence of beads and points in three heavily disturbed burials, Burials 87, 195, and 229.

Iron Implements

Iron implements occur in six burials: four reliable, one heavily disturbed, and one looted. Poor preservation conditions among the six burials make it difficult to identify patterns in the distribution of these artifacts relative to age, body position, and pit configuration. The average age for Burials 92 and 117 and the looted Burial 234 is 31.3 years—about the same as that for reliable and lightly disturbed burials lacking iron implements. Burial associations with Households 1, 2, 15, and 30 indicate that iron implements were fairly evenly distributed throughout the habitation zone. One burial is located in the plaza, but there are none in Structure 17.

Iron implements occur in burials with 23 different types of artifacts (Figure 11.2). On average, burials with iron tools have 9.5 different kinds of grave goods (Table 11.6). Burial 19 is distinctive, however, in having only an iron tool as its grave good.

Iron has strong associations with five artifact types (Table 11.3). It has a strong mutual association with hematite and beaver incisors and is strongly associated with points and FKK. The point association is supported by the co-occurrence of iron and points in the heavily disturbed Burial 40 and looted Burial 234. Discoidals also have a strong association with iron, and this is supported by the co-occurrence of iron and discoidals in Burial 40. No reliable and lightly disturbed burials contain both iron and pipes, but Burials 40 and 234 each contained a pipe.

Human Remains

Human skeletal elements were recovered from four reliable adult male burials. They include 10 adult molars (Burial 92), left and right frontals (Burial 105), a complete bundled skeleton (Burial 117), and a humerus (Burial 129). A fifth set of human remains (Burial 131), consisting of long bone shafts from

the lower and possibly upper extremities, was interred with two adults of indeterminate sex (Burials 143 and 144). Although different body parts are represented in each of the four male burials, it is useful to consider them together as a group.

Three of the burials are older adults while the fourth is fairly young (Figure 9.2). The average age of the four burials is greater than that of burials lacking human remains (36 vs. 30.3 years). One burial is located in Structure 17 and the remainder are distributed throughout the habitation zone in Households 2, 8, and 15. Of the latter, one is an inside burial, while the others are outside. All three of the deeper pits are simple in form, but they all have board covers. Flexed, lightly flexed, and extended body positions are represented. Except for board covers, the four burials do not differ from the general adult population in these mortuary characteristics.

Human remains occur with 23 different types of artifacts in reliable and lightly disturbed burials (Figure 11.2). The number of artifact types per burial ranges from none (Burial 129) to 18 (Burial 92) and averages 8.2. Human remains are strongly associated only with points (Table 11.3).

Os Bacula

Os bacula were recovered from three reliable burials. A fourth baculum was recovered during the excavation of Burial 81, but it may have been interred with Burial 82, which was intruded by Burial 81. The age distribution of burials with bacula is similar to that of adult males lacking them (31.6 vs. 31.0 years) (Figure 9.2).

As noted in Chapter 7, the preservation rank of burials lacking bone tools is significantly lower than that for burials with such tools. Bacula of small animals such as opossum are relatively thin-walled elements and are likely to decay more readily than bone tools that are generally made from the heavier bones of large mammals (Elizabeth Reitz, personal communication 2000). It is possible that more burials were interred with bacula than is evident in the collection.

All burials containing bacula (including Burial 81 or 82) were interred in the habitation zone. Associations with Households 2 and 15 suggest that they were widely distributed throughout the habitation zone or at least not restricted to the northern and northeastern sectors. Bacula burials are located both inside and outside domestic structures, have simple and stepped pit forms, occur with and without board covers, and have flexed and partially flexed body positions.

Bacula occur in burials with only 21 other artifact types but average 9.3 ar-

tifact types per burial. They have strong associations with four artifact types: points, antler cylinders, hematite, and *Busycon* beads (Figure 11.2, Table 11.3). All burials with bacula also have points. Given the small sample size, however, we cannot be certain that this association holds for the entire burial population.

Stone Discoidals

Stone discoidals were recovered from three adult male reliable burials and one heavily disturbed burial. The two that can be aged are approximately 19 and 45 years old, suggesting that discoidals were available to adult males of all ages. Reliable burials occur in Structure 17 and in the habitation zone associated with Households 1 and 2. The disturbed burial is in the plaza. Simple and chambered pits, but not board covers, are represented in the small burial sample. Body positions include flexed and partially flexed.

Discoidals occur with only 14 different types of artifacts in reliable burials (Figure 11.2). This low number may be due to the fact that only three burials have discoidals. The average discoidal burial has eight different artifact types. The artifact has one-sided associations with six different artifact types: points, FKK, blades, hematite, beaver incisors, and iron. All burials with discoidals also have points and FKK (Table 11.3). Discoidals also occur with points and iron in the heavily disturbed Burial 40.

End Scrapers

End scrapers occur in three reliable burials. Small sample size makes it difficult to identify patterns in the distribution of these tools relative to body position, pit configuration, or pit location. The average age of the three burials is considerably greater than that of burials lacking end scrapers (40.0 vs. 30.1 years). One burial is located in Structure 17; the other two are located in the habitation zone. End scrapers occur in burials with 20 different artifact types (Figure 11.2). All three burials with end scrapers also contain points, FKK, and blades.

Uncommon Artifact Types

Approximately half the artifact types occurring in adult male burials are known from only one or two burials. With such low frequencies, it is difficult to identify meaningful patterns in the mortuary associations of these artifact types. We can get around this problem to some extent by looking at the burial contexts of these types at other sites.

Copper Arrow Symbol Badges

Copper arrow symbol badges (CASB) were found with only one burial (Burial 92) at King. The artifact type is known from at least 13 other sites: Abercrombie, Charlotte Thompson, Kogers Island, Long Island, Lubbub Creek, Pine Log Creek, Terrapin Creek, Thirty Acre Field, Toasi, and Moundville in Alabama; Etowah and Cemochechobee in Georgia; and Lake Jackson in Florida (Brain and Phillips 1996:Table 26). With an age of approximately 45 years, Burial 92 is one of the oldest burials in the King site sample. It is also the most richly endowed burial, possessing among other things 31 points, a bifacial blade, and three iron implements (Figure 11.2).

Burials with CASB at the other 13 sites resemble Burial 92 in at least two respects. Most burials appear to have been high-ranking individuals. At least nine were interred in mounds. Where field documentation is good, burials are usually richly endowed with grave goods, including exotic items such as copper celts, stone palettes, bifacial blades, spatulate celts, *Busycon* cups, and additional embossed copper artifacts. The second point of comparison with Burial 92 is that burials with CASB are very uncommon at the sites where they have been found. At Etowah only three burials out of approximately 350 in Mound C had CASB. The numbers at Cemochechobee are one out of 34; at Kogers Island one out of 102; at Lubbub Creek one out of 60; and at Moundville one out of several hundred.

We may infer from these comparisons that the social identity represented by the CASB was restricted to a very small proportion of the population, perhaps only one or two in a community at any time, and that individuals having this identity were generally quite highly ranked. Unfortunately, Burial 20 at Lubbub Creek is the only CASB burial that has been aged (Blitz 1993:Table 17). At 35 years it is on the older end of the adult age range, but we really need additional burials with age estimates before we can be certain that the artifact type is indeed associated only with older individuals.

Spatulate Celts

Burials 117 and 234 are the only two burials in the King site collection that have spatulate celts, and the latter is known only from the word of the collectors who looted it (Little 1985). At approximately 19 and 30 years, respectively, both individuals were comparatively young. Both were well endowed with grave goods and they are probably the second- and third-richest burials at the site. Burial 117 had, among other things, nine points, a flintknapper kit, two iron implements, and one small discoidal (Figure 11.2). Items reported as

coming from Burial 234 are 23 points, three bifacial blades, one spatulate celt, one iron sword, and one stone pipe.

Spatulate celts are known from a number of sites across the Southeast (Brain and Phillips 1996; Lewis and Kneberg Lewis 1995; Marvin Smith 1987; Webb 1938). Brain and Phillips (1996:Table 28) list almost 50 sites known to have produced spatulate celts and distinguish early, intermediate, and late varieties. Unfortunately, only a small number of these finds have good contextual information and in none have the skeletons been aged.

Six burials, four of which had early spatulate celts, were in mounds. Nine burials, all with the intermediate celt form, were from village area cemeteries. Three of these occurred in burials that had either no other artifacts or only a few points, while those in two burials from Kogers Island and Polecat Ford were accompanied by bifacial blades, *Busycon* shell pins, and *Busycon* cups. The Kogers Island burial also had a stone palette and copper arrow symbol badges and the Polecat Ford burial also had 23 points. Early-form spatulate celts in Lake Jackson Mound Burial 2 were accompanied by a *Busycon* cup and a stone palette and in Spiro Burial 62 by a monolithic axe and numerous *Busycon* cups, among other things.

Spatulate celts are not common artifacts. Only one out of 459 burials excavated at the Mouse Creek phase sites had a spatulate celt. In Mound C at Etowah, the numbers are one out of 350 burials; at Toqua two out of 511 burials; and at Kogers Island one out of 102 burials.

We may infer from these comparisons that the social identity represented by spatulate celts was restricted to a very small number of individuals, perhaps only one or two in any community. Individuals having this identity generally were highly ranked in society, but they do not appear to be as high ranking as those interred with copper arrow symbol badges. This impression is based on the number of burials from Etowah, Lake Jackson, Lubbub Creek, and Moundville with early Cemochechobee type CASB that have exotic Southeastern Ceremonial Complex (SECC) grave goods.

Gravy Boat Bowls

Gravy boat bowls were found in only two burials at King. Burial 92 is one of the oldest (approximately 45 years) and one of the most richly endowed burials in the King site burial sample. Burial 124 was severely impacted by plowing and almost certainly lost artifacts. In addition to a gravy boat bowl, there was a celt and a Type III hammerstone that may have been the remnant of a flintknapper kit. Age cannot be determined.

Gravy boat bowls are known from at least 14 other sites in the Southeast:

Etowah, Long Island, Polecat Ford (Brain and Phillips 1996:148); Toqua (Polhemus 1987:1306); Kogers Island (Webb and DeJarnette 1942:217); 1La°13 (Webb 1939:64); Bell Field (Kelly 1970:72); Little Egypt (Moorehead 1932: Figure 71d); Dallas (Lewis and Kneberg Lewis 1995:361); and Baugh's Landing, Gilchrist Island, Tick Island, Sycamore Landing, and Mason Island (Moore 1915). As with Burial 92, burials containing gravy boat bowls at the 14 sites tend to be high ranking and uncommon. At least eight burials were in mounds. Three burials (one from Mound C, Etowah) lacked additional grave goods, three burials had only an additional pottery vessel or two, and five burials lacked information on grave goods. Burials at Toqua, Kogers Island, and Bell Field, however, were accompanied by numerous artifacts, some of which are exotic in nature, including points, spatulate celt, bifacial blade, stone effigy pipe, stone palette, copper-covered wooden ear disc, effigy bottles, galena cubes, and large *Busycon* beads.

At Etowah, only one out of approximately 350 burials had a gravy boat bowl. At Toqua the numbers are one out of 511; at Kogers Island one out of 102; at 1La°13 one out of 27; at Bell Field one out of 18; at Dallas one out of 279; at Baugh's Island one out of 15; at Gilchrist Island and at Tick Island one out of 5; and at Mason Island one out of 52.

We may infer from these comparisons that the social identity represented by the gravy boat bowl was restricted to a small proportion of the population, perhaps only one or two in any community, and that individuals having this identity were generally highly ranked. Unfortunately, there are few data on how old these individuals were. Of interest is the report by Moore (1915:269) that the Mason Island burial was a young child.

Busycon *Cups*

Busycon shell cups were found in only two burials at King, Burials 65 and 92. As with Burial 92, Burial 65 is an older individual (approximately 39 years) and richly endowed with grave goods (Figure 11.2). The artifact type is also known from a number of sites in the region. I have compiled data from five sites: Toqua (Polhemus 1987:994), Dallas (Lewis and Kneberg Lewis 1995: Table 23.6), Hixon (Lewis and Kneberg Lewis 1995:Table 24.3), Bell Field (Kelly 1970:69), and Kogers Island (Webb and DeJarnette 1942:219).

For the most part, burials with *Busycon* cups are few in number: at Toqua three or four out of 511 burials have *Busycon* cups; at Dallas two out of 279 burials; at Kogers Island two out of 102 burials; and at Bell Field one out of 18 burials. These burials are all adults and the two for which sex data are available are male. Hixon is distinctive in that 11 out of 112 burials have cups. The

site is also unusual in that five burials are subadults ranging in age from 1 year to early adolescence and three of the adults are identified as female. One of the latter (Burial 71) has a bifacial blade and may actually be male.

Many of the burials from these five sites were in mounds, although the exact number cannot be determined because of inadequate reporting. Artifact associations among the burials vary considerably. Ten burials have a pottery vessel or large numbers of shell beads or a combination of pots, beads, and shell gorgets. At the other extreme, five burials have copper-covered wooden ear discs and/or copper arrow symbol badges along with various combinations of bifacial blades, celts, spatulate celts, effigy bottles, effigy stone pipes, large numbers of shell beads, and galena. Three burials lack copper artifacts but have a variety of other grave goods, including effigy vessels, discoidals, bifacial blades, celts, and shell beads. Four of the burials with larger numbers of artifacts have two *Busycon* cups each.

Burials interred with *Busycon* cups are often highly ranked and, except at the Hixon site, appear to be restricted to a small proportion of the local population, perhaps only one or two in any community. The Hixon component dates to the Hiwassee Island phase, A.D. 1200–1300; shell cups may have had different meanings and uses at that time.

Celts

Stone celts were found in one biological male burial (81), one probable artifactual male burial (124), one extended burial (192), and one burial of undetermined sex (215). All four burials are located in the habitation zone and can be assigned to Households 2, 15, and 23. Burials 192 and 215 are reliable burials but have no grave goods other than a single celt. Burial 81 is partially mixed and Burial 124 is heavily disturbed and probably has lost artifacts to plowing and erosion. A celt and a celt preform were also recovered from mixed Burial 130, one of five individuals located in overlapping and intrusive burial pits.

Counting the specimen from the mixed Burial 130, celts occur in 2 percent of King site burials. They are somewhat more common in burial samples from Dallas and Mouse Creek phase sites such as Dallas, Hixon, Sale Creek, Rymer, Mouse Creeks, and Ledford Island, where relative frequencies range between 2 and 5 percent (Lewis and Kneberg Lewis 1995). The number of grave goods in Burials 81, 124, 192, and 215 at King ranges from one to more than 14. There is a gravy boat bowl in the heavily disturbed Burial 124, but no exotic or high-status artifacts such as bifacial blades and *Busycon* cups are represented in the other three burials. Burials with celts in Dallas and Mouse Creek samples exhibit a similar range in grave good frequency, but exotic and high-status grave

goods are also present in a number of burials. We may infer from these comparisons that celts were a relatively common type of grave good and that the individuals interred with them represented a fairly broad cross section of the adult male population in a community.

Pulley-Shaped Ear Spool

This artifact type was found only in Burial 30, located in the northern plaza. The sex of Burial 30, it will be recalled, cannot be identified with certainty. The individual has been identified as a female on osteological grounds but was interred with a number of male-associated grave goods.

Disc-shaped ear spools are very commonly depicted in images of human males engraved on shell cups and gorgets and embossed on copper sheets from thirteenth- and fourteenth-century sites across the Southeast (Brain and Phillips 1996; Phillips and Brown 1978:74–75). Archaeological specimens from that period are copper-covered wood and stone cymbal-type ear spools and occur with high-ranking burials at sites such as Spiro (Brown 1976b), Etowah, Moundville, Beaverdam, Rudder, Tallassee, and Kogers Island (Brain and Phillips 1996:375). Only two burials have been sexed: Burial 2 from Beaverdam is male (Blakely et al. 1985), while Burial 6 from Kogers Island is female (Newman and Snow 1942:Table 30).

The pulley-shaped ear spool made of shell, the type represented in Burial 30 at King, is not reported from many sites. In fact, the only reference to the type that I can find is to two burials from the Dallas phase component at Hiwassee Island. These burials are identified as adult females by Lewis and Kneberg (1946:147). There is no description of where they occurred at the site or what other artifacts occurred with them.

We can be fairly certain that the cymbal-type ear spools of the thirteenth and fourteenth centuries were restricted to high-ranking individuals. This practice may have carried into the sixteenth century with the pulley-shaped ear spool, but there is no archaeological evidence, other than the exotic marine shell from which the ear spools were made, to support this supposition.

Summary and Observations

Small sample sizes make it difficult to identify the kinds of associations that exist between most adult male mortuary practices. This is especially true for the co-occurrence of different pit forms and body positions with artifact types. Only in the case of FKK and board covers is there a strong association.

A number of artifact types—points, FKK, blades, discoidals, pipes, and antler cylinders—tend to occur more frequently in the plaza and Structure 17

than in the habitation zone, but in no instance is the observed distribution unlikely to be due to chance. Individuals interred in Structure 17 and the plaza, on the other hand, appear to be more involved in point exchanges than those buried in the habitation zone. Within the habitation zone, most artifact types appear to be evenly distributed across all sectors. Burials with bifacial blades, however, are restricted to households located in the northern and northeastern sectors.

Many artifact types that occur in three or more burials appear to be evenly distributed across the adult age range. FKK, bifacial blades, and, to a lesser extent, points, hematite, and human remains, however, are more likely to occur with older males. Among burials with points, those with the greatest number of points and the greatest number of point microstyles also tend to be older.

There are several pairs of artifact types that do not occur together in reliable and lightly disturbed burials (Table 11.3). Considering only those represented in three or more burials, there are five pairs of artifact types that have mutually exclusive distributions: pipes and iron, pipes and discoidals, pipes and end scrapers, discoidals and antler cylinders, and discoidals and bacula. Unfortunately, sample sizes are so small that we cannot be certain these are not due to chance. Indeed, pipes do occur with iron and discoidals in the heavily disturbed Burial 40 and with iron in looted Burial 234.

With the exception of *Busycon* cups and turkey tarsometatarsus awls, which occur in only two burials, no two artifact types always occur together in adult male burials. Among reliable and lightly disturbed burials, there are several more common artifact types that always occur with another type. These include blades, antler cylinders, bacula, discoidals, and end scrapers that always occur with points; beaver incisors, discoidals, and end scrapers that always occur with FKK; and end scrapers that always occur with blades. Sample sizes are large enough in the case of points, FKK, blades, antler cylinders, and beaver incisors, especially when heavily disturbed, partially disturbed, and looted burials are considered, that we can be reasonably confident these invariant, one-sided associations are not due to chance. Blades and antler cylinders apparently always occur in burials that have points, and beaver incisors apparently always occur in burials that have FKK.

Blades and FKK, hematite and beaver incisors, hematite and *Busycon* beads, iron and beaver incisors, and iron and hematite each have strong mutual associations. Many artifact types also have strong one-sided associations with other types. Those that are represented by the largest number of reliable and lightly disturbed burials are FKK, hematite, beaver incisors, and *Busycon* beads co-occurring with points; pipes, antler cylinders, hematite, and *Busycon* beads

co-occurring with FKK; and beaver incisors co-occurring with blades. Sample sizes are large enough in these cases, especially when heavily disturbed, partially mixed, and looted burials are considered, that we can be reasonably confident that these strong associations are not due to chance.

Artifact types that always or frequently co-occur are of special interest because their strong associations imply some sort of direct or indirect cause for why they are placed together in the same burial. Ultimately, of course, we are interested in why all artifact types are or are not interred together. These questions can be productively addressed only after we have considered the utilitarian function and meaning of individual artifact types within the King site community, a task we will turn to next.

Artifact Function and Meaning in Burial Context

In this section, an attempt will be made to understand how the different artifact types discussed above were used and what symbolic meaning they may have had prior to being placed in burials. Some types of grave goods probably had utilitarian functions such as wood carving or flintknapping prior to interment; others probably were used in activities that had a larger symbolic component such as scalping an enemy or carrying sacred fire; and others, such as body paint and engraved shell gorgets, may have been used or worn primarily because of their symbolic value—their ability to communicate information.

Evidence for artifact use and meaning has been collected from a variety of sources, including early European descriptions of aboriginal culture, SECC art, and archaeological context. This evidence will be examined within several behavioral and ideological domains, including warfare, ceremony, tools and implements, medicine, costume, and European trade goods.

Warfare

The prominent role that warfare played in historic aboriginal Southeastern Indian culture was described in Chapter 2. Warfare in the historic period probably differed in many ways from its precontact predecessor, but general themes such as the recognition of warrior grades and honors almost certainly go back well into the prehistoric period. It is certainly an important element in SECC art (Brown 1976a; Knight et al. 2001). Severed heads, scalps, and other body parts are frequently portrayed on engraved shell cups and may represent war trophies (Dye 2002, 2007). Weapons such as maces, monolithic axes, long bifacial blades—commonly referred to as swords or knives in the SECC literature—

and bows and arrows are also commonly depicted on marine shell and copper sheets. Archaeologists have different opinions concerning whether SECC images such as these were drawn from everyday life or from the mythological past and whether they portray actual people or supernatural and mythical personages (Brown 1976a; Knight et al. 2001). Regardless of which interpretation is correct, the fact remains that these images do depict weapons and martial arts. We may infer from this that the objects they depict may have served in some social and political contexts as markers for status positions that were strongly military in orientation.

Several artifact types interred with adult males at King—arrow points, bifacial blades, spatulate celts, copper arrow symbol badges, gravy boat bowls, human remains, and hematite—probably draw their significance and meaning from warfare. Some, such as arrow points, were probably actual weapons, while others, such as copper badges, were more likely to have functioned solely as symbols of prowess and success in warfare.

The points that accompany many King burials, often in large numbers, may have been used in hunting and other domestic tasks, but the evidence tends to support an exclusive military role. To begin with, points found in burials are quite different from the kinds of bifaces found in domestic contexts. They are generally very well made, symmetrical in shape, and thin in cross section (Figure 7.16). They are produced with shallow, parallel thinning flakes and fine marginal retouching and seldom show evidence of use wear or resharpening. The 255 burial points measured by Matthiesen (1994:Appendix A) average 37.6 mm in length, 14.3 mm in width, and 3.86 mm in thickness. Bifaces recovered from house floors at the Potts Tract (Structures 1 and 2) and King (Structure 8) sites come in two shapes: triangular and teardrop (Hally 1970; Ruggiero 2000). The triangular bifaces are often asymmetrical in shape and relatively short (averaging around 27 mm) and thick (averaging about 4.5 mm) (Figure 11.4). Teardrop-shaped bifaces are quite thick (averaging 6.2 mm) and narrow (averaging 12.2–13.4 mm) relative to length (averaging 30–35.5 mm) (Hally 1970:Figure 18c). Burial points are similar to the triangular bifaces in width but are significantly longer ($t = 4.80$, $p = .001$) and thinner ($t = 1.72$, $p = .045$). Burial points are also significantly thinner than teardrop-shaped bifaces ($t = 3.57$, $p = .001$). Both types of points from domestic contexts appear to have heavily reworked edges, indicating that they were repeatedly dulled and resharpened.

Given the difference in thickness, we can be certain that burial points and teardrop-shaped bifaces are different types of tools, the latter probably being used in a variety of domestic activities involving cutting and perhaps scrap-

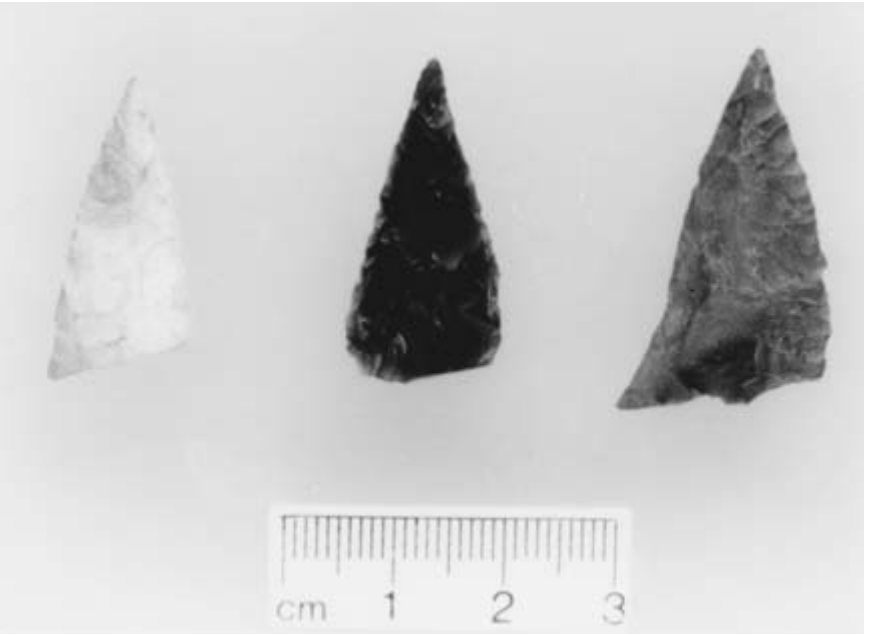


Figure 11.4. Triangular bifaces from Structure 8.

ing. We cannot be quite as confident that burial points and triangular bifaces are different types of tools. The latter could be simply reworked versions of the mint-condition burial point.[4] The tendency for burial points to be thinner, however, suggests that they were manufactured for different uses. If this is the case, it is probable that the triangular bifaces were generalized hunting points and butchering tools, while the burial points were specialized weapon points. Analysis of flaking patterns, edge wear, and resharpening by a lithic specialist could probably resolve this question.

All burials interred with five or more points contain at least one made of red, pink, white, or light gray chert (Table 7.10). In eight cases, there is at least one that is red or pink and one that is white or light gray. Given the overwhelming predominance of black and dark gray chert points in King site burials, the presence of these specimens is quite striking. As noted in Chapter 2, red and white figured prominently in the dualistic conceptualization of the world in the aboriginal Southeast. While the symbolic logic of white arrow points might escape us, red chert points are entirely consistent with the meaning of red in Southeastern belief systems. Whatever their exact meaning, these

colored points are at least metaphorically more appropriate for weapons than for hunting points.

Early European accounts refer to the use of the bow and arrow in hunting and warfare (Swanton 1946:572–575). Arrows were variously tipped with antler, gar scales, turkey spurs, bird bills, iron, cane, and stone. Descriptions of the use of bows in warfare are few in number and date mostly to the early historic period before guns replaced them. Elvas (Robertson 1993:59) describes the varying effectiveness of stone- and cane-tipped arrows against Spanish armor.

Bows, arrows, and arrow points are depicted on a number of engraved *Busycon* cups from Spiro (Phillips and Brown 1978:Plates 57, 58, 60, 62, 66). Their association with maces, severed heads, human skulls, and elaborately costumed human figures (Phillips and Brown 1978) is suggestive of warfare and/or human sacrifice and ceremonial contexts. Whether these engravings portray real-life scenes or mythological beings and events, they imply that the bow and arrow had ideological/symbolic importance in warfare beyond their practical use as weapons.

The fine craftsmanship and fragile nature of bifacial blades indicate that they were not used in everyday subsistence or household activities. Seven of the eight blades that have been subjected to lithic analysis bear evidence of use wear, breakage, and/or resharpening, and three have been considerably reduced in size by one or more of these processes (Figure 7.14). We may infer from this that bifacial blades did get broken and that they were used in a way that dulled their edges. That this was a time-transgressive process is indicated by the fact that two of the most heavily reworked blades occur with two of the oldest individuals (Burials 92 and 105), while what appears to be the least reworked blade occurs with one of the youngest individuals (Burial 223, the female warrior).

If bifacial blades were highly valued items in King site society, why were some individuals buried with small, broken, or worn-out pieces? Burial 92 has more high-value grave goods than any other burial at the King site, yet the accompanying blade is small in size, broken at one end, and extensively retouched at the other. One reasonable explanation is that bifacial blades, like Trobriand Island Kula shell necklaces and bracelets and Kwakiutl coppers, increased in value the longer they were in use and circulation. There is no evidence to suggest that blades were exchanged between individuals, but like triangular points they may have been, and their value may have increased with each exchange. Alternatively, blades may have increased in value as the status

of their owner increased through time or as they were used in more and more socially valued activities such as warfare or ceremonial displays. Breakage or resharpening, in this context, could have served as visible evidence of a blade's honorable life history and the valor of its owner.

Bifacial blades are depicted on shell cups and gorgets in four different thematic contexts. The most common, represented on gorgets from Etowah, Hixon, and Toqua, shows a single birdman figure holding a blade in one hand and a severed head or "rayed circle" in the other (Brain and Phillips 1996:44–49). Another theme, represented on gorgets from Etowah, Hixon, and Fain's Island, portrays two birdman figures facing each other and holding a blade in one hand (Lewis and Kneberg Lewis 1995:Figure 8.2a). The third theme, represented on a single shell cup from Spiro, depicts two human figures trailing snake bodies or capes from their shoulders and holding a bifacial blade in one hand (Phillips and Brown 1984:Plate 192). The fourth theme, represented on a gorget from Spiro, depicts two human figures facing each other and holding a bow in one hand and what is probably a bifacial blade in the other (Phillips and Brown 1984:Plate 336).

In none of these specimens are blades shown being used to do something. The association of blades and severed heads on gorgets from Etowah and eastern Tennessee, however, raises the possibility that the blades were used to remove body parts from slain individuals. The rayed circles, depicted in place of heads on some gorgets, may represent freshly cut scalps. They look like scalps with roached hair, and their substitution for severed heads suggests that they also represent war trophies (but see Knight and Franke 2007). Timberlake (Williams 1927:77) describes Cherokee warriors as being equipped with "scalping knives" as well as guns, bows and arrows, and pipe tomahawks. Adair describes in detail how scalps were removed with "long sharp-pointed scalping knives" (Swanton 1928a:415). These were probably iron knives in the mid-eighteenth century, but the important point is that special cutting implements were used to remove scalps and perhaps other body parts from slain enemies. Other ethnohistoric sources describe the use of cane and wooden knives for scalping and dismembering (Hudson 1976:249; Lorant 1965:65; Swanton 1928a:182), but there is no reason to believe that this was the only material used for this purpose prior to European contact. Numerous human skulls have been recovered from prehistoric Mississippian sites that show cut marks indicative of scalping (Bridges et al. 2000; Hill 2001b). It is difficult to believe that these marks could have been made with a cane knife.

Engraved shell art provides some support for the identification of bifacial blades as implements used to scalp and mutilate fallen enemies. It also places

these implements in association with what must have been historically and/or mythologically important events. For this reason, we can argue that bifacial blades probably also had importance as weapon/warfare/warrior symbols.

With the exception of the shell cup and gorget from Spiro, bifacial blades are always depicted as being held by birdman figures. Arrows and bows, on the other hand, are depicted with human figures lacking bird characteristics or with isolated heads. The contrast suggests that different types of events, activities, and personages, whether real or mythological, are being depicted. We can conclude, therefore, that points and bifacial blades probably symbolized different aspects of warfare—perhaps different military grades and honors.

The copper arrow symbol badge is usually interpreted as a representation of an arrow point (Brain and Phillips 1996; Schnell et al. 1981). The facts that the badges are embossed, often with an eye motif (Schnell et al. 1981), and that they are often found in burials with SECC items such as embossed birdman plates, bifacial blades, and celts of various kinds suggest they are symbolic of weapons rather than hunting points. Given their association with high-ranking individuals and their scarcity in burial collections, I think it is likely that they are markers for a high-level warrior grade or war honor.

Hafted celts or axes are a very common type of grave good, especially in burials that on other evidence can be identified as high ranking. They appear in burials as early as the eleventh century at Ocmulgee and continue into the sixteenth century. Four basic types can be recognized on the basis of shape and material: stone oblong form with thick cross section and rounded or straight bit (Lewis and Kneberg Lewis 1995:Figure 6.4j); stone oblong form with relatively thin cross section and square or expanded bit and occasionally copper cover and drilled hole in the haft area (Lewis and Kneberg Lewis 1995:Figure 6.4a and c; Rudolph and Hally 1985:Plate 25c); copper celt of oblong shape and square or expanded bit (Brain and Phillips 1996:162); and stone spatulate form, sometimes with drilled hole (Lewis and Kneberg Lewis 1995:Figure 6.5a–c). The latter three types of celt are unlikely to have been used in everyday domestic tasks because of their fragile nature (thin cross section, shallow tapered cutting edge, or soft metallic composition). They also generally show no signs of wear or edge damage. Given the importance of clubs, often fitted with metal blades, as weapons in the historic period (Van Horne 1993), it is likely that these types of celt were weapons or representations of weapons. The general absence of edge damage, of course, favors the more symbolic role.

In contrast to the frequency with which celts occur in Mississippian burials, there are relatively few depictions of them in engraved shell and embossed copper SECC art. I know of only four examples: two gorgets from the Midwest

showing human figures holding hafted celts, one fragmentary *Busycon* cup from Spiro that shows paired human figures holding what looks like a hafted celt or monolithic axe, and one cup fragment from Spiro depicting a bird-head hafted axe (Phillips and Brown 1984:Plates 187 and 204). With the possible exception of the bird-head specimen, none depict a spatulate celt form.

It is possible that the three nonutilitarian celt forms are merely stylistic variations on a single theme, but this seems unlikely on two counts. Each form has a long history, extending from at least the mid-fourteenth century through the mid-sixteenth century. The shape of the spatulate celt changes during this period (Brain and Phillips 1996:377) and may even develop from the elongate form dating to the mid-eleventh century at Macon Plateau in Georgia (Fairbanks 1956:Plate 1). The three celt forms may also differ in inherent value—the copper celts being made of an exotic material and the spatulate celt requiring perhaps greater skill to manufacture than the oblong form. I think it is more likely that the three celt forms stand for different types of weapons that may have had different mythological significance and represent different warrior grades or war honors. Indeed, spatulate celts occur with some regularity in cemetery burials, admittedly in the sixteenth century primarily, but copper forms are known only from mound burials, including the probable mid-sixteenth-century specimens from Nacoochee in northern Georgia and Lick Creek in the Upper Tennessee River valley (Brain and Phillips 1996:193–195, 203).

War clubs are described in a number of early European accounts, but apparently they lost importance as weapons with the advent of firearms (Swanton 1946:466–470). Some were made entirely of wood and shaped like spatulas or swords; others had wooden shafts with iron or stone spikes projecting from one end and some had stone or copper axeheads hafted in wooden handles. The latter, of course, is the type depicted in SECC art and represented in the archaeological record by copper and stone celts of various shapes.

I have argued elsewhere (Hally 1986a) that gravy boat bowls were used to hold and transport fire in the form of live coals. Mechanical performance characteristics that support this identification include heat-dissipating nodes on the exterior surface, large flanges that support handles, and presence of soot on interior rim surfaces. Early European accounts describe pottery vessels being used to carry newly kindled sacred fire to the square ground during the Green Corn ceremony (Williams 1930:111), to burn incense in temples (Swanton 1942:158), to hold fire during a curing ceremony (Lorant 1965:75), to carry fire to be used in battle (Worth 1993a:236), and to carry sacred fire on military expeditions as a worship device (Corkran 1969:44, 46). There is some evi-

dence that sacred fire was also carried to newly established towns from the parent town or town of origin by the leader who founded the new town (A. Moore 1988; J. Moore 1994). The means by which such fire was transported is not described, but pottery vessels could very well have been used. It seems logical, in fact, that the same type of vessel used to transport and hold sacred fire in ceremonial contexts would also be used to carry it to a newly founded town.

The first two uses are parts of ceremonies and ritual acts performed for the benefit of the community. The vessels involved are more likely to have been treated as communal property than private property and are thus unlikely to have been interred with deceased individuals. If such vessels were placed in burials, however, we might expect the deceased to be high-ranking ritual specialists or priests.

The last two uses are of interest because they may have resulted in personal ownership of the fire-carrying vessel. In the military case, the Cherokee war party leader or "war king" is specifically identified as the one who kindles the war fire and attends it while on the warpath (Corkran 1969:44, 46). We might expect that such individuals owned the pots in which they carried fire and that the pots would be buried with them when they died. The transfer of sacred fire from parent town to daughter town may also have resulted in personal ownership of the fire-carrying vessel. The establishment of a new town was obviously an event of great importance to the resulting community, but the role of the founder—as leader of the people who first settled in the town—would have been so central to the event that personal ownership of the fire-carrying vessel seems likely. Of course, it is possible that the vessel used to carry fire to a new town may have been subsequently used in community rituals involving sacred fire in that town.

From these observations, we can identify three different kinds of individuals who might have been interred with gravy boat bowls: priests, war leaders, and political leaders. These social positions may not have been mutually exclusive, but, at least in the case of the war leader, they should be distinguishable in mortuary contexts. In all cases, these individuals should be older than the average adult male because of the time needed to attain these positions of responsibility.

Scalping and removal of other body parts was a common practice in prehistoric and historic-period Southeastern warfare (Dye 2002, 2007). The extra skeletal elements interred with several burials could represent such war trophies. The strongest case for this interpretation can be made for Burials 92, 105, and 129, which have remains from only one part of the body: teeth, frontal bone, and humerus. The 10 human molars recovered from Burial 92

appear to have been prominently displayed as a necklace. Lawson reports that some North Carolina Indians kept the teeth of enemies they had killed in war (Swanton 1946:689). We do not know how the skeletal elements in Burials 105 and 129 were being handled and whether they were being displayed in some fashion. Skulls and long bones, however, are portrayed in SECC art in contexts indicating they were war trophies.

Burial 131 is represented by a bundle of long bones, probably from upper and lower limbs. These bones could represent the partial remains of a community member found and recovered several months or more following his/her death. Alternatively, they could represent a war trophy. Unfortunately, the two adult burials (Burials 143 and 144) they were interred with cannot be sexed.

The human remains (Burial 260) accompanying Burial 117 are distinctive in that they represent all or most of an adult individual, and this may have a bearing on why they were interred with Burial 117. There are four multiple burials in the King site collection that contain two adults interred side by side. In three of these, the two individuals lie in flexed positions one behind the other. In the fourth case the two individuals lie side by side in extended positions. There is also one multiple burial in which two children were interred in flexed positions, possibly one behind the other, and one in which two individuals, a child and an adult female, lie in flexed positions but facing each other. We do not know why these pairs of individuals were interred together, but in all likelihood they were related to one another and they probably both died at approximately the same time. The fact that Burial 260 is a bundle burial implies that this individual died before Burial 117, perhaps several years before. In itself, the difference in time of death is not necessarily evidence that Burial 260 was a war trophy, but it does suggest that the social relationship between the two was different from that existing between members of the other multiple burials.

Red was the color of war and conflict throughout the Southeast in the historic period (Hudson 1976). Among the many references to red in martial contexts is the use of red pigment to paint scalps and to paint warriors who were going to war (Hann 1988:71, 93; Swanton 1928a:406, 1946:697; Williams 1927:113). Hematite was probably the major source of the red pigment used in this way.

Ceremony

At least four types of grave goods—*Busycon* cups, stone discoidals, pipes, and gravy boat bowls—are known historically to have been used in activities that

are likely to have had sociopolitical and/or religious significance for the King site community. As such they are likely to mark civil or ceremonial offices that individuals could attain either through their own effort or by inheritance. Three of the types—*Busycon* cups, pipes, and gravy boat bowls—were used sometimes in war-related ceremonies, but unlike the artifact types discussed above, their primary ideological association seems not to have been with warfare and warriors.

References to *Busycon* cups in the historical literature describe them as serving vessels for the black drink, a caffeine-rich beverage made by steeping the parched leaves and twigs of yaupon holly in boiling water (Fairbanks 1979). Among the Creek, it was drunk daily in the square ground or rotunda in a social setting and was offered to visitors upon their arrival in a town. It was also consumed in ceremonial settings such as the Green Corn ceremony and peace negotiations. Regardless of the context in which black drink was used, its consumption appears to have been highly formalized and intended to ritually purify those who drank it. Among the Creek, preparation of black drink was supervised by specially designated individuals, the *heniha,* who were town officials responsible for public works and second in rank to the town chief. These individuals may also have had custody of the shell cups used to serve black drink. The beverage was served by one or two specially designated individuals variously described as old or young men and possibly bearing the title "Black Drink Singer" (Fairbanks 1979).

We may infer from this information that *Busycon* cups were used primarily, if not exclusively, to serve black drink and that this activity was in the hands of at least two types of officials, one of which was high in the community's civil hierarchy. Adair (Williams 1930:135) states that priests were custodians of the shell cups, implying that the cups were the property of the town rather than individuals. According to a Creek informant of Hitchcock in the nineteenth century, the shell cups used to serve black drink by the Coweta had been used for a long time and were carefully preserved (Swanton 1928b:503).

In contrast to this picture of community ownership, *Busycon* cups occur in burials throughout the Southeast (Milanich 1979), implying a certain degree of individual ownership. Given the sacred nature of black drink preparation and consumption and the small number of individuals who are interred with shell cups at most archaeological sites, it is likely that such ownership was greatly restricted by social tradition. To the extent that eighteenth-century beliefs and practices surrounding the black drink and the shell cup are applicable to the late prehistoric period, we may infer that individuals interred with

Busycon cups had an official role in the preparation and consumption of the beverage.

The chunkey game, involving a polished stone disc or chunkey stone, was played by men throughout the Southeast in the early historic period (Swanton 1946:682–684). To judge by the geographical distribution of stone discoidals from archaeological contexts, the game was widespread in the prehistoric period as well. The game appears to have been an important element in Mississippian belief systems, as it is depicted on SECC shell gorgets (Phillips and Brown 1978:110–111) and occupies an important place in at least one myth, the Apalachee Ball Game myth, that charters important social positions and ceremonies (Keyes 1994).

In the eighteenth century, James Adair reported that chunkey stones were community property and were never interred with the dead (Swanton 1946: 547). Archaeological evidence seems to support Adair's observation, as almost all archaeological specimens are found in nonburial contexts, either in mounds or near public ceremonial structures (Colburn 1936:86; Lewis and Kneberg 1946:122; Polhemus 1987:794; Schroedl 1986:372; M. Smith 1994:144).

Stone discoidals, however, do occasionally occur in burials. Examples include Mound 72 at Cahokia (Fowler et al. 1999), Mound C at Etowah (Brain and Phillips 1996:154), and King. The first two date well before European contact, but King is not that far removed in time from what Adair was observing among historic Southeastern Indians. It is possible that the discrepancy between what informants said in the eighteenth century and what the archaeological record shows reflects the existence of multiple kinds of games involving stone discs. Stone discoidals occur in two size classes with diameters of approximately 40 cm and 90 cm and in two distinct shapes, biconcave and plano-convex. The discoidals depicted on SECC shell gorgets are of the large, biconcave type. The discoidals in King site burials are of the large and small plano-convex varieties. Each of the four resulting types of discoidal may have been used in a different game or in the same kind of game played in different social and ritual contexts. It is possible that only one of them was the chunkey stone referred to by Adair.

However this question is resolved, it is clear that chunkey was more than just a game played for sport. It derived some of its meaning and ideological significance from events or personages of the past, and society at large probably maintained some degree of control over when and under what circumstances it was played.

In the historic period, pipes were smoked in four different contexts: war

preparation, peace negotiation, social interaction, and religious ritual. Members of war parties feasted and smoked together prior to setting off on raids (Swanton 1946:694). The calumet was carried by ambassadors to indicate peaceful intentions and, with pipe bowl attached, smoked as part of a formal greeting and by participants in peace negotiations (I. Brown 1989; Hewitt 1907). The calumet and calumet ritual appear to have been a historic-period introduction to the nuclear Southeast (I. Brown 1989), but we cannot rule out the use of pipe smoking as a ritual element in peace negotiations in prehistoric times. The most commonly cited use of pipes is in social settings. Travelers were offered tobacco to smoke by their host who, in the case of more important visitors, might be the town chief (Swanton 1928a:447–449). Men smoked for pleasure prior to daily council meetings in the town house and square ground (Hudson 1976:226). Finally, tobacco, especially of the *Nicotiana rustica* variety, was smoked before religious ceremonies and might have been used in conjuring rituals (Hudson 1976:353).

Several different kinds of pipes occur with King site burials. Most are clay elbow pipes with tall, conical bowls, but there are also clay pipes with short bowls and an obtuse angle between bowl and stem, stone disc pipes, and stone pipe bowls without stems. These variations could merely reflect personal stylistic preference or they could represent different pipe uses. Unfortunately, the historic accounts say little about whether different types of pipes were used in different contexts. Calumets used in war and peace contexts differed in the way the pipe stem was decorated but apparently not in the form of the pipe bowl (I. Brown 1989).

Historic accounts make few direct references to who owned and used pipes. Lawson (Swanton 1946:545) reports that Congaree women smoked stone pipes, raising the possibility that pipe use and ownership was common among women across the Southeast. Adair states that possession of a carved stone pipe with elaborately decorated wooden stem would qualify its owner as a "grand beau" (Swanton 1946:546). One gets the impression from this and from more general references that most adult males possessed one or more pipes and used them in various social settings. Nowhere is this clearer than in Timberlake's account of the formal greeting he received at the Cherokee town of Settico where he was offered pipes to smoke by "about 170 or 180" people (Williams 1927:65).

Ritual usage, on the other hand, may have been restricted to religious specialists and conjurers, although we cannot rule out the use of pipes in personal rituals designed to ensure individual well-being. War leaders apparently sponsored and directed the ceremonies that preceded the departure of war parties

they recruited. We might expect that this use of pipes was restricted to military leaders. We might also expect that the use of pipes in treaty and peace negotiations would be restricted to community and polity leaders.

Tools and Implements

Over one-third of the artifact types recovered from adult male burials at King can be identified as tools and implements or parts thereof. They include the following:

flintknapper kit
beaver incisor
antler cylinder
end scraper
celt
circular polishing stone
tabular polishing stone
tabular limestone
bipointed bone tool
turkey tarsometatarsus awl
cylindrical bone tool
bone handle
cougar radius tool
split bone tool
bird-bone tool
antler tine

Although specific functions cannot be identified for many of these artifacts, we can be reasonably confident that most were used in the production of goods such as flaked stone points; pottery vessels; arrows, bow staves, tool handles, and other wooden items; baskets; and animal-skin containers and clothing. In general, the early historic and ethnographic literature has little to say about craft activities among the Southeastern Indians. This, combined with the small number of specimens of most tool types available in the burial collection, means that we cannot say much about how most of these tools were used.

There are no historic descriptions of flaked tool manufacturing in the Southeast that I am aware of, nor are there references to the kind of people who practiced the craft. Nevertheless, on the basis of laboratory analysis, there is little doubt that the groups of artifacts we have identified as flintknapper kits were used to flake stone tools (Cobb and Pope 1998). We are probably safe in assuming also that the individuals interred with these kits owned them and used them to flake stone tools such as points, bifacial blades, and end scrapers. Since fewer than half the 34 reliable and lightly disturbed adult male burials were interred with FKK, however, we might question whether the kits do not have a slightly more restricted use or meaning. They may have been used to produce only a limited variety of lithic tools, for example, or they may be markers for highly skilled flintknappers or craft specialists.

Polhemus (1987:Figure 11.19, personal communication 1999) identifies antler cylinders as flaking tools on the basis of the existence of one specimen from Toqua with a chert flake embedded in its end and the occurrence of wear facets on the rounded ends of some other specimens. Polhemus also argues that the different lengths of antler cylinders at Toqua reflect differences in tool use life—shorter specimens having been worn down and reground more frequently. Illustrated specimens (Polhemus 1987:Figure 11.19) vary between 10 mm and 180 mm in length. In support of Polhemus's identification is an antler cylinder from the Little Egypt site that had a faceted end and was physically associated with a large concentration of flint debitage in Structure 3 (Hally 1980:354–355). Also supportive is the physical location of antler cylinders adjacent to flintknapper kits in two King site burials.

Polhemus seems to have included two different types of artifacts in his antler flaker category: first, long sections of antler tines that taper from a thick proximal end that in some cases shows little modification to a narrow, highly worked distal (working) end (Polhemus 1987:Figure 11.19a–c) and, second, short cylinders cut from antler tines that are of uniform thickness throughout their length and are ground on both ends (Polhemus 1987:Figure 11.19d–g). The latter resemble the antler cylinders recovered from King site burials and the one from Little Egypt.

In the absence of viable alternatives, "pressure flaking tool" is the best functional identification we have for the antler cylinders recovered from King site burials. The evidence in support of this identification, however, is equivocal. Seven of the 19 antler cylinders had well-preserved surfaces on one or both ends. All of the 11 intact ends on these tools—two from Burial 81 and nine from Burial 157—had smooth, rounded surfaces. There was minor damage to two of these surfaces that could have resulted from pressure flaking use, but it was limited to a very small area in each case. In short, if these pieces of antler were pressure flaking tools, they were yet to be used as such. In addition, 16 of the 19 measurable specimens from King measure between 30 and 50 mm while the shortest is 27 mm and the longest is 68 mm. I find it difficult to believe that so many individuals (six) would be interred with so many flaking tools having approximately the same stage of use reduction or that one individual (Burial 157) would be interred with eight tools showing approximately the same amount of use reduction. Alternatively, the short, relatively uniform length of the cylinders could be an intentional design feature if they were hafted by being driven into the end of a wooden handle (Polhemus, personal communication 2003). As use reduced the length of the cylinder, the handle would have been whittled back to expose a uniform length of antler

flaker. A very long piece of antler would have required a long handle that might have been ungainly to use. Finally, there is the fact that two of six burials with antler cylinders do not have FKK and seven of 11 FKK burials do not have antler cylinders. As will be discussed in the next section of this chapter, preservation conditions may account for some FKK burials that are missing antler cylinders but probably do not account for all of them.

The ethnohistoric literature has little to say about the meaning and use of beaver incisors beyond John Smith's description of their being used to notch arrows (Swanton 1946:572). They do occur fairly regularly in burial contexts, however, often with evidence of sharpening and wear on the occlusal surface (Lewis and Kneberg Lewis 1995:155; Polhemus 1987:1019). As was common throughout eastern North America, they were probably used for working wood—probably as chisels but perhaps also as whittling knives. Their strong association with FKK in King site burials suggests usage in the production of arrows, but they were probably used to manufacture other types of wooden objects as well.

The four chert unifacial end scrapers and four preforms recovered from Burials 49, 92, 101, and 117 were apparently enclosed in containers that also held flintknapper kits. They are not flintknapping tools but their exclusive association with FKK suggests their use was related to flaked stone tool production. The fact that seven burials with FKK did not have unifacial end scrapers or preforms, however, indicates that the tool was not essential to flaked stone tool production. Microscopic examination of the working edge of the four scrapers by Cobb and Pope (1998:9) provided evidence that they were "used in a transverse motion, with most wear on the dorsal face at a perpendicular or oblique angle to the worked material" (Cobb and Pope 1998:10). Comparison to use wear on experimental tools indicates that three of the four tools were used in scraping, shaving, or slicing dry wood or hardwood (Cobb and Pope 1998:10). They may have been used in arrow or bow production or even the manufacture and maintenance of wooden billets or antler flakers.

The presence of smooth facets on the edges of circular polishing stones indicates that these tools were used to polish or grind some kind of fine-grained material. The specimen from Burial 226 was one of four artifacts that formed a tight cluster at the feet of the individual. The other artifacts are two tabular polishing stones and a large mussel shell. The four artifacts may form a tool kit, but their manner of use is not known. The mussel shell and circular polishing stone could be related to pottery manufacture, but the tabular polishing stones with their surface striations do not fit this interpretation very well.

Tabular polishing stones and tabular stones are also difficult to assign a specific use. Except for the two tabular polishing stones included in Burial 226 (see above), all of the specimens of these artifact types were physically part of flintknapper kits in two different burials. Their presence in FKK may mean that they were used in flintknapping or in manufacturing activities related to flaked stone tool production.

Several kinds of worked animal bone—bird-bone tool, split bone tool, cylindrical bone tool, and antler tine—are so fragmentary and are represented in such low numbers that we cannot be certain what they originally looked like or how they were used. The cougar radius tool, eyed bone tool, and turkey tarsometatarsus awls all conform to artifact types that have been recognized and described in print elsewhere, but again we cannot be certain how they were used. With the exception of the cougar radius tool, there is no reason to believe that any of these worked bone items had other than everyday, mundane uses. The fact that cougar bone was used instead of white-tailed deer bone to make chisel-like tools at King and Toqua suggests that these artifacts had a meaning and perhaps usage that was unrelated to everyday domestic and subsistence activities.

Walker (2000) argues that bipointed bone implements with one end blunter than the other were part of barbless compound trolling hooks used in southwest Florida coastal waters to hook striking fish. This interpretation does not fit the King site specimens very well. To begin with, the latter are considerably larger than those described by Walker (average length of 176 mm vs. 89 mm). Second, there are no striking fish in Valley and Ridge Province rivers that were large enough to be taken with a hook measuring in excess of 175 mm. Alternatively, such hooks could have been used to catch bottom-feeding sturgeon, which were indigenous to the Upper Coosa drainage (Bud Freeman, personal communication 2006).

Polhemus (1998:101) identifies bipointed bone artifacts as arrow points. This identification is based on overall shape, uniformity in size and shape, the occurrence of impact fractures on the end of some specimens, and the fact that multiple specimens are often placed in burials in clusters similar to those characteristic of stone triangular points (Polhemus, personal communication 1999). Several pieces of evidence suggest that they had uses other than as projectile points or that they were points intended for special kinds of game. Their comparatively great weight (9–11 gm vs. 2–5 gm for stone burial points) suggests that they would have required a different type of bow to be effective. Their slightly asymmetrical shape raises the possibility that they would not have flown true for very great distances. The absence of barbs would have al-

lowed them to be easily withdrawn from a wound, a characteristic that is not normally seen as useful in fighting or hunting.

There are several historic references to the use of bone for arrow points, but the most interesting one is by Du Pratz (Swanton 1946:575). The Natchez made arrows tipped with bipointed pieces of bone for shooting large fish. The bone was hafted at a slight angle to the arrow shaft so that the rear end of the point stuck out and served as a barb. These arrows were attached to a line and wooden float. It is possible that bipointed bone tools were used in this way. Such arrows would not have been shot over great distances but rather directly into the water. The weight of the point would have allowed the arrow to pass through water with less loss of velocity, and the second pointed end would have served as the barb.

Medicine

Ethnographic evidence collected by Capron (1953), Swanton (1928b, 1946), and Sturtevant (1954) indicates that charms and medicine bundles were widely used by Southeastern Indians during the historic period. The Seminole had medicine bundles that were believed to provide for the well-being of the entire band or tribe in warfare and in disease prevention and cure (Capron 1953; Sturtevant 1954). The "ark" that Creek and Cherokee war parties carried (Swanton 1928b:502, 1946:692) was probably similar in nature, although little is known about it. Medicine bundles and charms were also privately owned by Seminole, Creek, and Cherokee. Quartz crystals, believed to aid the owner in war, hunting, love, and divining the future (Hudson 1976:166–168), were an important medicine, and various plant and animal parts, rocks, and powdered minerals were also considered effective supernatural agents (Capron 1953; Swanton 1928b:498–503).

A small number of King site burials contained animal bones and bone fragments that may have been charms or elements of medicine bundles. Bacula were recovered from five burials, but organic decay probably destroyed specimens in other burials. The fragility of this bone element and the fact that at least one specimen from Burial 118 had a drilled hole suggest that bacula were not tools. Speck (1928:3470) reports that Pawmunki used the bacula of raccoon and mink "to insure luck to hunters." The practice of piercing the proximal end of these bones, found at King and Toqua, raises the possibility that they were worn by the owner, perhaps suspended around the neck. Bacula could also have been sewn into clothing, carried in bundles, or tied to implements such as bows. In two (Burials 92 and 223) of the three burials for which adequate field records are available, bacula were located in the shoulder/upper

arm region, where they could have been suspended from the neck. In Burial 118, however, the baculum is located in the hip area. Given their strong association with adult males at King and Toqua (Polhemus 1987:Appendix C), bacula were presumably associated with characteristically male concerns and activities, possibly even serving as symbols of maleness. The bacula interred with Burial 223, the female warrior, could be seen as supporting this interpretation or as suggesting additional, perhaps quite different, meanings.

The single "eyed bone cylinder" found with Burial 63 may also have been used as a charm. This item is approximately the same size as the opossum bacula and has a drilled hole at one end, presumably for suspension. High surface polish and the lack of evidence of use wear suggest that the cylinder was a piece of jewelry or a charm and not a tool.

Opossum mandible and maxilla elements and a bear phalange located near the right hand of Burial 63 may have been parts of a medicine bundle. The eyed bone cylinder, discussed above, was not part of this group, although its exact location in the burial pit is not known. A possible bear element in Burial 103 may also have been part of a medicine bundle. Organic preservation conditions in this burial were so poor that other small animal bones could have disappeared through decay. Two opossum mandibles, a possible opossum baculum, a fox radius, and two swan carpometacarpus elements were recovered during the excavation of Burial 81. The latter definitely belong with Burial 81, but we cannot be certain that the other elements do, nor do we know their location within the burial. If they are all Burial 81 grave goods, they may have been components of a medicine bundle.

Costume

Historic accounts describe shell beads strung as necklaces, bracelets, earrings, and leg ornaments among a number of Southeastern tribes. Men and women both wore them (Swanton 1946:516–523). Adair (Williams 1930:484) briefly describes the manufacture of *Busycon* beads and their use among the Creek, Chickasaw, and Cherokee as a form of currency. The latter may be a historic-period introduction from tribes in the Middle Atlantic region (Swanton 1946: 516–523), but Prentice (1987) argues that the use of shell beads as a "primitive money" goes back well into the Mississippian period.

Marine shell beads appear to have had a number of religious meanings and symbolic associations. The use of the *Busycon* conch in preparing and serving the black drink, for example, may have imparted one kind of meaning to beads made from that species of shell. A second type of meaning is suggested by the depiction of beads in SECC engraved shell and embossed copper

art (Brain and Phillips 1996; Phillips and Brown 1978). Necklaces of barrel-shaped beads, often with a suspended *Busycon* columella, are a common feature of this art. Less commonly, strings of what were probably beads are depicted at the wrist and ankle (Phillips and Brown 1978). Cross-hatched motifs, presumably representing shell beads, are also shown at the neck, elbow, wrist, knee, and ankle. Bartram and Timberlake describe the use of collars made of shell beads by Creek and Cherokee (Williams 1927:518).

The age distribution of marine shell beads among subadult burials, described in Chapter 10, suggests a third symbolic meaning. Subadult burials with beads are almost always interred outside domestic structures and almost never have pottery jars or bowls. Subadults with pots are younger on average and are almost always interred beneath house floors. Adult male burials appear to conform to at least two of these three patterns, but the small sample size reduces the certainty with which this can be demonstrated. Counting disturbed as well as reliable burials, 10 of 11 adult males have either beads or pots, but not both. Eight of the nine burials with beads, furthermore, are interred outside. Burial 92 is the only burial that does not conform to these patterns. It has both marine shell beads and a pottery vessel and it is interred inside a PDS. It may not, however, be a true exception. Its pot is a gravy boat bowl, which is not a domestic vessel, and its shell beads may be part of a headdress rather than the usual necklace.

In Chapter 10, I proposed that the shift from pots to beads as grave goods and from inside to outside interment in subadult burials may relate to issues of gender and social identification: female vs. male, maternal kin vs. paternal kin, and household vs. community/society. Similar distinctions may be involved in the adult male mortuary patterns involving shell bead grave goods and outside burial location. The subadult comparison, however, breaks down when pots are added to the equation. Burial 93 has a jar and is interred outside.

Since marine shell beads are depicted in SECC art on personages who may have had mythological importance, we might expect them to be interred primarily with high-ranking individuals. In reality, however, marine shell beads are very common grave goods in the interior Southeast during the fifteenth and sixteenth centuries. At King, they are the second most common type of grave good after points, and they are interred with both men and women as well as children. I infer from this that marine shell beads, and *Busycon* beads in particular, were also seen as costume items and that they probably were available to all members of the community, although in varying quantities (Thomas 1996).

Finally, because they were made from material that had to be imported from

the Gulf or South Atlantic coast, marine shell beads would have had a certain inherent value and probably served as indicators of personal or household wealth. Goldstein (1980), Prentice (1987), Thomas (1996), and Trubitt (2000) reach similar conclusions based also on the common occurrence of *Busycon* beads with low-status burials and with children.

Circular engraved shell gorgets are described and depicted as being worn suspended below the neck among many Southeastern tribes during the early historic period (Swanton 1946:518–519). The mask gorgets accompanying adult males at King conform to this picture. In Burial 49, the gorget was located in the chest area, and in Burial 188 the gorget was located between the head and left shoulder.

Unfortunately, the historic accounts do not tell us what meaning gorgets may have had. Early gorget forms dating to the thirteenth to fifteenth centuries were engraved with human figures, spiders, turkey cocks, and other designs and may depict mythological characters and events (Knight et al. 2001). They are found most commonly with burials accompanied by high-status grave goods and interred in mounds and are generally interpreted as marking elite status (Brown and Kerber 1990; Prentice 1987; Trubitt 2000). Later gorget styles, depicting humanlike faces and rattlesnakes, however, are commonly found with children and burials interred in domestic settings. Three of the five mask gorgets and five of the eight rattlesnake gorgets at King were interred with subadults. I infer from this that, in the sixteenth century at least, gorgets were more likely to be indicators of material wealth than high status. Some idea of just how valuable these objects may have been is provided by Lawson (Lefler 1967:203), who reports that some gorgets traded for three or four dressed buck skins in the Carolina Piedmont in 1700.

To the extent that the designs depicted on gorgets have mythological references, we can expect that gorgets were also worn and interred with the dead because of their role in transmitting information. Their symbolism may have been primarily religious in orientation or primarily social and political. The fact that they are interred with children at King, however, suggests that the message is not political in nature.

Knobbed shell pins, both small and large sizes, and bracket shell pins are best seen as costume items and more specifically as ear ornaments. Early French descriptions of shell earrings among Lower Mississippi Valley tribes seem to be describing knobbed shell pins and possibly bracket shell pins but restrict their use to women (Swanton 1946:512–514). There are no historic references to this type of ear ornament in the Southern Appalachian region that I am aware of. King site examples of knobbed shell pins, including both large and small sizes,

occur with adult males and females and possibly with one subadult (Burial 125). They occur with adults of both sexes in Mouse Creek phase burials in Tennessee as well (Sullivan 1986:Table 7-26).

There is some question whether the different types of shell pins were earrings, hair pins, or clothes fasteners and whether they all had the same or different functions. Lewis and Kneberg Lewis (1995:169) report that some Dallas and Mouse Creek phase burials have only one knobbed shell pin while others have as many as three. They suggest that the artifacts are actually hair pins. Single burials from the Dallas phase Citico and Tellico sites in Tennessee had both knobbed and bracket type shell pins (Brain and Phillips 1996:225, 243). In the latter case, there was a knobbed shell pin on each side of the skull and the bracket shell pin was on top of the skull (Rice 1977).

The King site evidence indicates that knobbed shell pins were ear ornaments. Three burials each have pairs of pins located in the head area: the large variety in Burial 120 and the small variety in Burials 156 and 195. The existence of single small pins in the chest area of Burials 118 and 125 does not rule out their use as ear pins. They may have been placed there at the time of interment.

Burial 30 cannot be identified as either male or female with certainty. Two types of costume items—pulley-shaped ear spools of shell and whole turtle shells—that are not known from other adult male burials at King were interred with the burial. The former, as its name implies, is almost certainly an ear ornament. Whole turtle shells, occurring in burial context, are usually identified as rattles, an interpretation that is often supported by the presence of small pebbles or drum teeth. No pebbles or drum teeth were found near the two turtle shells accompanying Burial 30. The physical proximity of the two shells to the upper right and left arms of the burial, however, suggests that they were attached to this part of the deceased's body or clothing. The most reasonable interpretation of the Burial 30 shells is that they were rattles.

European Artifacts

Iron artifacts were probably obtained as gifts directly from members of either or both the De Soto and Luna expeditions (Marvin Smith 1987). Cobb and Ruggiero (2003) argue that these expeditions may not have visited the King site and that iron artifacts were obtained through aboriginal exchange from more important towns in the Ulibahali chiefdom that the Spanish did visit. I think this is unlikely given the large number (nine) of iron artifacts that have been found in King site burials. This many Spanish artifacts exchanged with King site inhabitants implies that a much larger number was distrib-

uted at the towns that were actually visited by the expeditions. As discussed below, the Pardo expedition, which was consciously trying to gain influence among inhabitants of the Carolina Piedmont, seems to have distributed only about one or two iron items per town. A third mechanism—taking iron objects from the Spanish in battle or following battle—will be discussed in more detail below.

For the inhabitants of the King site, Spanish iron items may have had several different uses and meanings. The celt-form implements may have been used as woodworking tools. They and the large spike may have been hafted and used as war clubs. All iron implements probably also had meaning as tokens of recognition from the powerful alien "paramount chiefs" (Smith and Hally 1992) who had recently passed through their territory. But it was the Spanish who were distributing these items, and it is to their motives and perspective that we must turn if we are to understand why some burials have metal tools and others do not.

The Spanish would have attempted to maximize the political impact of their gifts by giving them to those inhabitants they could identify as politically and socially important members of the community. We know little about how these allocation decisions were made, but the strategy of the later Pardo expeditions is documented. Departing from Santa Elena on the South Carolina coast in 1566, Pardo's mission was to explore the interior, pacify its Indian inhabitants, and arrange for them to supply food for Spanish garrisons at the forts he established (Hudson 1990). The latter objectives were to be accomplished in part by distributing trade goods to the native inhabitants. Metal tools to be distributed included chisels, wedges, knives, and hatchets, examples of which are represented in King site burials. According to an account of the second Pardo expedition in 1567, most of the recipients of trade items were *micos* (polity chiefs), *oratas* (village chiefs), *mandadors* (war chiefs), and *indios principales* (principal men) (DePratter and Smith 1980; Hudson 1990: 134–141).

There are a few references in the De Soto narratives to items of clothing and glass beads being given to chiefs or their representatives and one reference to the chief of Casqui receiving an iron knife (Swanton 1985:55). Rangel relates that at Itaba the Spanish "bartered for some Indian women, whom they gave them in exchange for mirrors and knives" (Worth 1993b:285). I read this passage as saying that the payment went to someone other than the bartered women. Whether the recipients were officials and principal men or less prominent individuals is not stated, but the latter is possible.

In light of this historical evidence, I think it is probable that most of the

iron implements in King site burials were gifts from members of the De Soto and/or Luna expeditions to politically and socially important people. It is unlikely that a *mico* would have resided at King, but the town would have counted among its inhabitants an *orata,* principal men, and presumably at least one individual who could qualify as a military leader.

If the Spanish attempted to match the value of their gifts with the prominence of the recipients, we might judge Burial 234 with its sword to be the most important person in the community, possibly its headman. I think this would be a mistake since the sword is unlikely to have been a gift. This was a functional weapon and would certainly have been too valuable to the Spanish to be given away. Most likely, it was taken from an expedition member or retrieved from a battlefield. To judge by the quantity and value of his grave furnishings, Burial 234 was an important citizen of the town, but we cannot put too much weight on the sword in our attempts to identify what his position was.

Burial 19 may have obtained his iron knife in the same manner as Burial 234. The burial is anomalous among those with iron in lacking other grave goods. Presumably, he had not acquired any of the prestigious social identities that are characteristic of other burials with iron artifacts. Unless he was born to high rank, the Spanish would have had little reason to give him such a gift. It would be helpful to know how old Burial 19 was when he died.

If Burials 234 and 19 obtained their iron grave goods in battle why could the other individuals interred with iron not have obtained some or all of theirs in a similar manner? Unfortunately, the evidence supporting either mechanism is not conclusive. Burials 15, 92, 117, and possibly 40 were all high-ranking members of the community and hence likely to be the kind of individuals the Spanish were trying to influence with gifts. The artifacts involved, furthermore, are of the type known to have been given as gifts. On the other hand, we might wonder why Burial 92 had three iron artifacts and Burial 117 had two when all indications are that the Spanish were rather parsimonious in their bestowal of such gifts. Quite possibly, each of these individuals may have obtained their iron objects by both mechanisms. In the final analysis, I cannot prove how Burials 15, 40, 92, and 117 obtained their iron artifacts. The gift mechanism is the most reasonable given what evidence there is and will be assumed to be the correct one.

Interpretation of Male Burial Artifact Distribution

The variety of functions and meanings that we can attribute to many of the artifact types interred with adult males and the fact that many of these types do

not always occur together in the same burials lead to the conclusion that adult male social identity was multidimensional. Warfare was an important dimension of male status but so was involvement in community civil and ceremonial activities, craft production, and wealth display. Moreover, some of these dimensions of male social identity may have been causally related, while others almost certainly were not or were only remotely interconnected. In the following pages, I will attempt to unravel these complex relationships by bringing together evidence from grave goods, grave good associations in burials, grave and body treatment, and intrasite burial location. My objective is to provide greater understanding of the meaning of individual grave goods and to provide a detailed picture of adult male social identity as reflected in mortuary practices.

A number of interpretations will be offered for why specific artifact types occur in some burials but not others. Those interpretations that are most likely to be valid are based on arguments for why access to particular artifact types would have been restricted to certain individuals. If, for example, bifacial blades were scalping knives and were markers for a particular warrior grade, then only individuals who met the requirements for that grade could be interred with them. As a socially valued identity, furthermore, the individual holding that warrior grade would be motivated to demonstrate his accomplishment in a variety of ways and contexts, including funerary ritual. Based on what I can glean from the ethnohistorical and archaeological evidence from the Southeast, this type of argument can be made with some credibility for points, blades, spatulate celts, gravy boat bowls, copper arrow symbol badges, human remains, *Busycon* cups, and stone discoidals.

The same kind of argument can be made for FKK, unifacial end scrapers, antler cylinders, beaver incisors, and pipes, but with slightly less force, because we do not understand as well how they were used or how access to the social identities they represent might have been restricted. Marine shell beads, ear pins, and gorgets present similar problems. We do not know whether they represent primarily items of costume, items of wealth, or, at least in the case of gorgets, ritual items.

There is, of course, always the possibility that some artifact types occur in burials because they represent a personal preference of the deceased or the social and political agendas of his mourners. I suspect, however, that the more we learn about what artifacts mean and how access to them as markers of social identity was restricted in Mississippian society, the less likely it is that we will have to consider personal preference and self-interest as factors in decisions regarding grave furnishings.

Warfare

Evidence has been presented earlier in this chapter that points, bifacial blades, spatulate celts, copper arrow symbol badges, human remains, gravy boat bowls, and hematite functioned as war symbols and in some cases as implements used in warfare. I will argue in the following pages that some of these items served as markers for warrior grades or war honors. To the extent that this is a correct interpretation, we can expect that the frequency with which they occur in burials and the frequency with which they occur together in the same burial should vary directly with the age of the deceased. Older individuals will have had time to acquire more war honors and higher warrior grades than younger individuals and, on average, should be interred with a greater variety of the artifacts that marked these statuses.

The type of projectile point placed in burials appears to have been used in warfare and not as a hunting and butchering implement. It follows that the presence of arrows in a burial communicated something about the deceased's involvement in warfare. Since points are such a common grave good (17 out of 34 reliable and lightly disturbed burials) and they occur with individuals as young as 15 years of age, we might conclude that they mark a very basic level of involvement—perhaps nothing more than participation in one or more military operations. Seventeen of the 34 burials, however, do not have points. Does this mean that half of the adult males in the King community did not participate at all in warfare? It is possible, but I think it is more likely that points mark a level of achievement above that of simple participation. The historic-period literature is full of references to a first military grade, marked by the receipt of a special warrior name, that could be earned among the Creeks by taking a scalp (Swanton 1946:426) and among the Apalachee by participating in a raid that resulted in the taking of an enemy scalp (Hann 1988:182). The greater average age of males with points compared with that of males without them (32.4 years vs. 27.6 years) fits this interpretation, as we would expect that some men would have to participate in several military expeditions before they were able to meet the requirements for promotion to the socially recognized status of warrior.

Individuals as young as 15 years were interred with points, indicating that the type of warrior identity points represented could be achieved early in adulthood. Since some of the 17 individuals lacking points are in their forties, we cannot attribute the lack of points in a burial entirely to youthful inexperience. More likely, such individuals did not participate enough in mili-

tary activities to allow them to achieve the minimal warrior grade. Some of them may have lacked interest in military activity.

It is, of course, possible that all men who participated in warfare, even if only minimally, were eligible to be interred with points when they died and that some chose not to mark this status. We cannot ignore the possibility that personal preference was the ultimate reason individuals were or were not interred with points. But we must weigh this interpretation, which cannot be readily verified in the archaeological record, against the likelihood that there was a higher, more restricted level of eligibility—the first warrior grade—the existence of which accounts very well for the frequency and age distribution of burials with points.

We saw in an earlier section that some adult males exchanged points with one another. Although we may never know the specific rationale for this behavior, I think it is most likely that men exchanged points in order to establish and/or maintain social bonds or partnerships of some kind with one another. But not all men were involved in such exchanges, and, as we have seen, some men—and women—were involved in more exchanges than others. It is possible that men simply accumulated exchange relationships as they grew older, but the evidence for this is weak.

I will argue below that bifacial blades were markers for a second, higher warrior grade. Comparison of burials with and without blades reveals that the former have significantly more points and point styles than the latter (number of points, $t = 2.66$, $p = .01$; number of point styles, $t = 2.63$, $p = .01$). We might infer from this that successful warriors—those who had achieved higher warrior grades—tended to more actively seek point exchange relationships. Alternatively, and I think more likely, successful warriors—male as well as female—may have been more sought after as exchange partners by other warriors. Burial 223, with seven point styles, may have been especially sought after because of her honored status as a female warrior.

There is considerable lithic, SECC, and ethnohistoric evidence that bifacial blades were used in battle to remove scalps or other body parts from fallen enemy. The evidence from SECC art also indicates that blades had symbolic associations with warfare that likely had mythological underpinnings. As weapon symbols, they were probably also used as badges or display items.

The fact that blades do not occur in most adult male burials suggests that there was some restriction on who could possess and use them. I propose that blades were also markers for a warrior grade and that only individuals who had achieved the grade could possess them. This grade ranked higher than

that represented by points and could be earned only after the latter had been achieved. Two types of evidence support this interpretation. First, blades are found only in burials with points, while points occur in many burials lacking blades. Second, burials with blades are older on average (41.3 years vs. 32.5 years) than burials with points only. The evidence also indicates that only a limited number of warriors were able to achieve this higher grade and that it normally took them a number of years to do so.

Viewing bifacial blades as symbols of an elevated warrior grade also resolves the question of whether cane or stone cutting implements were used to dismember and scalp fallen enemy in late prehistoric and early historic times. Both were, but by different kinds of warriors. Cane knives were used by lower-grade warriors, and bifacial blades were used by warriors who had achieved the higher grade symbolized by possession of a blade.

Copper arrow symbol badges were almost certainly weapon symbols. Given their association with high-ranking individuals and their scarcity in burial collections from other sites, I think it is likely that they were markers for a high-level warrior grade—possibly the highest of those recognized in the King site community and polity. Burial 92 contains points, a bifacial blade, and CASB. Since he is the only King site burial with CASB and is approximately 45 years old, we may surmise that he achieved the grades represented by the more common points and blades before earning the grade represented by CASB. In other words, points, blades, and CASB represent steps in a single graded hierarchy.

Spatulate celts seldom, if ever, have broken and battered edges. They are most likely, therefore, to have been symbolic representations of war clubs rather than actual weapons. Regardless of whether they were weapons or only weapon symbols, they probably were markers for a warrior grade or specific war honor. Their infrequency in burials at King and other sites in the Southeast indicates that they represent a grade or honor that was more advanced than that represented by points. Burial 117 is the only reliable burial with a spatulate celt at King but is only approximately 19 years old. The looted burial identified as Burial 234 and containing a second spatulate celt is approximately 30 years old. Both burials have points and are among the richest three or four burials known from the site.

Burial 117 has only a spatulate celt, while Burial 234 has both a spatulate celt and bifacial blades. At other sites, the two artifacts sometimes occur together and sometimes in separate burials. I infer from this that the social identities represented by the spatulate celts and blades are not parts of a single hierarchy of warrior grades. They may belong to separate grading systems, or one may represent a specific war honor that can be won independently of where

one stands in the other graded system. Since bifacial blades are more common than spatulate celts in burials at King and elsewhere, they are more likely to represent a midlevel grade in a hierarchical system, while spatulate celts are more likely to represent a separate war honor, albeit one that may have been more difficult to achieve.

I have argued in the preceding pages that points, bifacial blades, CASB, and spatulate celts were markers for different warrior grades and war honors and that they were used as grave goods for those individuals who had earned the appropriate grade or honor. There are, however, several reasonable alternative explanations for why these items were used as grave goods. To begin with, given the craftsmanship and exotic materials involved in their manufacture, it is possible that blades, spatulate celts, and CASB were used to display an individual's wealth, trade contacts, or general importance in the community. The problem with this interpretation is that each of the three types of grave goods had symbolic associations with warfare and possibly with mythological personages and events of a military nature. Their use as grave goods, therefore, would seem to be most appropriate as statements about the deceased's involvement in warfare.

Following this lead, we might conjecture that the desire or right to possess blades, spatulate celts, and CASB was acquired through visionary experiences and that the deceased used them as amulets for protection and to enhance success in warfare. This explanation, it seems to me, is inadequate because it fails to account for the hierarchical and age-dependent manner in which these items co-occur in the burial sample.

It is also possible that individuals who were heavily involved in warfare and committed to warrior ideals used war symbols such as bifacial blades to advertise their self-identification as warriors much like people today wear clothing emblazoned with the logo of their college alma mater. Again, this explanation fails to account for the manner in which items co-occur in burials.

None of these explanations fit the ethnohistoric evidence as well as the warrior grade and war honors model does. Graded systems of warrior statuses are reported for aboriginal societies throughout the Southeast in the eighteenth century and earlier. We can be certain, therefore, that they were a feature of King site society. Graded systems of warrior statuses would have required physical markers to distinguish the different grades. We know that some historic tribes used body tattooing and war trophies such as scalps for this purpose; there is no reason to believe that there were not other kinds of markers. Points, bifacial blades, CASB, and spatulate celts fit the requirements of a system of warrior grades and honors. They can be easily displayed as items of

clothing or portable objects. As weapons and weapon symbols, they are symbolically appropriate as markers for warrior grades. Most important, the manner in which they co-occur in burials of different ages is exactly what we would expect to see if they marked successive steps in a graded system of statuses.

Warrior grades are a social identity that all parties involved—decedents, mourners, and other community members—probably agreed should be represented in the mortuary treatment of eligible individuals. There may have been a tendency to exaggerate the deceased's accomplishments in battle, but the community at large probably did not tolerate such misrepresentation. Indeed, Adair states that formerly the Chickasaw had required that tattoos depicting falsely claimed war honors be erased (Swanton 1928a:417). If I am correct in identifying points, blades, CASB, and spatulate celts as grave goods, we can be fairly confident that their presence or absence in a burial is an accurate reflection of whether the deceased had attained at least a minimal level in the hierarchy of warrior grades.

It is possible that some individuals who had the right to be interred with blades, spatulate celts, or CASB were not accorded such mortuary treatment or that some individuals who were interred with these items did not merit such recognition. For the reasons outlined above, I doubt such cases were very common and I do not know how one would detect and verify them if they did exist.

Since it was probably prestigious to exchange points with other adult males and to have a number of such exchange partners, we can expect that these relationships also would be consistently portrayed in mortuary practices. Exaggeration might have been difficult due to the need to actually possess points of the correct style to use them as grave goods.

Gravy boat bowls are most likely to have been used and possibly owned by individuals who were leaders of war parties, ritual specialists in community ceremonies involving sacred fire, and political leaders who founded new towns. Of the two King site burials with gravy boat bowls, Burials 92 and 124, only the former can be fully characterized as to age and grave furnishings. He was clearly a prominent warrior, having achieved several military grades, including perhaps the highest. We may speculate then that the inclusion of a gravy boat bowl in his grave means that he was a war party leader or held the office of war chief in the community.

An argument also can be made that Burial 92 was interred with a gravy boat bowl because he was an important religious functionary. His success as a warrior would not necessarily have precluded his holding such a position as well. Sacred fire and the ceremonies surrounding it, however, were clearly commu-

nity affairs in the eighteenth century, and we may question whether an individual would be in possession of a pottery vessel used to carry sacred fire in such contexts.

Burial 92 may also have had a gravy boat bowl because he was involved in the founding of the King site as a formal town. He is by most criteria the richest burial known from the site and is also one of the earliest. As founder, he may have carried sacred fire from a parent town to the King site, and this may have given him the right to be interred with the vessel that was used to transport that fire. This, of course, does not explain why Burial 124 also was interred with a gravy boat bowl. One could argue that the two burials represent competing claims for the honor of being town founder, but there is no independent supporting evidence.

The heavily disturbed Burial 124 contained only a gravy boat bowl, a Type III hammerstone, and a celt. Additional grave goods may have been destroyed by the plow. As a result, we do not know whether he had achieved any warrior grades. If he had, then an argument could be made that both he and Burial 92 were interred with a gravy boat bowl because they were war leaders or, at different times, town war chiefs. In any case, Burial 92 was probably interred with a gravy boat bowl either because he held a position of military leadership or because he was the founder of the town. Either social identity was important enough that there would be strong motivation to display the appropriate symbols at the time of death and to challenge false or exaggerated claims to them.

Three and possibly four of the sets of human remains accompanying adult male burials (Burials 92, 105, 117, and 129) can be identified as war trophies taken from slain enemy. One gets the impression from the historical literature (Dye 2002, 2007; Swanton 1928a, 1946) that scalps and other body parts were commonly taken from fallen enemy, but only three or four out of 34 adult male burials were presumably interred with such war trophies. Why were more individuals not accompanied by them? Three of the burials with body parts, Burials 92, 105, and 117, also were interred with weapons and weapon symbols. All three had points and bifacial blades or spatulate celts, and Burial 92 also had copper arrow symbol badges and a gravy boat bowl. As such, these individuals had each attained elevated warrior grades or special warrior honors. The relative scarcity of such trophies in the King site burial collection could be due in part to preservation conditions, but it more likely reflects the fact that war trophies represented special honors that were not available to all warriors.

Perhaps the strongest evidence against identifying human remains as war trophies or, for that matter, identifying points as markers for the first warrior

grade is that Burial 129 was not interred with any weapons or weapon symbols. Presumably this individual had not attained even the lowest warrior grade and should not have been in the position to collect or display a war trophy. Burials 143 and 144 may represent another case of an individual lacking warrior status being interred with a war trophy. In this case, however, we do not even know whether either burial was male.

The red pigment hematite was probably associated with war and was presumably used as body paint by men when they went to war. We may wonder then why it was not interred more commonly with adult males and especially with those having points as grave goods. The fact that it was not a common type of grave good (occurring with only six out of 34 reliable and lightly disturbed burials) could be interpreted to mean that it was available as a status marker to only a small number of men who had attained a specific warrior grade or honor. Several types of evidence, however, indicate that hematite was available to most adult males and not just those who had attained prominence as warriors. First of all, Burial 103 has hematite but no points or blades. Second, hematite has strong associations with more artifact types than any other type of adult male grave good, suggesting that it was not tied to some limiting set of prerequisite social identities such as warrior grades. Third, the average age of burials with hematite (31.0 years) is the same as that of burials lacking the pigment (31.3 years), suggesting that individuals did not have to reach a certain level of proficiency or prominence to gain access to the material.

While hematite probably does have its strongest symbolic association with war, it seems to have been available to most adult males for use in life and death without prerequisites. General availability and widespread usage may have reduced the value hematite had as a social marker to the point that the decision to include it in a burial was left primarily to the personal wishes of the deceased or the discretion of his mourners.

Ceremony

In the historic period, gravy boat bowls, *Busycon* cups, stone discoidals, and pipes were all used in activities that took place in public settings and usually had civic or religious significance for the community as a whole. The significance and use of each, however, were different from and largely unrelated to the others. Unlike the warrior grades and associated weapon symbols, gravy boat bowls, shell cups, discoidals, and pipes do not necessarily represent accomplishments or social identities that can be arranged in ascending order of prestige and social value. We may infer from this that the social identity or

office represented by each was probably gained by different mechanisms and largely independent of the others.

Three possible reasons gravy boat bowls were interred with Burials 92 and 124 were discussed in detail in the previous section. In the case of Burial 92, for which we have a full complement of mortuary data, it is possible that he had been an important religious functionary and used the gravy boat bowl to carry sacred fire in community ceremonies. Alternatively he may have used the vessel to carry sacred fire on military expeditions that he led. A third possibility is that he was the founder of the King site community and used the vessel to transport sacred fire from the parent town. The second and third explanations are more likely to be correct than the first because individual ownership is more likely in those cases. I will consider the third one further in Chapter 12.

According to the available ethnohistoric evidence, *Busycon* shell cups were used to serve black drink in a number of social and ceremonial settings. The individuals who were responsible for preparing and serving the drink in the eighteenth century were community officials such as the Creek *heniha* and perhaps ritual specialists or priests. Presumably these functions were performed in the sixteenth century by individuals holding somewhat similar positions and who were high-ranking and prestigious members of the community.

In the eighteenth century, shell cups used in black drink rituals appear to have been considered community property. As such, they probably were not available to most individuals as items of personal property or for use as grave goods. The small number of burials with *Busycon* cups at King supports this interpretation and suggests that only a limited number of people with special qualifications could "own" shell cups. We may surmise that those people were the officials responsible for the conduct of black drink rituals and that the *Busycon* cup served as a symbol of their ritual status.

The two burials (Burials 65 and 92) with *Busycon* cups at King seem to fit these criteria. Both were interred with abundant grave goods including a number of exotic items. Both are also fairly advanced in age (39 and 45 years, respectively) and would therefore have had the opportunity to achieve social prominence and be appointed to positions associated with black drink ceremonialism.

Neither burial has a discoidal and only one has a pipe, indicating that the social identities represented by these artifact types were acquired independently of that associated with black drink ritual. Both burials have points and bifacial blades, but this association is more likely due to war prowess being a criterion for high social standing in the community than to any ideological connection between war and the black drink.

The individuals interred with stone discoidals at King probably used these artifacts to play chunkey or a related game. Given the popularity of chunkey in the historic period, we can expect that most adult males in the community would have played the game. This being the case, we might expect more burials to have discoidals. Alternatively, given the tendency for discoidals to occur in nonburial contexts at other Mississippian sites and given Adair's statement concerning community ownership of chunkey stones, we might question why any King site burials would have them.

Adair's reference to chunkey stones as community property implies that the community was involved in some fashion with regulating when, where, and under what circumstances the game was played. Such interest on the part of society at large would be compatible with the evidence in SECC shell art for a mythological origin or charter for the game. We may conclude from this evidence that communities such as King had one or more civil or religious officials who were responsible for regulating the game and maintaining the paraphernalia used in its performance. These officials were probably prominent, high-ranking citizens and presumably were allowed to "own" chunkey stones as a sign of their position. All four discoidal burials at King—including the heavily disturbed Burial 40—contained a wealth of grave goods and/or iron implements, indicating that they were important members of the King community.

Only one discoidal burial, the heavily disturbed Burial 40, has a pipe, and none have shell cups, indicating that the social identities represented by these artifact types were acquired independently of that associated with the chunkey game. All three reliable burials with discoidals have points and either a bifacial blade or a spatulate celt. As with shell cups, this association is more likely due to war prowess being a criterion for high social standing in the community than to any direct ideological connection between warfare and the chunkey game.

Pipes were smoked in conjunction with social, political, military, and religious activities in the historic period and appear to have been a common possession of adult males. Each of these uses may have required a different type of pipe. With at least four distinct pipe forms represented in King site burials, it is tempting to think that there was a relationship between function and form. Unfortunately, this relationship cannot be adequately investigated with the small number of pipe burials available.

Relative to the number of people who must have owned pipes and used them in social settings, very few pipes were placed in graves. It is possible that

pipes were not considered to be an especially desirable type of grave good and that their use as such was due primarily to personal choice. Pipes, however, have very unusual artifact associations: they co-occur with relatively few artifact types, they have a strong association with only one artifact type, they are accompanied in burials by very few artifacts, and they tend to occur with uncommon artifact types. Together, these characteristics suggest a burial distribution that is far from random and thus unlikely to result from a more or less random process such as personal preference.

A more likely explanation for the small number of burials with pipes is that they were considered appropriate grave goods only under special circumstances. Pipe smoking in preparation for war, as part of peace negotiations, and in religious ceremonies would have been seen as contributing to community well-being and would have been considered important by society at large. It is possible that pipes were interred only with individuals involved in one or more of these kinds of activities.

Leaders of military expeditions would have met these conditions, but the available evidence indicates that they were not the ones buried with pipes. Presumably only individuals who had attained high warrior grades would have been allowed to lead war parties, but only three of seven reliable and lightly disturbed pipe burials have points and only one of these has a bifacial blade. With the exception of Burial 65, pipe burials do not seem to have reached even a midlevel warrior grade.

Treaties, alliances, and other types of nonmilitary arrangements between communities or polities would have been negotiated by high-ranking individuals—most likely town headmen or polity chiefs. Most pipe burials are unlikely to have been prominent, high-ranking members of the community. Most have very few grave goods. Marine shell beads and pins occur in only three reliable and lightly disturbed burials, and only Burial 65 has other kinds of exotic grave goods. Three pipe burials are located in Structure 17 and the plaza, but the rest were interred in the habitation zone, often in the eastern and southeastern sectors. Individuals interred with pipes, in short, are unlikely to have been ambassadors.

The strongest case can be made for individuals interred with pipes being conjurers and other types of religious practitioners. We would not expect such individuals to necessarily be prominent, high-ranking members of the community. We might expect them, however, to possess objects with supernatural power such as charms, amulets, and medicine bundles. Three pipe burials have artifacts that can be identified as such. Burial 103 has a probable bear bone;

Burial 118 has an opossum baculum; and the partially mixed Burial 81 may have had an opossum baculum, an opossum mandible, a fox radius, and portions of two swan wings.

Given the variety of pipe forms represented in King site burials, we should not rule out the possibility that pipes as grave goods were markers for a number of different kinds of social identities. Burial 65, with points and a bifacial blade, may have been a war party leader and the distinctive limestone pipe with flaring rim that accompanied him in the grave may have marked that social identity. One thing seems certain, however; pipes were not part of the warrior grade complex represented by points and other weapon symbols. Nor were they closely related to the identities represented by shell cups and chunkey stones.

The offices associated with black drink ritual, the chunkey game, and pipe smoking in some ritual contexts probably brought honor and prestige to the individuals who occupied them. We can anticipate that there would have been competition for these offices. Given the ideological significance of the black drink and the chunkey game, however, I would think that false claims to these offices would generally not be tolerated by the community.

Tools and Implements

The utilitarian function of most types of tools interred with adult males cannot be identified with great specificity or certainty. This makes it difficult to determine why they were included as grave goods in burials. Many tool types, furthermore, are represented in only one or two burials, which makes it difficult to identify patterns in their distribution and associations.

In general, we are probably safe in assuming that a particular tool was included in a burial because the deceased had actually made and/or used it during his lifetime. If all individuals who made or used a type of tool were interred with it, the task of interpreting tool distributions and associations in burials would be fairly straightforward. Some tools, such as FKK, beaver incisors, celts, and end scrapers, however, were probably used by a large proportion of the adult male population at King, but they occur in a relatively small number of burials. This raises the question of why some tool users were interred with a particular type of tool and others were not. Three explanations are possible: personal preference, craft specialization, and skill recognition.

It is possible that many types of tools had little meaning or value beyond that of their utilitarian function and that the decision to use them as grave goods was an entirely personal one reflecting, for example, the deceased's pride in what he produced or his self-identification with a particular craft. It is not

clear what kind of evidence personal preference might leave in the archaeological record, other than perhaps a random-appearing distribution of the artifact type within the burial sample. Nevertheless, personal preference must be considered as a possible factor in any attempt to explain why particular types of tools were used as grave goods.

The nature of craft specialization and the degree to which it occurred in Mississippian societies has been a hotly debated topic for some time (Cobb 2000; Muller 1997; Pauketat 1997; Prentice 1983, 1985; Welch 1991; Yerkes 1983, 1989). The arguments for and against craft specialization and the evidence and theory used to support them need not concern us here. What is important for our purposes is that most scholars concede that some Mississippian craftsmen may have produced more of some items—especially display or prestige goods—than did others and that a portion of their "surplus" production was transferred to other individuals in the community (Muller 1997). The important question for us here, I think, is not whether such part-time specialization existed at the King site but how it can be recognized in the archaeological record.

Mississippian flintknappers and woodworkers certainly differed from one another in the care and skill with which they executed their crafts. Some individuals may have been good enough at what they did to be recognized by society for their excellence. Such recognition may have taken a variety of forms, and inclusion of the craftsman's tools in his burial could have been one appropriate form of expression.

We will begin our consideration of craft-related grave goods with FKK. We know how these tool kits were used, and they are relatively common in the burial sample. Many everyday tasks performed by adult males and females at the King site required flaked stone cutting and scraping tools and projectile points. It is likely, therefore, that most males were flintknappers and possessed flintknapping tools. Why then do only 10 of 34 reliable and lightly disturbed adult male burials have FKK? One possibility is that decisions to include FKK in burials were based largely on personal preference. If all males in the King site community were flintknappers, the status of flintknapping would not have been especially distinctive or prestigious, and there would have been little prestige-inspired motivation for using FKK as grave furnishings. Under these conditions, the decision to include an FKK in a burial would have been based on a variety of personal factors that probably were more or less randomly distributed among the adult male population. The distribution of FKK among adult male burials, therefore, should itself be random.

Flintknapping kits are not randomly distributed among adult male buri-

als. They are more likely to be interred with older males. They tend to co-occur with tool types such as end scrapers and beaver incisors that were not used in flintknapping (Table 11.7), and they have a strong tendency to be interred with prominent members of the community—individuals who held high warrior ranks as well as civil/ceremonial offices and who had achieved a variety of such honors.

One might argue that such men were very ambitious and as a result may have been more strongly motivated to include flintknapping in their repertoire of skills and accomplishments. This implies, however, that FKK were a marker for an unusual or valued social identity, and this would not necessarily have been the case if all adult males were flintknappers. On the other hand, if there was community recognition for exceptional skill as a flintknapper, there would have been reason to claim such ability. This possibility is best considered in the context of craft specialization.

It is possible that flaked stone tool production in the King site community was handled to some extent by craft specialists—individuals who produced a particular craft item in greater quantity than they had need for and distributed it to others who did not have it in sufficient quantity or quality. Under these conditions, the status of flintknapper would have had some social value. If burials with FKK were flintknapping specialists and burials lacking FKK were individuals who did little or no flintknapping, the ratio of craftsmen to consumers would have been approximately 1:3, based on the number of reliable and lightly disturbed burials with FKK (10 of 34). This seems high, but we really have no basis, archaeological or ethnographic, for questioning it.

Seeman (1984) suggests that arrow points were one of the few types of flaked stone tools that required a great deal of skill to make and hence would be the tool type most likely to be manufactured by specialists. His review of historical accounts of bow, arrow shaft, and arrow point making in North America found few references to point manufacture among Eastern tribes, but among Western and Plains tribes, his sources suggest that flaked stone points were made predominantly by specialists. These individuals were male and usually older men, the latter characteristic, however, reflecting perhaps the fact that old men were the only ones who still had flintknapping knowledge and experience in the late nineteenth century. Cobb and Pope (1998) identify the King site burials with FKK as part-time specialists. They present no evidence in support of this identification, however, beyond Seeman's ethnographic data.

Flintknapping specialists should be more proficient in their work than individuals who make only enough tools to meet their own needs (Costin 1991). Their level of proficiency presumably could be attained only after years of

Table 11.7. Distribution of stone, bone, and antler tools among reliable, lightly disturbed, and partially mixed adult male burials

Burial	FKK	Antler Cylinder	End Scraper and Preform	Beaver Incisor	Celt	Circular Polishing Stone	Tabular Polishing Stone	Tabular Stone	Tabular Limestone	Bone Handle	Cougar Radius Tool	Split Bone Tool	Turkey-Bone Awl	Cylindrical Bone Tool	Bird-Bone Tool	Antler Tine
15	1			1												
34	1			2												
49	1		1													
57		10														
65	1	1								1	1		2		1	1
81	1	2		3	2		2	1				1				1
84	1															
92	1	3	2	1									1			
101	1		4													
102	1	3							1							
103	1			1												
117	1		1	1					1					1		
157		9														
212						1										
226						1	2									

practice. We might expect, therefore, that flintknapping specialists would be older individuals. We might also expect that their proficiency would manifest itself in the superior quality of their work (Costin 1991). Both of these expectations are met to some degree by the King site burial data. In addition to the older age of burials with FKK, there is also evidence that their products are superior in workmanship.

In order to test the latter expectation, I conducted an admittedly subjective analysis of point quality. I looked at thinness of points and the size and regularity of thinning and edge retouch flakes. Well-made points tend to be thin and lenticular in cross section and have flake scars that are narrow, shallow, and uniform in size. Poorly made points tend to be thick and have flake scars that vary in shape and size but tend to be large and deep. I also noted the length of points, because finely made points tend also to be quite long and narrow. With these criteria, I felt I could define three levels of manufacturing quality or skill: high, intermediate, and low. I applied these criteria to points identified by Matthiesen (1994) as belonging to the numerically dominant microstyles in Burials 15, 34, 65, 92, 100, 101, and 118 and to the most common microstyles in Burials 30, 44, 81, 102, 105, 117, 157, and 176 where Matthiesen was unable to identify one microstyle that was markedly more common than the others. The assumption, of course, is that the most common microstyle was made by the individual it was interred with.

I was able to analyze the points from nine burials with FKK and six burials lacking FKK. The results are listed in Table 11.8 with "3" representing high-quality points. To the extent that my evaluation was unbiased and accurate, these results suggest that individuals interred with FKK were more skilled at making points than those lacking FKK.

The tendency for individuals interred with FKK to also be high-ranking warriors and civic and ceremonial office holders is not incompatible with their identification as part-time craft specialists. Individuals who succeeded in these endeavors probably were motivated by the desire for community approbation. The status of flintknapping specialist may have added to their standing in the community.

There are two logical problems with identifying FKK burials as craft specialists. To begin with, individuals who obtained their flaked stone tools from flintknapping specialists should not necessarily have burial points of lower quality, as is the case with several burials in Table 11.8. If they acquired points from a specialist, those points should be well made. A second problem involves the association of distinctive point styles with individual flintknappers. Most of the point styles identified by Matthiesen (1994) are distinctive enough that

Table 11.8. Relationship of point quality to possession of flintknapper kits

Burial	FKK Present	Point Quality	Number of Points Analyzed
15	Yes	1	4
30	Yes	3	3
34	Yes	2	14
65	Yes	3	8
81	Yes	3	3
92	Yes	3	17
101	Yes	3	10
102	Yes	1–2	3
117	Yes	2	3
44	No	1	3
100	No	2	11
105	No	3	25
118	No	1–2	12
157	No	1	1
176	No	1–2	3

we can be fairly certain their manufacturers intended them to be recognizable. This implies that there was a community value placed on each adult male having his own distinctive point style. Would non-knappers be satisfied with using the point style of someone else, or would specialists produce points in a separate style for their customers? Neither seems likely.

Finally, it is possible that most, if not all, adult males at King were flintknappers but that some were recognized by the community as being better craftsmen than others. To the extent that such recognition was valued and sought after by adult males, we might expect skilled individuals to demonstrate their status by using FKK as grave goods. This explanation for the use of FKK as grave goods has the advantage that it allows all adult males to be flintknappers, manufacturers of burial points, and producers of distinctive point styles, while at the same time recognizing that individuals will differ in their skill as flintknappers. It does not rule out the possibility that some flintknappers produced some flaked stone tools for others to use. In fact, the two statuses, skilled flintknapper and flintknapping specialist, may grade into one another—less skilled knappers may have sought after the products of the highly skilled knapper.

Antler cylinders were probably used as pressure flakers in stone tool production, although as noted earlier the supporting evidence is far from conclusive. If this is their function, why do two reliable burials with antler cylinders not have FKK and why do seven reliable and lightly disturbed burials with FKK lack antler cylinders? Poor bone preservation conditions may account for the absence of antler cylinders in some FKK burials, but the evidence for this is not strong. The average preservation rank of reliable and lightly disturbed burials with antler cylinders is higher than that for burials lacking antler cylinders (3.6 vs. 3.14), but the difference is not very great. Preservation, of course, would not be a factor in the case of burials with antler cylinders that lack FKK.

If preservation is not an important factor in the presence/absence of antler cylinders in burials, we must conclude that other factors are involved in the decision to use them as grave goods. The six burials with antler cylinders listed in Table 11.7 can be divided into two groups on the basis of several criteria. Burials 65, 81, 92, and 102 have FKK, while Burials 57 and 157 do not. The former each have three or fewer antler cylinders; the latter have 10 and 9, respectively. The three burials with FKK range in age between approximately 34 and 45 years, while Burials 57 and 157 are approximately 25 and 15 years old, respectively. The former tend to have a large number of grave goods, including blades, pipes, *Busycon* cups, quantities of points, and quantities of marine shell beads. Burials 57 and 157 each have a single point and little else.

These contrasts make sense if we identify the antler cylinders in burials with FKK as pressure flakers that were actually in use at the time of interment and the antler cylinders in Burials 57 and 157 as new, unused pressure flakers. Unfortunately, there is not sufficient use-wear evidence to demonstrate that there was such a difference. Six of the nine antler cylinders from Burial 157 show no use wear on one or both ends. Only one antler cylinder from a burial with FKK—the partially mixed Burial 81—has intact end surfaces, however, and it also shows no use wear. Whether the other specimens from FKK burials or the 10 from Burial 57 have use wear is unknown.

If antler cylinders occurring with FKK tended to have use wear and the others tended not to, we could argue that antler cylinders have two different meanings as grave goods. In the presence of FKK, which mark individuals who are recognized as skilled flintknappers or as craft specialists, they may have been simply part of a functioning tool kit. In burials lacking FKK, they may have been markers of a distinct social identity. What this identity might be is not clear, but it may have been related to an early stage in an individual's development of flintknapping skills or to specialization in the production of antler

cylinders. The latter seems less likely because antler cylinders were probably not very difficult to make or to make well.

All reliable and lightly disturbed antler cylinder burials have points, suggesting that the tool type is related to warfare and/or the warrior ranking system. As flaking tools, there would seem to be no direct functional or ideological connection between antler cylinders and warfare. I think it is more likely that the co-occurrence of the two artifact types is the result of the fact that so many individuals had achieved the initial warrior grade. Indeed, all artifact types occurring in three or more adult male burials, with the exception of pipes, have very strong associations with points (Table 11.3).

The foregoing arguments are based on very small samples of burials and on incomplete evidence. It is also possible that individuals were interred with antler cylinders as a result of personal preference. This is not supported, however, by the seemingly nonrandom distribution of the artifact type among burials described above.

Three kinds of woodworking tools—beaver incisors, unifacial end scrapers, and celts—occur in King burials (Table 11.7). Except for Burial 81, which has beaver incisors and two celts, and Burial 117, which has beaver incisors and a unifacial end scraper preform, the three tool types do not occur together in the same burials, suggesting that they were used in unrelated woodworking activities. Since each of these tool types potentially could have been used in a variety of woodworking activities, however, we can expect that most adult males used them.

All five reliable burials with beaver incisors have FKK, as does the partially mixed Burial 81. This suggests that there was some kind of relationship between woodworking and flintknapping activities. Five of the 10 burials with FKK, however, do not have beaver incisors (Table 11.3). Some of these burials may have lost beaver incisors through decay, but the relatively similar preservation ranks of reliable and lightly disturbed burials with and without incisors (2.8 vs. 3.0) do not support this explanation.

Beaver incisors could have been used in the manufacturing of any number of small to medium-sized wooden objects. According to historic sources, bow staves and arrow shafts and foreshafts were produced by specialists in Plains Indian societies (Seeman 1984). Similar craft specialization may have existed in the Mississippian Southeast. Beaver incisors would have been an integral part of the woodworking tool kits used by such specialists. If beaver incisors were regularly interred with specialists, we would expect to find them in only a small number of graves—perhaps even fewer graves than FKK if the craft was practiced by fewer individuals.

Alternatively, beaver incisors may have been markers for individuals who were recognized by the community as skilled woodworkers or may have been selected as grave goods by individuals who valued their own woodworking efforts. The latter alternative, however, is not very likely because the distribution of beaver incisors does not appear to be random. The artifact type occurs only with burials that are richly endowed with grave goods.

Beaver incisors have strong associations with points, bifacial blades, and hematite, but in each case, they are found in one or more burials lacking these other artifacts. This suggests that the social identity represented by beaver incisors was not directly related to success in warfare. The association with points, at least, can be attributed to the fact that points occur in so many burials. These associations could also be a by-product of the tendencies for beaver incisors to occur in FKK and for individuals interred with FKK to achieve high warrior grades.

All unifacial end scrapers and preforms appear to have been included in containers holding FKK, suggesting that they were used in the production of wooden or bone items that had a close functional relationship with the production or use of flaked stone tools. The important question is why they were included in the FKK of Burials 49, 92, 101, and 117 and not the other seven flintknapper burials (Table 11.7).

Unifacial end scrapers are not common artifacts in Late Lamar sites. Only four burials at King had them, and none were present in analyzed floor deposits excavated from domestic structures at Potts Tract (Hally 1970), Little Egypt (Gougeon 2002), and King (Ruggiero 2000). The fact that end scrapers do not show up in domestic contexts is evidence that they were not general-purpose woodworking tools and were not commonly used tools; yet Burial 92 had two specimens and Burial 101 had one specimen and three preforms. Neither skill nor personal preference fits these circumstances as well as does restricted usage by craft specialists.

Unifacial end scrapers and preforms are also strongly associated with points and bifacial blades. End scrapers may have been used to manufacture weapons such as clubs, axe handles, arrow shafts/foreshafts, and bow staves, but I think the functional and ideological connection to warfare is only indirect at best. Burials 49, 92, 101, and 117 all reached high warrior grades and as a result these individuals may have been interested in making weapons or weapon symbols, but other individuals also attained these warrior grades and were not interred with end scrapers.

None of the five burials yielding stone celts were reliable or lightly disturbed

adult male burials. Nevertheless, because celts do occur with two and possibly three adult males (Burials 81, 124, and 192) and because most of them were probably woodworking tools, it is appropriate to discuss the artifact type here. Differences in the shape and size of the six specimens indicate that they may have been used in several different kinds of woodworking tasks. The specimen from Burial 124 may have been a chisel or wedge, while the remaining specimens from Burials 81, 130, 192, and 215 were probably chopping tools designed to be hafted in a wooden handle. Variations in cross section, bit shape, use wear, and material suggest further differences in the way the latter were used.

Artifact associations do not tell us very much about why celts were interred with burials. The only grave goods in Burials 192 and 215 were the single celts; Burial 81 had many artifacts, including points and an FKK; and Burial 124 probably had many artifacts prior to being damaged by the plow. In only one instance, Burial 81, were celts found with other woodworking tools.

Celts occur with some regularity in domestic contexts. Eight whole specimens were recovered from 10 house floors at King, Little Egypt (Hally 1980), and Potts Tract (Hally 1970), and celt fragments were frequent finds in general midden excavations at these sites. Presumably most men owned at least one celt that they used in tasks such as field clearing, house building, and other activities requiring heavy-duty wood cutting and splitting. Such common usage is not reflected, however, in the relatively small number of celts placed in King site burials. As grave goods, celts may represent part-time craft specialization, recognized woodworking skills, or personal preference, but there is no real evidence to support one of these possibilities over the others.

Four uncommon non-flaked stone tool types of unknown function—circular polishing stone, tabular polishing stone, tabular stone, and tabular limestone—occur in four reliable burials and the partially disturbed Burial 81 (Table 11.7). Those tools in Burials 81, 102, 117, and 212 were all found in physical association with FKK. Burial 226 does not have an FKK; the circular polishing stone and tabular polishing stone were placed together with a large mussel shell and these may represent a distinct type of tool kit.

Seven uncommon types of bone and antler tools or tool parts—turkey tarsometatarsus awl, bone handle, cougar radius tool, cylindrical bone tool, split bone tool, bird-bone tool, and antler tine—occur in four of the burials listed in Table 11.7. Burial 65 is distinctive in having several of these tool types. All were found together along with the proximal end of a turkey tibiotarsus, an FKK, and an antler cylinder in a tight cluster adjacent to the hip of the burial.

The compact nature of the cluster suggests artifacts were originally held in a container. Several different craft activities are probably represented by these artifacts.

A tight cluster of tools that includes an FKK, two antler cylinders, one split bone tool, and fragments of an antler tine was located near the head of Burial 81. The cluster also may have included a deer ulna awl, a cylindrical bone tool, and a second split bone tool, but the locations of these artifacts were not recorded in the field and as a result they cannot be assigned to Burial 81 or the tool cluster with certainty. The spatial compactness of the cluster suggests that artifacts were originally in a container. Several different craft activities are probably represented, especially if the three questionable tools were also part of the cluster.

Altogether, 16 different tool types, tool parts, and tool kits were recovered from 14 reliable and lightly disturbed burials and the partially mixed Burial 81 (Table 11.7).[5] These include FKK and antler cylinders related to stone tool production, three woodworking tools, four non-flaked stone tools of unknown function, and seven bone and antler tools of unknown function. Counting FKK and antler cylinders as components of a single type of tool kit, we find that four burials contained only one type of tool or tool kit and 11 burials contained between two and seven different tool/tool kit types.

Some of these tool types—for example, FKK and celts—were used in crafts that probably were practiced by most adult males in the community. Others, such as circular polishing stones and turkey tarsometatarsus awls, also may have been widely used, but we lack evidence one way or the other. What we do know is that most tool types were not commonly used as grave goods.

Relatively few adult males—14 out of 34 reliable and lightly disturbed burials—were interred with tools/tool kits. This suggests that individuals interred with tools were a rather select group. There were not very many of them, and they almost always were interred with multiple tool types that, for the most part, represent distinct craft activities.

We may conclude from this that tools are not randomly distributed among adult male burials. This being the case, it is unlikely that the decision to use tools as grave goods was made solely on the basis of idiosyncratic, personal preference. More likely, tools were selected for inclusion in burials because the individuals who used them were craft specialists or were recognized by the community as skilled craftsmen.

In 9 of the 11 reliable, lightly disturbed, and partially mixed burials with multiple tool/tool kit types, all or nearly all items occur in a single spatial cluster (Table 11.9). Their proximity to one another suggests that they were in-

Table 11.9. Spatial location of tools and other artifact types within burials

Burial	Artifact Types Placed in a Single Location	Artifact Types Placed in Separate Locations
15	Beaver incisor, blade, and points FKK and discoidal	Iron implements, hematite
34	FKK and beaver incisor	Blade, point
49	FKK and end scraper	Blade, point
65	FKK, beaver incisor, antler cylinder, and blade	Point, pipe, *Busycon* cup
81	FKK, antler cylinder, beaver incisor, celt, tabular rock, tabular polishing stone, bone tool, and antler tine	Point, pipe
92	FKK, antler cylinder, beaver incisor, end scraper, and *Busycon* cup	Blade, point, iron, gravy boat bowl
101	FKK, end scraper, and discoidal	Blade, point
102	FKK, antler cylinder, and tabular rock	Point, pipe
103	FKK and beaver incisor	Pipe
117	FKK, beaver incisor, end scraper, tabular limestone, and bone tool Iron and discoidal	Spatulate celt, point
226	Circular polishing stone, tabular polishing stone, and mussel shell	

terred in a single container or in multiple containers placed together in one location. In most cases—Burials 34, 49, 81, 92, 101, 102, 103, and 117—this location differed from those where artifacts related to warfare and civic and ceremonial offices were interred. We may infer from these spatial patterns that tools and tool kits were seen as belonging to one category of mortuary behavior and that this category was considered to be different from mortuary practices involving grave goods of a military, civil, and ceremonial nature. Such distinctions imply a formality of decision making in grave good selection that may not have been present in decisions based only on personal preference.

Three adult male burials are known to have had bipointed bone implements. They have little in common with respect to grave goods. Burials 92 and 81 have larger numbers of artifact types, many of them in common, but Burial 63 has only two shell beads and a probable medicine bundle consisting of several animal bones.

Burials 63 and 92 each had a single bipointed bone tool and presumably these individuals had used the implement during their lifetimes—possibly for capturing fish. Burial 81 had a minimum of 10 finished tools and two pre-

forms. He may have used the implements, but he certainly was manufacturing them as well. Given the number of specimens involved, Burial 81 may have specialized in the manufacture or use of the bipointed implements. There does not seem to have been a great deal of skill or labor involved in making the implement, however, so we may question what factors would have led an individual to produce a surplus of them and led others to forego manufacturing them.

Unfortunately, we do not know for sure how bipointed bone tools were used, and as a result we cannot estimate how widely used they would have been or how many men would have possessed them. Bow fishing is their most likely use, but it is difficult to believe that of the 34 reliable and lightly disturbed burials, only two individuals would have caught fish in this way. Possibly, these men were especially skilled in this type of fishing.

Medicine

Bacula, small mammal bones, bear bones, and polished, eyed bone cylinders were probably charms or amulets used in conjuring and in curing rituals or to protect the owner from harm or increase his chances of success in hunting, love, war, and other undertakings. As such they would have been unlikely to be affected in their acquisition by any of the social identities discussed above or to be strongly associated with any other particular artifact types except pipes. To some extent this is borne out by the burial data from King. Burials with these items range from Burial 92, the richest burial in the collection, to Burial 63, which had only two shell beads and a bipointed bone tool in addition to several bones of small mammals and an eyed bone cylinder (Figure 11.2). Age at death ranges between approximately 15 and 45 years and is roughly the same as the average age at death for the entire adult male sample. Burial 63 and Burial 103, each with a bear bone, are distinctive among adult male burials in having no war-related or exotic artifacts. Burials with bacula, on the other hand, are strongly associated with points and hematite, both of which can be considered war-related grave goods.

Charms and amulets intended to protect or aid their owner in some fashion were probably common possessions among King site inhabitants. We might anticipate that such items would usually be interred with their owner and thus would occur in a large number of burials. The fact that grave goods that may have been medicine objects were recovered from only seven adult male burials (Burials 63, 81, 92, 103, 118, 157, and 229), however, suggests that they were not personal charms and amulets. More likely they were medicine items used by conjurers and curers. These specialists probably did not occur in large num-

bers in communities like King. If they were interred with the tools of their trade, the number of burials with such objects would be small.

Costume

Marine shell beads were items of costume, but they almost certainly also had significant ideological and symbolic meanings. Marine shell beads were probably also a sign of material wealth because the raw material from which they were made had to be imported at some cost. Prentice (1987:198–199) argues that marine shell beads functioned in Mississippian society primarily as wealth items and to a lesser extent as status items and "religious icons." According to Prentice, the use of marine shell beads as wealth indicators is evident in their distribution throughout all levels of Mississippian society and in the varying quantities with which they occur in burials—the latter indicating differences in level of wealth.

The distribution of marine shell beads among King site burials satisfies both of Prentice's criteria. They are found in 14 adult and 16 subadult burials as well as with both adult males (9) and adult females (1). Burials with marine shell beads can be assigned to at least eight different identifiable households scattered widely across the site. The quantity of beads in single burials varies from as few as 1 to more than 200 beads and between 2 and 3,078 shell bead units. Among households, quantity ranges from one burial with as little as three bead units in Household 14 to at least six burials with a total of at least 1,268 bead units in Household 15.

There is no consistent relationship between marine shell beads and other high-ranking adult male statuses and adult male rank in general. Beads occur in burials with grave goods such as blades, FKK, and discoidals, but not frequently. Some burials, such as Burial 92 (660 bead units) and Burial 30 (224 *Marginella* shell beads), with large quantities of beads have large numbers of grave goods and exotic grave goods and were probably prominent members of the King community. Other burials (Burials 15, 34, 49, 65, and 101), with roughly comparable arrays of grave goods, have no beads. This suggests that marine shell beads represented a kind of status—material wealth—that was different from and obtained independently from the other adult male statuses we have identified. We may infer from this that marine shell beads were placed in burials primarily to indicate the wealth of the deceased or his/her household or kin group. It follows that differences in quantity of beads reflect to some extent actual differences in wealth.

With only two adult male burials possessing shell gorgets, it is difficult to identify any pattern in the artifact type's distribution that helps us understand

why it was used as grave furniture. Probably the most telling thing about the distribution of mask gorgets is that they occur with so few adults compared to subadults. We are probably safe in concluding from this that they were considered to be more appropriate grave goods—and perhaps costume items—for subadults than adults.

The two burials with mask gorgets are quite different from one another. Burial 49 appears to have attained a midlevel warrior grade and to have been a master flintknapper or flintknapping specialist. In contrast, Burial 188 has no distinguishing personal characteristics or indicators of wealth beyond those represented by the gorget. Similar variability, it will be recalled, exists among burials with marine shell beads. It suggests that high rank, however it was defined, was not a necessary criterion for use of mask gorgets as grave goods.

On the other hand, Burials 49 and 88 are both located in the northern portion of the site in the vicinity of Structure 15 where burials with marine shell beads and subadult burials with gorgets are concentrated. This suggests some connections with household wealth—wealthy households and their members would be more likely to possess objects made from marine shell and they might have been more interested in demonstrating their material wealth by using gorgets as grave goods.

But why do so few adult male burials have mask gorgets? Clearly there are other factors involved. The ideological and symbolic nature of the gorget may be one of them. Supposedly this characteristic would be the same for males and females and for subadults and adults, but it may have been considered less appropriate or necessary for adults. The idea of a protective amulet for children comes to mind. We should not rule out, however, the possibility that the decision to include a mask gorget in a burial was primarily based on personal preference. Wealth display and religious benefits may have been factors to consider, but they were probably not requirements.

The small number of burials with knobbed shell pins makes it difficult to identify patterns in the type's mortuary associations. We do know that knobbed shell pins occur with adult males and females as well as subadults and that five of the seven burials with these artifacts occur in two households (Households 2 and 23) located in the eastern sector of the habitation zone. Four of seven burials with knobbed shell pins also have marine shell beads, but none have gorgets.

The existence of knobbed shell pins in burials indicates that ear ornaments were considered an appropriate type of grave good in the King site community. The infrequency with which they occur in the burial sample (2.8 percent) and in Mouse Creek phase burial samples (2.1 percent), however, contrasts with

early European accounts indicating that ear ornaments were a common form of bodily decoration in the Southeast at the time of contact. According to these sources, a variety of objects made from a variety of materials were inserted in or hung from ear lobes, including objects of wood, bone, and stone; bird feathers; bird claws; fish bladders, strings of shell beads; columella shell pins; and copper and silver wire and rings (Swanton 1946). Except for stone and metal ornaments, all of these materials are subject to decay. Given that some were more susceptible to decay than shell, it is likely that many if not most adult male burials at King originally had ear ornaments but that only those made of shell survived or were recognized for what they were at the time of excavation. A second type of ear ornament, the shell pulley-shaped ear spool, is known only from Burial 30 (sex unknown). Some of the marine shell beads recovered from burials may have been ear ornaments as well, especially in those cases in which their numbers are low.

The question to answer, then, is not why some burials had ear ornaments and others did not, but why some had the knobbed shell form while others may have had ornaments made of different materials. Gender was evidently not a factor, but ideology may have been. Given that pins were made of *Busycon* shell and the likelihood that other ear ornaments may have been made of symbolically charged materials such as bird claws and feathers, it is possible that different types of ear ornaments were used to mark social divisions such as descent groups within the community. The only evidence that knobbed shell pins may have played such a role is their concentration in two households located in the eastern sector of the habitation zone and their negative association with shell gorgets. Shell pins and gorgets never occur in the same burial, and gorget burials are heavily concentrated in the northern sector of the habitation zone. The implication is that gorgets were also markers of social groups. Unfortunately, there are several reasons we should not push this argument too far. Sample sizes are small (six adult burials with shell pins and four with gorgets). The spatial distributions of pins and gorgets are not entirely exclusive since one burial with knobbed shell pins occurs in the northern sector of the habitation zone and one gorget burial occurs in Household 2. Shell gorgets and ear pins are different kinds of costume items and, thus perhaps, less likely to symbolize distinct social groups. Finally, because gorgets are not ear ornaments, they are not directly relevant to the question of why burials do or do not have knobbed shell pins.

If some shell beads were ear ornaments, their spatial distribution relative to knobbed shell pins could be significant. Ten of the 11 burials with six or fewer beads occur in the northern, northeastern, and southeastern habitation zone

sectors. The exception, Burial 163, a subadult, belongs to Household 23 in the eastern sector. Unfortunately, we cannot be sure that bead counts are reliable in many of these burials because of poor bone preservation and the heavily weathered conditions of the beads themselves.

Perhaps the strongest evidence against knobbed shell pins being markers for social groups is the fact that Burial 118 was interred with them as well as a bracket shell pin. The latter artifact type is not known for sure to have been an ear ornament, but it may have been.

It is also possible that knobbed shell pins were worn and used as grave goods in part to demonstrate personal or household wealth. They would have been considerably more costly to procure than marine shell beads because only one or two of the larger-type pins can be manufactured from a single *Busycon* shell. If they were primarily wealth indicators, we might expect them to be used for this purpose alongside marine shell beads. Except for Burial 195, however, they do not occur with burials that have large quantities of marine shell beads, nor, with the possible exception of Burial 83, do they occur in households that have abundant marine shell beads.

Personal preference may also have been a factor. Given the mortuary associations reviewed above, however, I think it is more likely that factors such as wealth or social group affiliation are responsible for most decisions concerning the use of this artifact as a grave good.

Little can be said with certainty about bracket shell pins as grave goods. They occurred with only two burials, and it is not clear how they functioned as costume items. Procurement cost would have been relatively high because only a few pins can be manufactured from a single *Busycon* shell. The desire to demonstrate material wealth, then, may have been a factor in the decision to place them in a burial. There may have been an ideology component to their use as grave goods given the material from which they were manufactured. They are unlikely to have served as markers for social group affiliation, however, because of their rarity and because one of the pins occurs in Burial 118, which has a knobbed shell pin. Personal preference may have been a factor as well.

European Artifacts

King site males probably obtained iron implements by two different mechanisms: as gifts from the De Soto or Luna expeditions and by theft or recovery on the battlefield. Burials 15, 40, 92, and 117 are likely to have obtained their iron implements by the former mechanism; Burials 19 and 234 by the latter mechanism. As argued in an earlier section, the four individuals represented by Burials 15, 40, 92, and 117 were probably considered by the Spanish to be

prominent members of the King site community whose cooperation and support was deemed useful. This characterization is supported by the quantity and variety of aboriginal grave goods accompanying all of the burials except the heavily plow-disturbed Burial 40.

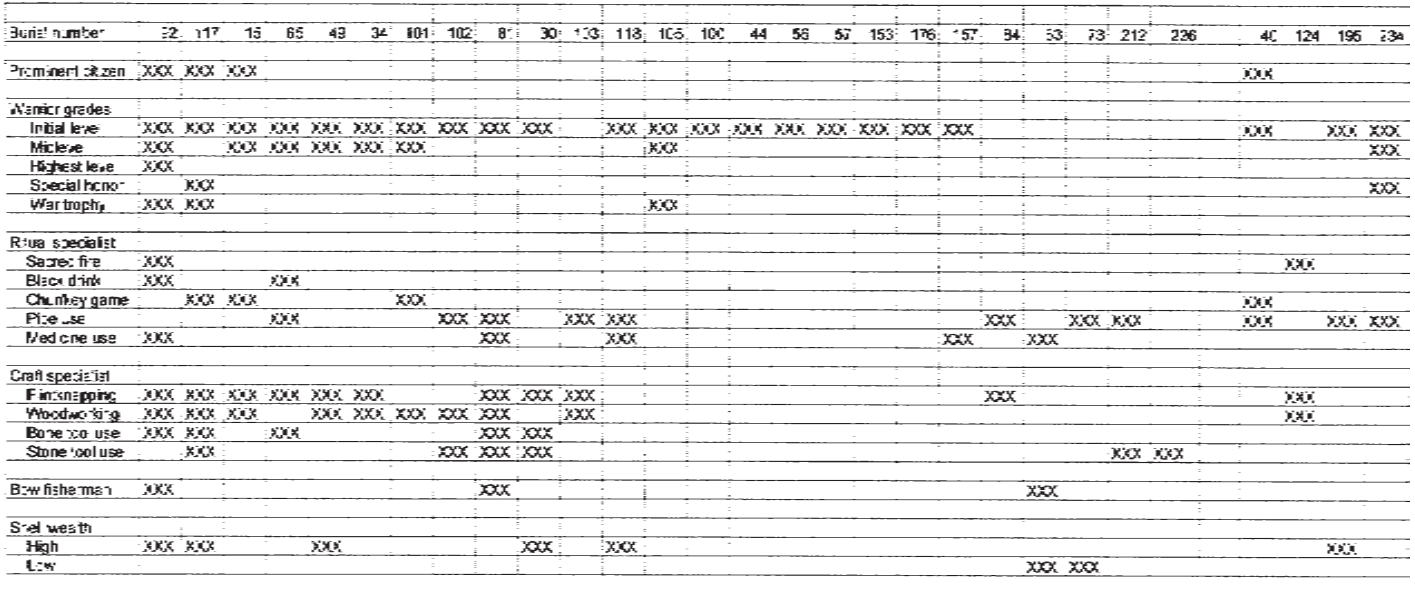
Adult Male Status Resumes

In the preceding section, we looked at the reasons different artifact types were used as grave goods in adult male burials. I argued that most types represent specific statuses that were recognized and valued by the King site community. I also argued that most types were placed in burials in recognition of the fact that the deceased had acquired these statuses during his lifetime and that they functioned as symbols of those statuses. Although not always stated explicitly, this argument also assumes that the artifact types in question served the same function while the deceased was alive.

To the extent that this line of reasoning is valid, we can use the grave goods accompanying adult male burials to identify the statuses that individuals held during their lifetimes. Figure 11.5 illustrates the statuses that can be inferred in this way. The array of statuses represented in each burial may be thought of as constituting a resume of the deceased's accomplishments. In this section, we will look at these resumes and attempt to understand something about the combinations of statuses that they contain.

Only reliable and lightly disturbed burials with grave goods are listed on the left side of Figure 11.5. These are the only burials we can use in analyzing the composition of resumes because they are the only ones that have not lost grave goods—except through decay. The partially disturbed Burial 81 is included in this group because all of his social identities can be inferred from grave goods that we know accompanied the burial; those artifact types of questionable association tell us nothing new about the individual. The four burials listed on the right side of the figure are heavily disturbed and looted burials. They will be considered later when we turn to the question of which adult males were important members of the King community.

Several of the status categories in Figure 11.5 require explanation. The "prominent citizen" category refers to individuals who received iron tools from the Spanish as gifts. The spatulate celts in Burials 117 and 234 are tallied as a "special honor" for warriors. Gravy boat bowls may have been markers for the military office or grade of war chief, but I have chosen to emphasize their association with ritual as conveyors of sacred fire. "Medicine use" refers to items that probably functioned as charms, amulets, or other types of objects



Burial number	32	117	15	65	49	34	101	102	87	30	103	118	105	100	44	56	57	153	176	157	84	53	73	212	236	40	124	195	234
Prominent citizen	XXX	XXX	XXX																							XXX			
Warrior grades																													
Initial leve	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX		XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX						XXX		XXX	XXX
Mid leve	XXX		XXX	XXX	XXX	XXX	XXX						XXX																XXX
Highest leve	XXX																												
Special honor		XXX																											XXX
War trophy	XXX	XXX											XXX																
Ritual specialist																													
Sacred fire	XXX																										XXX		
Black drink	XXX			XXX																									
Chunkey game		XXX	XXX				XXX																			XXX			
Pipe use				XXX				XXX	XXX		XXX	XXX									XXX		XXX	XXX		XXX		XXX	XXX
Medicine use	XXX								XXX			XXX								XXX		XXX							
Craft specialist																													
Fire shaping	XXX	XXX	XXX	XXX	XXX	XXX			XXX	XXX	XXX										XXX						XXX		
Woodworking	XXX	XXX	XXX		XXX	XXX	XXX	XXX	XXX		XXX																XXX		
Bone tool use	XXX	XXX		XXX					XXX	XXX																			
Stone tool use		XXX						XXX	XXX	XXX														XXX	XXX				
Bow fisherman	XXX								XXX													XXX							
Shell wealth																													
High	XXX	XXX			XXX					XXX		XXX																XXX	
Low																						XXX	XXX						

Figure 11.5. Adult male status resumes. Burials 40, 124, 195, and 234 were disturbed by plowing or looting.

with supernatural power that may have been used in curing and conjuring or, less likely, to ensure individual success and safety in various endeavors. "Stone tool use" refers to non-flaked stone tools such as circular polishing stones that were not part of FKK. "Shell wealth" is estimated using quantity of marine shell pins, beads, and gorgets. Finally, hematite is not included as a status indicator because its meaning and use as a grave good are not well understood.

It is clear from Figure 11.5 that adult male burials with grave goods differ considerably in the number and combinations of statuses they held. Number of statuses ranges from 1 to 12 with most having four or fewer. No two burials with three or more statuses have identical resumes and very few share more than half of their statuses. We can infer from this that most statuses were acquired independently of each other and, by implication, that success and recognition in one field of endeavor did not necessarily lead to success and recognition in another field. Nevertheless, as we will see below, acquisition of some statuses appears to have been directly dependent upon acquisition of others.

In spite of the confusing array of statuses that exists in the burial collection, there are a number of interesting patterns or tendencies in the way statuses are combined. Unfortunately, none can be tested for statistical significance because of small sample size.

1. Warrior statuses form a nested hierarchy in which lower-level grades are more common than higher-level grades and honors and the latter are represented only in burials that also have lower grades. Warrior grades and honors were apparently acquired in sequence from lowest to highest.
2. Ceremonial offices involved in transporting sacred fire, preparation and serving of black drink, and organizing the chunkey game are always held by individuals who have at least two warrior grades or one grade and a special war honor.
3. Pipe use, in contrast, is more likely to occur with individuals having only one warrior grade or none at all.
4. Except for Burial 92, no individual has more than one of the three ceremonial offices involving sacred fire, black drink, and the chunkey game.
5. Flintknapping and woodworking specialists are more likely than not to be individuals who have at least two warrior grades/honors.[6]
6. Individuals are more likely to be both flintknapping specialists and woodworking specialists than only one or the other.
7. Bone tool– and stone tool–using specialists are more likely than not to also be either flintknapping specialists or woodworking specialists.

Overall, there is a tendency for advanced warrior statuses; ceremonial offices involving sacred fire, black drink, and the chunkey game; and craft activities to be concentrated in a relatively small number of people. An interesting question is whether there are causal relationships underlying any of these co-occurrences. There are more people with advanced warrior grades and honors than there are with ceremonial offices. As was characteristic of ethnographic Northern Plains society, it is possible that the first opportunity young men had to gain social recognition was as a warrior and that success in that realm provided a stepping stone to advancement in the civilian world.[7] If some kinds of social advancement in the aboriginal Southeast were similarly organized, we might expect individuals with ceremonial offices to be generally older than those with advanced war honors. Such seems to be the case, although the number of instances upon which this observation is based is very small. Involvement in warfare, at least as documented by entry to the warrior grade represented by points, began at a comparatively young age. Individuals who attained the midlevel warrior grade or special honor average 37 years old. Burial 92, with offices related to sacred fire and the black drink, is approximately 45 years old. Burial 65, with a black drink office, is approximately 39 years old. One of the two burials with stone discoidals that can be aged, Burial 101, is approximately 45 years old. The other, Burial 117, however, is only around 19 years old.

Reaching the status of skilled craftsman or craft specialist should depend primarily upon ability and practice. Successful warriors may be more highly motivated to achieve success than the average adult male and may apply that same dedication to the perfection of craft skills. Other than that, however, I can see no reason warrior status or ceremonial offices should necessarily lead to success in craft production. Social prominence resulting from success in craft production, on the other hand, could have affected one's ability to gain ceremonial office. The fact that there are more adult males with craft specialist statuses than ceremonial offices and that ceremonial offices occur almost exclusively with individuals who are also craft specialists supports this interpretation.

Several burials stand out because of the number and types of statuses in their resumes. The individual in Burial 92, with 12 statuses, has by far the greatest number. He was probably the most prominent member of the community, at least to the extent that the reliable and lightly disturbed burials are representative of all King site burials. He had acquired the highest warrior grade, he had two ceremonial offices and may have been a conjurer or curer, he was recognized for his skill in at least three different crafts, and he had great shell wealth.

The individual interred as Burial 117 has fewer statuses than Burial 92 but in many respects has a similar resume. He had achieved the equivalent of at least a midlevel warrior grade and like Burial 92 was interred with a war trophy—in this case, an entire bundled skeleton. He had only one ceremonial office but was recognized for his skill in at least four different crafts and had great shell wealth.

The individuals interred as Burials 15 and 65 have most of the same kinds of statuses as Burials 92 and 117, just fewer of them. They both had reached a midlevel warrior grade and had one ceremonial office and two craft specialties, but they lack shell wealth. Burial 65 was also a ritual specialist who used pipes.

On the basis of quantity and kinds of grave goods, the individuals represented by Burials 15, 65, 92, and 117 were probably the most prominent members of the King site community for which we have evidence. It is noteworthy that the Spanish apparently also recognized them as being prominent citizens by giving three of them iron implements as gifts. The number of objects each has even parallels the strength of their resumes, with Burial 92 having three items; Burial 117, two; and Burial 15, one. Burial 40 may also have been given iron by the Spanish in recognition of his importance in the community. The heavily disturbed burial yielded grave goods indicating that the deceased had acquired at least the initial warrior grade, was a ceremonial official in the chunkey game, and used a pipe in ritual activities. Several other types of grave goods may have been lost to erosion and plowing. Unlike the other four burials, he has the distinction of being interred in the plaza.

Burials 195 and 234 may also have been very prominent members of the King community. Points and a pipe were recovered from the heavily plow-damaged Burial 195, but it is the quantity of marine shell bead units (3,078) that stands out and suggests that Burial 195 may have had other high-ranking statuses as well. On the basis of what looters recovered from Burial 234, it appears that this individual was an important warrior, having attained both the midlevel grade and the war honor represented by spatulate celts. He also was a ritual specialist using pipes. There is no evidence that he was a craft specialist, but the types of artifacts associated with woodworking, bone tool use, and stone tool use are not very spectacular and may have been overlooked by the looters. This burial contained a complete sword, but I have chosen to interpret the artifact as not being a Spanish gift.

The individual interred as Burial 81 has the third-largest number of statuses, ahead of Burials 15 and 65, but his resume is rather different from theirs and those of Burials 92 and 117. He had only the entry-level warrior grade

and held none of the ceremonial offices associated with sacred fire, the black drink, and the chunkey game. He was, however, a ritual specialist using pipes and medicine objects—at least a bird-bone fan but possibly also a baculum and bones of fox and opossum—and he specialized in flintknapping, woodworking, bone tool use, and stone tool use. He may have also specialized in the manufacture of bone points for bow fishing. In spite of this variety of accomplishments, he had no shell wealth or Spanish iron.

I do not want to overemphasize the differences between Burial 81 and those people who had attained midlevel and higher grades in the warrior hierarchy, that is, Burials 92, 117, 15, 65, 49, 34, 101, and 105. There are, however, a number of other individuals—Burials 63, 73, 84, 102, 103, 118, 157, and 212—who did not progress very far in the warrior hierarchy but were ritual specialists with pipes and/or medicine objects and might have had one or more craft specializations. These individuals, along with Burial 81, may represent a different career path that was available to people in King site society. Burial 30, if he is a male, seems to fit this career path as well, although he does not seem to have been involved in any ritual activity.

Notes

1. In the analysis of adult male grave goods associations, flintknapper kits have been treated as a single artifact type. The five different tool types that make up most kits have not been included in the analysis.

2. Burials 145, 146, and 195, analyzed by Matthiesen, are not considered here because of unreliable artifact associations and the possibility that points were lost to plowing.

3. This microstyle is identified in Matthiesen's Table 6.1 as combining microstyles 101C, 223A, and 223B.

4. Polhemus (1998:84, Figure 5.4) has found a similar difference in length and edge reworking between triangular bifaces recovered from house floors at the Dallas phase Loy site (40JE10) and burial points from the contemporary Fain's Island site (40JE1) in eastern Tennessee.

5. The number of types is 17 if the deer ulna awl that may be associated with Burial 81 is included.

6. In order to avoid the use of awkward phrases such as "skilled craftsman or craft specialist" and "skilled flintknapper or flintknapping specialist," I will frequently refer to such individuals in the remainder of this chapter simply as "specialist" in their respective crafts.

7. Fogelson (1977:191–192) argues that Cherokee men went through a similar progression, with young men being warriors and old men being civil leaders.

12
Community and Polity in Northwestern Georgia

In this final chapter, I draw together the different analytical strands that have been developed and, to some extent, interwoven in earlier chapters. Among these are the household identifications, public architectural facilities, and status and wealth differences that exist among community members. I will use these sets of data to identify individuals who may have played significant roles in the community; to look at how households differed with respect to craft specialization, wealth, and social and political importance; and to place the King site community in the larger regional contexts of chiefdom polities in the Upper Coosa and Upper Tennessee river drainages.

Status and Wealth in the King Site Community

Achieved Statuses

Compared with subadults and adult males, few women were interred with grave goods, and those who were had a very small number and variety. This is quite different from the Dallas phase in eastern Tennessee, where the distribution of grave goods indicates that adult females increased in social stature and political power with age (Sullivan 2006). At King, marine shell costume items are the most common grave goods among women and may have had their primary meaning as wealth display. Pottery bowls, accompanying two adult females, may mark domestic or craft activities that they were involved in, but the associations that pottery vessels have with marine shell beads and subfloor interment in subadult and adult male burials suggest that they had other sym-

bolic meanings. It is telling that in the one case of an adult female burial with abundant grave goods, Burial 223, the artifacts involved relate to the deceased's status as a warrior, a male characteristic. We may conclude from these data that the King site community had little interest in marking women's achieved statuses with nonperishable grave goods.

Subadults exhibit a fair amount of variability in grave goods that probably marks several different statuses. A few older subadults were interred with stone and bone artifacts that may have been used as tools and that may have been markers for one or more achieved statuses related to technical proficiency. For the most part, though, subadults were interred with marine shell and bone costume items and pottery vessels. The age distribution of these and of grave goods in general indicates that mortuary practices for subadults were aimed primarily at marking important age-related rites of passage.

With adult males, we see a dramatic increase in the variety of artifacts used as grave goods and the quantity of artifact types that occur with individual burials. The great majority of artifact types that occur in adult male burials are not found in subadult burials. Some more common types—points, flintknapper kits (FKK), pipes, antler cylinders, hematite, bacula, and beaver incisors—do occur with individuals as young as 15–20 years. This, together with the absence of grave goods in subadult burials between the ages of 9 and 14, suggests that King site society recognized a major life change in males at about the time of puberty.

In Chapter 11, I identified many adult male grave goods as markers for a variety of social statuses that the King site community recognized and valued. These include different warrior grades, civic and ceremonial offices, and craft specializations. Most of these statuses appear to have been achieved, but some may have been inherited.

The most commonly used approach to distinguishing between achieved and ascribed statuses involves the age distribution of grave goods. If a type of grave good is found only with adults, one can argue that the status was not acquired automatically at birth through inheritance. Of course, it is possible that some inherited positions were not assumed until an individual reached maturity or until the incumbent vacated the position. Where such conditions exist, the strongest evidence for achieved status would be grave goods that occur exclusively or predominantly with older adults. This criterion allows us to identify statuses that had prerequisites that were difficult to meet or required time to satisfy. Social identities that can be achieved early in adulthood will not have this kind of burial age distribution, however, and consequently will be more difficult to distinguish from those that are ascribed.

Among the artifact types that occur exclusively with adult male burials, four—points, bifacial blades, FKK, and unifacial end scrapers—have a tendency to be interred with older individuals in their middle to late thirties and forties. Presumably the social identities represented by these artifact types—low and medium warrior grades and skilled or specialist flintknapper and woodworker—were open to all adult males and were earned through personal effort and achievement, a process that usually took many years.

Three additional artifact types—copper arrow symbol badges, gravy boat bowls, and *Busycon* cups—occur only with older individuals, but sample sizes are so small we cannot be certain that they were not also acquired by young men. I argued in Chapter 11 that copper arrow symbol badges represent a high-level warrior grade that could be earned only after passing through lower grades. There is no strong reason to question this interpretation, but we should not dismiss the possibility that the artifact type does represent an ascribed status.

The interpretation of gravy boat bowls and shell cups is not as clear-cut. If the former were used by war leaders to carry sacred fire into battle, they too would represent an achieved status gained by working up the ladder of warrior grades. The position of town war chief, on the other hand, may have been inherited. The Natchez provide a precedent for this in that their head war chief position appears to have been passed down within the Great Sun's descent line. That the position of town war chief would be filled in a similar manner seems unlikely, given that the town chief was probably not considered to be divine. Nevertheless, we should not dismiss the possibility that it was inherited.

The civil offices involved in transporting sacred fire in community ceremonies and preparing the black drink were probably gained by older individuals who had already established their reputations in military and/or civil affairs, but we cannot be totally certain that they were not inherited. Likewise, the founders of new towns, who may have used gravy boat bowls to carry sacred fire from the parent town, could have been individuals who gained political influence and a following through success in military and/or civil affairs. Alternatively, their authority to establish new towns may have come about by virtue of their membership in ruling lineages. Ascription in this form—perhaps supported by personal success in warfare or other civil endeavors—seems reasonable, especially given the likelihood that such leaders probably became chiefs of the towns they founded.

Spatulate celts were identified in Chapter 11 as a symbol of a warrior honor and, as such, can be considered to represent an achieved social position. The individuals interred with this artifact type, Burials 117 and 234, however, are

not very old—approximately 19 and 30 years, respectively—suggesting that the military honor could be won by fairly young warriors or that it was an ascribed status. Burial 117 seems to have been an unusual individual and will be discussed in greater detail in a later section.

Pipes, antler cylinders, beaver incisors, bacula, and bipointed bone tools are all relatively common grave goods. All occur with at least one individual who was in his late teens at the time of death, raising the possibility that the statuses they represent were acquired through inheritance. Given the type of activities—flintknapping, woodworking, curing/conjuring, bow fishing—that each was associated with, however, personal achievement is the most likely way they were acquired.

Wealth

Wealth can be defined in a number of ways. Haller (1970), a sociologist, defines it as "access to goods and services." Michael Smith (1987) offers the definition "anything of value," while Schneider (1974:256) suggests that wealth is "the total of desirable (i.e., valuable) goods, both social and material, possessed by someone or existing in a community." The first definition emphasizes the conditions that give rise to wealth and especially wealth differences, while the latter two emphasize what actually constitutes wealth. The latter definitions are more relevant to our goal in this section, which is to identify those grave goods that constitute wealth in King site society and to measure variability in wealth between individuals and households.

Value is the key element in the identification and measurement of wealth. Ideally, we need to know what members of King site society saw as being valuable and how they measured that value. Michael Smith (1987:321–322) distinguishes three major factors that, singly or in combination, may determine value. These are labor input or "energetic value" as measured by the time involved in an item's production and transportation; scarcity, determined by supply and demand; and the "periodicy and social significance" of events in which an item is consumed. The first two factors are readily measurable with mortuary data. The third is as well if we consider the death of an important person as an event of social significance.

By these criteria, several types of grave goods can be identified as having value and thus as being potential wealth items. These include copper arrow symbol badges, spatulate celts, bifacial blades, stone discoidals, *Busycon* cups, shell gorgets, knobbed shell pins, bracket shell pins, marine shell beads, and gravy boat bowls. All except the last have considerable energetic value. The copper and marine shell items and possibly the spatulate celt and bifacial blades were made with nonlocal and/or rare materials and therefore would

have been in short supply. The gravy boat bowl, *Busycon* cup, and stone discoidal were all used in socially significant events such as black drink preparation and consumption, rituals involving sacred fire, and the chunkey game. Several artifact types were also interred with prominent community members.

In Chapter 11, the copper arrow symbol badge, spatulate celt, bifacial blade, stone discoidal, *Busycon* cup, and gravy boat bowl were identified as markers for important adult male statuses in the community. If I am correct in these interpretations, the prestige and social significance of these statuses would have far outweighed any value these items had as a result of their high production costs and scarcity. I think it is more likely that they functioned as markers for specific statuses than as wealth items.

In Chapter 11, I argued that marine shell beads functioned as costume items and as indicators of wealth. The two uses, obviously, are not incompatible. Beads were probably worn as costume items in part to display personal or household wealth.

It is significant that marine shell beads frequently occur in subadult burials. The beads had to have been provided by parents or other older kin. The restriction of beads to children over 3 years of age interred outside primary domestic structures appears to have been a community-recognized statement about the social development of subadults. The fact that only some children with these characteristics had beads and that the quantity of bead units varies considerably among them, however, makes sense only in the context of wealth display. Children were also being used to display the wealth of parents, households, or descent groups.

Beads are present in approximately equal numbers of reliable and lightly disturbed adult male (15 percent) and subadult (16 percent) burials. They occur in somewhat greater quantities with adult males than subadults, the average number of *Busycon* bead units per burial being 191 and 153, respectively. In contrast, among adult females, one burial (5 percent) had one marine shell bead worth three bead units. We have no way of knowing how many subadults with beads were female or male, although two subadult bead burials also had rattlesnake gorgets compared with one with a mask gorget. We may conclude that adult males and subadults of both sexes were equally likely to display shell wealth but that adult females seldom did.

Thirty-one burials yielded marine shell beads (Table 12.1). The number of *Busycon* bead units ranges between 3 and 3,078, with the largest numbers occurring in two adult male burials (Burials 92 and 195) and three subadult burials (Burials 64, 88, and 110). Burial 30, an adult of undetermined sex with 224 *Marginella* shell beads, should also be counted as having great shell wealth.

The distribution of shell bead wealth among households will be discussed

Table 12.1. Burial distribution of marine shell beads, gorgets, knobbed shell pins, and bracket shell pins

Burial	Household I.D.	Household I.D.?	*Busycon* Bead Units	Other Bead Types	Gorget	Knobbed Shell Pin	Bracket Shell Pin
4/5	1				1		
20	1				1		
73	1			2 *Olivella*			
	Household 1 total bead units		0				
117	2		30			1	
118	2		69			1	1
156	2					2	
158	2		12	1 *Olivella*	1		
	Household 2 total bead units		111				
17	6		15				
18	6		30				
	Household 6 total bead units		45				
49		14			1		
160		14	3				
188	14				1		
189		14		2 *Olivella*			
	Household 14 total bead units[1]		0				

60	15		108	1 *Anadara*	1	
61	15		309	2 *Anadara*		
63	15		6			
66	15		3		1	
83		15				1
87	15		182			
88		15	421			
90		15		1 *Olivella*		
91/259		15	224	2 *Olivella*		
92	15		660			
110		15	582			
	Household 15 total bead units		1,268			
85		18		21 *Anadara* 1 *Noetia*		
99		18			1	
120	23		106			2
125	23					1
143		22	2			
144		22	2			
163	23			1 *Anadara*		
	Household 23 total bead units		106			
223		30				1
224		30	13			
229		30	27			

Continued on the next page

Table 12.1. *Continued*

Burial	Household I.D.	Household I.D.?	*Busycon* Bead Units	Other Bead Types	Gorget	Knobbed Shell Pin	Bracket Shell Pin
235	30		52	2 *Olivella*			
	Household 30 total bead units		52				
30	Plaza		58	224 *Marginella*			
31	Plaza		300		1		
32	Plaza				1		
35	Plaza				1		
36	Plaza				1		
	Plaza total bead units		358				
64	Unknown household		671		1		
88	Unknown household		421				
90	Unknown household			1 *Olivella*			
97	Unknown household		7				
110	Unknown household		582				
195	Unknown household		3,078			2	

1. Household *Busycon* bead unit totals include only burials that can be definitely associated with the household.

in a later section. We can note here, however, that Household 15 has far and away the greatest concentration of shell bead wealth. In general, habitation zone burials have the greatest quantities of shell bead wealth, but large quantities also occur in at least two plaza burials. Three other plaza burials (Burials 37, 38, and 40) were disturbed by plowing and may have lost beads as a result. Structure 17 burials are distinctive in having no beads.

Shell pins and gorgets have greater energetic value than beads and were much less common. As discussed in Chapter 11 and in a later section, knobbed shell pins may have been markers for social subdivisions within the community, and gorgets are likely to have had ideological or symbolic functions given their rich iconographic content. Gorgets also occur with subadults more frequently than adults and may have been bestowed on children as protective devices or to mark membership in a social group. Given their relatively great energetic value and relatively low level of occurrence, the possibility exists that shell pins and gorgets also functioned as indicators of personal or household wealth.

Ascribed Status

The only ascribed statuses that we can be reasonably certain existed in the King site community would have been those associated with the matriline of the town chief. Members of this descent line probably shared a distinct status by virtue of their kinship relationship to the town chief. More restricted statuses, inherited within the descent line, would have included the town chief, probably the genealogically senior females responsible for perpetuating the matriline, and possibly offices such as town administrator (*iniha*) and town war chief (*mandador*). With matrilocal postmarital residence, most female and unmarried male members of the matriline probably belonged to only one or two households. Married male members probably joined the households of their wives when they married. Whether the town chief did so as well is a question that we will deal with later.

Matriline membership may have been marked at the time of death by distinctive grave goods, body positions, grave types, grave locations, or some combination of these. If grave goods were used as markers for membership, they probably would have had some of the following characteristics:

1. They would have primarily symbolic functions and not utilitarian functions such as flintknapping.
2. They might have decoration with explicit iconographic content, as in the case of engraved shell gorgets.

3. Their material, shape, or color might have symbolic associations, as in the case of hematite and *Busycon* shell objects.
4. They might be made of nonlocal or scarce materials or require great skill or effort to manufacture.
5. They might be costume items that could be worn during the individual's lifetime.

In addition, we can expect that burials belonging to the town chief's matriline would have had some of the following characteristics:

1. There should be relatively few of them because the town chief's descent line was only one of many that existed in the community and because only approximately half the burial population at the site has been recovered and analyzed.
2. Depending upon whether all or only some members of the matriline were being recognized as such, we might expect to find adult males, adult females, and/or subadults being interred with special grave goods.
3. They should be associated with a relatively small number of households. Adult female and subadult members of the matriline should be restricted to only one or two different household cemetery plots, while adult male members should be found in a larger but still limited number of plots.
4. The only individuals belonging to the town chief's matriline whom we should expect to find in the burial plots of matriline-affiliated households are adult females and subadults; adult male members would move away when they married. If membership in that matriline was being marked by a particular type of grave good, then all adult female and/or subadult burials interred in the household's burial plot should have that artifact type.

Several types of grave goods meet many of these criteria, but in no case can a strong argument be made that any served as a marker for the town chief's matriline. Rattlesnake and mask gorgets occur in 13 different burials. Whether or not each type of gorget was restricted to burials of one sex, the six different plots (Households 1, 2, 15, 18, unnamed, and plaza) with subadult and adult female gorget burials is a much greater number than I would expect, given that postmarital residence was probably usually matrilocal. Furthermore, in three of the household plots and the plaza, there are several subadult and adult female burials lacking gorgets.

Similar evidence indicates that knobbed shell pins also were not used to mark membership in the town chief's matriline. Subadult and adult female burials with this artifact type can be assigned to at least three different house-

holds (Households 2, 23, and unnamed). More important, both Households 2 and 23 have several additional subadult and adult female burials that lack shell pins.

Bifacial blades are found in 11 burials located in as many as seven different household burial plots: Households 1, 15, and 30, as well as three unidentified households and the plaza. Pipes occur in 11 burials belonging to six different households, and hematite is found in eight burials belonging to five different households. These numbers seem too large to represent the deceased adult male members of one descent line, given the relatively short duration of site occupancy.

Stepped pit walls, board covers, and extended body position have nonrandom distributions among burials, but there is no evidence that they were markers for matriline membership. Burials with these characteristics simply occur in too many households. Stepped pit walls are found with adult male burials in five different households and with subadult and adult female burials in three different households. In Households 2 and 14, there are adult female burials both with and without stepped pits. Subadult burials with board covers occur in three different households, but in at least one (Household 2) there are also subadult burials lacking this feature. Subadults are interred in an extended position in only two households, but in one of those, Household 15, there are also subadults with different body positions.

Unlike grave goods and mortuary practices related to pit form and body treatment, a strong argument can be made that burial location was a marker for membership in the town chief's matriline. Eleven burials are located in the plaza north of Structures 16 and 17. This is one of three instances in which burials were located in public spaces—the others being the 10 burials in Structure 17 and Burial 194 located farther south in the plaza near the large post pit (Feature 45). The north plaza area was clearly a prestigious location that had considerable symbolic importance for the community. It lay immediately in front of the entrance to Structure 16 and probably the entrance to Structure 17. A lightly constructed pavilion, enclosing all 11 burials, may have been erected there. Similar structures, usually identified as warm-weather council houses, are known from a number of Dallas phase and Overhill Cherokee sites. At least two of these, at Toqua (Polhemus 1987:139–140) and Coweeta Creek (Rodning 2002), have burials beneath their floors.

The individuals interred in the north plaza could have been drawn from any number of households and selected for any number of reasons. The most important evidence we have for determining who they were and why they were interred there is the group's demographic character (Table 12.2). There are five subadults, at least two adult males, and possibly as many as four adult females.

Table 12.2. Mortuary characteristics of plaza burials

Burial	Disturbed	Biological/ Artifactual Sex	Age	Body Position	Iron	Bifacial Blade	Points	Discoidal	FKK	Tabular Polishing Stone	Pottery Bowl	Pottery Jar	Vessel Fragment	Pipe Fragment
30	Plow	I	42	Extended			12		2	1				
31	Plow	I	3	Extended										
32	No	I	4	Extended										
33	No	I	3	Unknown							2	1	1	
34	No	M	45	Flexed on back		1	20		1					
35	Yes	I	S-A	Unknown										
36	Intrusion	I	A	Unknown										
37	Plow	I	>14	Unknown										
38	Plow	I	4	Unknown										
39	No	I	22	Flexed								1		
40	Plow	M	<24	Unknown	1		1	2						1

Burial	Beaver Incisor	Bird-Bone Tool	Split Bone Tool	Cylindrical Bone Tool	Antler Cylinder	Turtle Shell	Mask Gorget	Rattlesnake Gorget	Pulley-Shaped Ear Spool	*Busycon* Beads	*Marginella* Beads	Shell Spoon
30		1	1	1	1	2			1	2	224	
31								1		100		
32							1					
33												1
34	2											
35								1				
36								1				
37												
38												
39												1
40												

Note: I = Indeterminate; M = male; A = adult; S-A = subadult.

The subadults range in age between 1 and 6 years and the adults between approximately 20 and 45 years. If at least one of the adult burials is female, the group matches the demographic profile of the community as a whole rather well, suggesting that sex and age were not criteria for interment in the plaza. On the contrary, the sex and age distribution of the 11 burials could be obtained simply by selecting members of a single household or descent group as they died.

If the north plaza was a symbolically important and prestigious place to be buried, we might ask why children and women were interred there. Children could not have earned the right, and women, to judge by their general lack of grave goods, especially in comparison with adult males, did not hold many important civil or ceremonial positions in the community. This is not a problem if the people interred in the north plaza are members of a descent group or household that had the right to be interred there.

The fact that they were interred in the plaza or within a pavilion attached to Structures 16 and 17 suggests that the individuals represented by Burials 30–40 were prominent or high-ranking members of the community. This view is supported by the nature of the grave goods accompanying the burials. As a group, Burials 30–40 are more richly endowed with grave goods than any household burial group, with the possible exception of Household 15. This is despite the fact that several burials have been plowed disturbed—one severely—and one burial was heavily disturbed by the intrusion of another.

All four subadults have grave goods (Table 12.2). Three have shell gorgets, one has a large quantity of marine shell beads, and one has a unique combination of three pottery vessels and a vessel fragment. Not counting Burial 30, two of the three possible adult female burials also have grave goods, including a shell gorget, a ratio that is considerably higher than that for female burials in general. The two adult artifactual males (Burials 34 and 40) were accompanied by artifacts representing a number of important statuses, including intermediate warrior grade, chunkey game official, pipe user, skilled flintknapper, and skilled woodworker. Burial 30, if it was a male, had many of these same statuses. It is also the only burial from the site interred with *Marginella* beads. Plowing would have destroyed any grave goods placed in the hip and leg area of Burial 40. Unfortunately, we will never know the full extent of his resume, but it could have rivaled those of Burials 92 and 117, a view that is supported by the presence of an iron artifact in the burial.

The simplest explanation for who the north plaza burials were—and the one that most closely fits what we can reasonably infer about King site social and political organization—is that they were related by kinship to the town chief.

There are three ways they may have been related: as members of his matriline, as members of his natal household, and as members of the household he belonged to after marriage. In the former, the town chief as well as individuals of both sexes and all ages related to him matrilineally would have been eligible for interment in the plaza. Assuming that at least one of the four adults of unidentified sex was female, the demographic profile of the plaza burial group conforms to what we would expect if matrilineal descent was the sole defining criterion.

The natal household alternative presents at least two problems. To begin with, the town chief himself might not have been included. More likely, he would have been interred with his own household or his wife's natal household. Second, there is the question of who adult male Burials 34 and 40 were. The adult male members of a matrilocal household would presumably be individuals who were unrelated to the town chief's matriline and had married into the household. I think it is unlikely that such individuals would be accorded the privilege of interment in the plaza.

There are also problems with identifying the north plaza burials as members of the household the chief established or joined when he married. The town chief would be included in the household's burial plot, but the members of his matriline who were responsible for perpetuating his descent line would not be. It is also questionable whether individuals unrelated by matrilineal descent to the town chief or ineligible to succeed him—his wife and children—would be accorded the privilege of plaza burial.

Unfortunately, there is no conclusive, direct evidence supporting one of these alternatives over the others. The logically most satisfying interpretation is that the plaza burials were members of the town chief's matriline. This interpretation allows the town chief and other close adult male and female relatives to be interred in the plaza and it excludes all others. It is the interpretation favored here.

There are, however, two problems with this interpretation. A number of adult males with impressive resumes were interred in various households in the habitation zone. Preeminent among them are Burials 92 and 117—individuals who held a number of important statuses, including civil and ceremonial offices that would have placed them at or near the top of the community's sociopolitical hierarchy as we know it. These men could have been part of the town chief's matriline, but they were not interred in the plaza. I will return to the question of how these individuals fit into the King site community and explain why they were buried where they were.

The second problem is the relatively small number of individuals interred

in the plaza. Households 1, 2, and 23 have upwards of 25 individuals interred in their burial plots. The descent line of the town chief must have been equally long-lived and should have had at least as many deceased members. Why, then, were so few people interred in the plaza? The most reasonable explanation is that only a select few in the town chief's matriline had this right, specifically the town chief, his successors, the women responsible for perpetuating the matriline (the chief's mother and eldest sister and her eldest daughter), and perhaps his eldest male siblings, who may have inherited special offices. Other members of the matriline, depending on their sex and marital status, would be interred in the cemetery plot of the town chief's natal household or their wives' households.

A related question is whether the town chief resided matrilocally in his wife's natal household or whether he had his own residence where he was joined by his wife/wives and children. Each alternative has interesting implications. If the town chief resided in his own house, it is reasonable to suppose that his residence would be a "public" building set aside for the exclusive use of the town chief and his successors. As such, we might expect it to be larger than other primary domestic structures and to have a prominent location in the town. The town chief may have held meetings with community elders and entertained prominent visitors in his residence, as was the case with the Natchez Great Sun. More likely, he would have used Structure 17 for such activities. Similar structures were used in this way in the eighteenth century.

If the town chief resided in his own house, we might also expect household residents to be wealthier on average than the residents of other households. The town chief, by virtue of his prominent position in the community and the likelihood that he controlled access to the community's stored food surpluses, may have had greater wealth than other residents of the town. Presumably this wealth would have been available in some fashion to other household members.

Alternatively, if the town chief resided matrilocally in his wife's household, we might expect that residence location to shift through time depending upon who successive town chiefs married. The primary residence structure in this case would not necessarily be especially large or prominently located. Furthermore, the town chief's wealth might not be as widely shared among household members, many of whom would be related to him only as affines.

There is strong evidence that leaders of Mississippian chiefdoms at the time of European contact lived in houses located on platform mounds (Gougeon 2002:184–187; Polhemus 1987:247–259; Swanton 1911:59). This practice is consistent with the political power, social rank, and divine nature of these

polity chiefs, and it implies that the chief resided in his own household and not that of his wife. It is possible that the chiefs of subordinate towns used special residences to reinforce their authority as well. I think this would be more likely if the status of town chief was elevated well above that of ordinary citizens. It is doubtful that town chiefs were considered to be divine, but there is ethnohistoric evidence for their being related by kinship to polity chiefs or being specially appointed by them (Hann 1988:98; Knight 1990:11; Worth 1998:92). Even in the eighteenth century, the founders of new towns enjoyed special standing within their communities, with the position of town chief being passed down in the family line (Moore 1988:64).

In light of the ethnohistorical evidence, I think we can safely conclude that the town chief's status in the King site community was quite distinct and elevated and that members of his matrilineal descent line enjoyed a special status as well. The north plaza burial group is consistent with this view. To the extent that this view is correct, we can expect that the town chief resided in a special structure that was erected solely for his and his successors' use and that of their households.

To this point, I have argued that the individuals interred in the north plaza were members of the town chief's matriline. In addition to the elevated status enjoyed by these individuals as members of the descent group, we can expect that a small number of special statuses would have been inherited within the matriline. At the very least there would be the status of town chief, but there may have been other lesser offices such as town administrator (*heniha*), public labor coordinator (*chacal*), speaker (*yatika*), and town war chief (*mandador*). Because of their uniqueness, we might expect these offices to be marked by unique grave goods, although if successive holders of an office were interred at King, the associated grave good could occur in more than one burial. We might also expect that any artifact type used as a marker for one of these special statuses would have high energetic value and/or require special skills to fabricate and would have some iconographic content.

Of the dozens of artifact types that occur in adult male burials, only four—copper arrow symbol badge, spatulate celt, *Busycon* cup, and gravy boat bowl—meet these criteria and are thus more likely to represent high-ranking, ascribed sociopolitical statuses (Table 12.3). The pulley-shaped ear spool and *Marginella* beads also meet these criteria, but the burial they occur in—Burial 30—may not be a male.

Among adults, Burial 92 is the only burial that has a unique type of grave good that can be considered a possible marker for a high-ranking ascribed status. The artifact type in question, copper arrow symbol badge, was identified

Table 12.3. Distribution of uncommon artifact types among adult male burials

Burial	Copper Arrow Symbol Badge	Spatulate Celt	*Busycon* Cup	Gravy Boat Bowl	Pulley-Shaped Ear Spool	*Marginella* Beads	Burial Location
30					X	X	Plaza
65			X				Household 15 area
92	X		X	X			Household 15
117		X					Household 2
124				X			Household 23
234		X					Household 30

in Chapter 11 as a symbol for the highest warrior grade, which presumably was an achieved status, but we cannot rule out the possibility that it marked a unique ascribed status. Burial 92 also is one of only two burials to have a *Busycon* cup and a gravy boat bowl. Burial 92 is also distinctive among adult male burials in having the largest variety of grave goods, the largest number of aboriginal grave goods made of exotic materials, and the largest number of recognizable statuses. In addition, the individual interred as Burial 92 is one of only three or four burials to be recognized as a prominent individual by the Spanish with a gift of iron tools—of which it has the largest number.

Given his impressive resume, the individual interred as Burial 92 could have been the holder of an office inherited within the town chief's matriline. He could have been the actual town chief or a lesser official. There is one problem with identifying him as any of these: he is interred in the Household 15 burial plot and not in the north plaza. It is significant, however, that he is an inside burial associated with Structure 15.1. He died before Structure 15 was moved to the west as part of the rearrangement of the habitation zone that accompanied the formal establishment of the King site town. This means that he died before the town was formally established and before the north plaza became a cemetery for select members of the town chief's matriline.

We can be fairly certain that the individual interred as Burial 92 was an important person in the early days of the King site settlement. In fact, given his resume, he may have been the most important person. In this light, it is significant that among his possessions was a gravy boat bowl. He may have used this vessel to carry sacred fire as a war party leader or as a ritual specialist in community ceremonies. Given his association with the initial settlement of King

and his social and political prominence, it is equally likely that he used the vessel to carry sacred fire from his town of origin, the parent town of the new King site town. Burial 92, in other words, may have been the individual who led the first settlers to Foster Bend and who was ultimately responsible for founding the town. As such, he would have become town chief had he lived longer, and he presumably would have been interred in the north plaza when he ultimately died. His early demise, however, meant that someone else—presumably a maternal nephew—became the chief of the new town.

Unfortunately, there is no conclusive evidence to support this interpretation of Burial 92's identity. It stands solely on logical relationships between several pieces of archaeological evidence and a number of assumptions. The argument is weakened somewhat by three inconsistencies. First of all, if Burial 92 was so important in the identity and existence of the King site town, why was the body not exhumed and reburied in the plaza? Ethnohistorical evidence from the Natchez and the De Soto expedition indicates that secondary burial was an important part of mortuary practices for polity leaders and their close matrilineal relatives.

A second problem is that the gravy boat bowl in Burial 92 implies that sacred fire had already been brought to the King site and by extension that one of the most important rituals involved in founding a new town—lighting the sacred fire—had already taken place when the owner of the vessel died. I visualize the ceremony surrounding the founding of a town such as King as involving four simultaneous actions: construction of the council house; laying out of the plaza; erection of the central pole; and lighting the sacred fire in the council house. Burial 92 seems to have been interred prior to at least the first three of these events.

It is possible that sacred fire was not brought to the King site until it was formally established as a town, several years after initial settlement. The implication of this scenario is that Burial 92 would not have had the opportunity to carry sacred fire to the site prior to his death.

The third inconsistency is that if sacred fire was carried to the site by Burial 92 at the time of first settlement, there is the problem of where it was kept until the town was formally established and Structure 17 constructed. As discussed in Chapter 8, the size of Structure 1.1 and its architectural similarities to Structure 17 suggest that it may have served as a council house prior to the formal establishment of the town. The sacred fire could have been housed temporarily there.

Household 15 has several characteristics that make it a good candidate for the household of the town chief. Among them is the presence of Burial 92,

which implies that the household is actually his own or that of his wife. We will look more closely at Household 15 in a later section.

The individual identified as Burial 117 also has an impressive resume, made more so by his young age. By approximately 19 years of age, he had acquired the initial warrior grade, a special war honor, and a war trophy and had become a chunkey game official and a skilled flintknapper and woodworker. His importance in the community, furthermore, was recognized by the Spanish, who presumably gave him two iron tools. None of these statuses, however, are unique to Burial 117.

It is possible that Burial 117's precociousness was aided or sanctioned by membership in the town chief's descent line. It is also possible that one or two grave goods represent more specialized statuses that were inherited within that line. The spatulate celt has been identified as a marker for an achieved war honor, but there is no reason it could not have been a marker for the office of town war chief. Likewise, the office associated with stone discoidals may have been so important that access to it was controlled by inheritance, although the relatively large number of burials with discoidals (four) argues against this. Unfortunately, there is no strong evidence one way or the other regarding the manner in which spatulate celts and stone discoidals were acquired. The location of Burial 117 in the habitation zone indicates that, at the time of death, he was a member of Household 2, which was presumably his wife's. If he was a member of the town chief's matriline, his interment in the habitation zone implies that he was not one of its key members. I prefer to see him as a successful warrior and not necessarily related to the town chief.

Burials 30, 34, and 40 were all interred in the north plaza and presumably were matrilineal relatives of the town chief and eligible for offices that were inherited within that line. All have impressive resumes. Burial 34 had achieved the midlevel warrior grade and was a skilled flintknapper and woodworker. There is nothing distinctive about his grave furnishings, however, that would indicate he was a member of the town chief's matriline and had inherited a special office in the community.

Plowing has heavily damaged Burial 40, impacting the entire skeleton and destroying all bone below the pelvis. Nevertheless, he does have grave goods indicating that he had earned the initial warrior grade, was a chunkey game official, and was involved in the ritual use of pipes. More important, the Spanish apparently recognized him as being a prominent member of the community. No doubt, additional grave goods have been lost, some of which might have broadened his resume to include other important and perhaps unique statuses. He was also fairly young at the time of death, being in his late teens or early twenties.

Burial 30, of undetermined sex, had earned the initial warrior grade and was a skilled flintknapper and craftsman involved in bone and stone tool use. He or she was unique, however, in having *Marginella* shell beads and at least one pulley-shaped ear spool. The former could be merely an indicator of wealth, especially given the large quantity of beads involved. Since this is the only occurrence of *Marginella* shells in the entire burial sample, however, we cannot rule out the possibility that it was a marker for some special status. Pulley-shaped ear spools are commonly depicted in Southeastern Ceremonial Complex (SECC) art, suggesting that they were markers for mythologically important or high-ranking individuals. Individually or together the two artifact types could be markers for a special status or office within the town chief's matriline.

If my interpretation of Burial 92's historical significance is correct, a town chief would have assumed office around the time the King site town was founded. The King site probably existed as a town for at least 20 years after its founding. Given the usual lifespan of King site males, it is quite possible that this individual would have died before the town was officially abandoned. Of the three adult plaza burials discussed above, Burial 40 is the most likely to have been that person, given the iron tool in his grave.

Burials 124, 195, and 234 also need to be considered as possibly having held ascribed statuses. Each may have had resumes like those of Burials 92 and 117 and held important offices in the community. Burial 124 is of interest because of the presence of a gravy boat bowl. The burial was heavily plow damaged, with little more than legs and part of the upper torso surviving. Additional grave goods include a narrow, chisel-like celt and a Type III hammerstone, which may have been part of an FKK. On the basis of this evidence, we can infer that the individual interred as Burial 124 was involved in sacred fire ritual and may have been a skilled flintknapper and woodworker. Judging by Burial 92, which also had a gravy boat bowl, Burial 124 may have had a much broader resume.

The presence of a gravy boat bowl in Burial 124 forces us to reconsider the meaning of this artifact type and how it relates to the role of Burial 92 in the history of the King site community. The impressive resume of the individual interred in Burial 92 and the fact that he was probably one of the first settlers at the King site lead to the conclusion that he was the town's founder and that his gravy boat bowl was used to carry sacred fire to the new town. Presumably, new towns were formally established by a single individual (Moore 1988). This certainly makes sense from the standpoint of the establishment of a single, uncontested descent line as the source of a community's top leadership positions. As an outside burial associated with the long-lived Household 23, Burial 124

could have been interred at any time during the King site's occupation span—including the period after the town was founded. He, therefore, may not have been directly involved in the founding of the town.

How then do we interpret the gravy boat bowl artifact type that is found in both Burials 92 and 124? Was the vessel form used in only one type of ceremony involving sacred fire or in several different types of ceremonies? It is possible that the vessel in Burial 92 was not involved in the founding of a new town at King or that it was used to transport sacred fire to the King site while the Burial 124 vessel was used to carry sacred fire on war parties or in community-wide ceremonies. I prefer the latter interpretation.

A third possibility is that the gravy boat bowl is a marker for the office of town chief, perhaps because of its role in kindling the sacred fire in a new town. This implies that Burial 124 represents a town chief, but I think that is unlikely because the burial is not part of the north plaza burial group.

Burial 234 was apparently very richly endowed with grave goods. Unfortunately, the burial was looted and its contents are known only through the verbal accounts of the pothunters (Little 1985). The burial was also damaged by plowing, as portions of an iron sword were visible above ground at the time of discovery. According to Little (1985) the looters recovered a complete basket-hilt sword, three large bifacial blades, a spatulate celt, a stone pipe, and 23 points. Other types of artifacts may have been removed by plowing or missed by the pothunters. If the looted burial described by Little is the same as Burial 234 (excavated in 1992), then this individual was probably a subfloor burial associated with Structure 30 and was approximately 30 years old at death.

As discussed in Chapter 11, it is likely that the sword was obtained illicitly by the individual interred as Burial 234 and not as a result of Spanish largess, although he may have been sufficiently important to merit a gift of iron. Burial 234 can be accommodated easily within the interpretive framework presented in Chapter 11. His aboriginal grave goods indicate that he had achieved a mid-level warrior grade and had earned a special war honor and that he was probably a conjurer or curer. He is unusual in having both bifacial blades and a spatulate celt. The latter is sufficiently rare among King site and other Mississippian burial samples that it could represent an inherited office such as town war chief. The location of Burial 234 in the habitation zone indicates that he was interred in his wife's household burial plot and thus was not a key member of the town chief's matriline. As with Burial 117, I prefer to see him as a successful warrior but not necessarily related to the town chief.

The final burial to be considered, Burial 195, has also been severely damaged by erosion and plowing, there being no skeletal remains below the waist.

The burial is of interest because of the presence of at least 54 large barrel-shaped beads made from the *Busycon* columella. Other artifacts accompanying the burial include two points, a pipe, and two knobbed shell pins. Additional artifacts, including *Busycon* beads, could have been removed from the burial by plowing.

The beads range in size up to 32 × 27 mm, with the majority being larger than 25 × 20 mm. Similar beads were recovered from Burials 30 (one bead), 88 (one bead), and 110 (10 beads), but Burial 195 is distinctive in having so many. Large barrel-shaped beads, presumably made from the *Busycon* columella, are frequently depicted as necklaces with columella pendants on engraved shell and embossed copper SECC artwork (Phillips and Brown 1978). Archaeological examples of such necklaces have been found in Wilbanks phase burials in Mound C, Etowah, and dating to the fourteenth century. While the Mound C beads appear to run somewhat larger than those interred with Burial 195, it is possible that the latter was wearing a similar kind of necklace. If it originally included a columella pendant, the necklace would have had a historical and symbolic connection to those worn by mythological figures and individuals associated with the chiefs of prehistoric Mississippian polities. Burial 195 is not located in the north plaza and therefore probably was not a key member of the town chief's matriline. His location in the southern sector of the habitation zone near Structures 28 and 31 serves to remind us that not everyone of importance in the community belonged to households located in the eastern and northeastern sectors of the town.

Structure 17 Burials

The Structure 17 burials present a rather unusual picture compared with those found in other settlement contexts at King (Table 12.4). To begin with, they were interred beneath the floor of a building located in the plaza that served as a community meeting place, analogous to eighteenth-century Creek rotundas and Cherokee townhouses. Eight of the 10 burials can be identified as adults on the basis of skeletal evidence. The other two, Burials 106 and 109, are probably also adults, based on pit length.

Six of the burials can be sexed with varying degrees of certainty. Burials 100, 101, and 105 are biological males, and Burials 102 and 103 are artifactual males. Burial 109 lies in a pit 7.2 feet long and is probably an extended burial and, therefore, probably male. Since more than half the burials are male or are likely to be male, we might conclude that the others are as well. Five of the six identifiable males, however, are the only burials with artifacts and they are the

Table 12.4. Mortuary characteristics of Structure 17 burials

Burial	Biological/ Artifactual Sex	Age	Pit Type	Board Cover	Pit Length	Pit Depth from Surface	Orientation	Body Position
100	M	32	Simple	Yes	5.1	1.8	90	Flexed on back
101	M	45	Chamber	No	5.1	2.4	81	Flexed on back
102	M	34	Stepped	Yes	6.2	2.3	84	Extended
103	M	>18	Simple	Yes	6.5	2.8	84	Flexed on back
104	I	18	Stepped	Yes	5.7	2.1	7	Flexed
105	M	43	Simple	Yes	7.1	2.6	90	Extended
106	I	>12	Chamber	No	4.7	1.5	87	Unknown
107	I	>15	Simple	Yes	4.8	2	81	Unknown
108	I	>18	Stepped	Yes	5	1.9	90	Flexed
109	I	I	Simple	Yes	7.2	2.3	84	Unknown

Burial	Large Blade	Point	End Scraper	Discoidal	FKK	Tabular Limestone	Hematite	Pipe	Beaver Incisor	Antler Cylinder	Bear Bone	*Busycon* Fragment
100		24										
101	1	23	1	2	1							1
102		6			1	1		1		3		
103					1		1	1	1		1	
104												
105	1	50										
106												
107												
108												
109												

Note: Orientation given as degrees east of north; measurements in feet. I = Indeterminate; M = male.

only ones located on the northern side of the structure. These coincidences do not in themselves constitute evidence that some burials were female, but they do raise the possibility that Structure 17 burials formed two contrasting sets—male/artifacts/north and female/no artifacts/non-north. The location of the extended Burial 109 in the southern floor sector, however, does not conform to this pattern.

Ethnohistoric accounts indicate that Cherokee women were permitted to enter the council house but that Creek women were not. A similar restriction may have applied to female burials as well in Creek and ancestral Creek society. The existence of an adult female burial in the late seventeenth-century townhouse at Coweeta Creek (Lambert 2002), however, raises the possibility that at least some of the four unsexed burials in Structure 17 were female. In order to thoroughly evaluate the significance of the burials in Structure 17, we must consider separately the possibilities that all were male and that some were female. We will first consider the case in which all were male.

If all individuals were male, it is unlikely that they were all drawn from the same household or descent group. The site was not occupied long enough for that many deaths to occur among adult males belonging to a single household or descent group. More likely, the Structure 17 interments were drawn from several different households or descent groups.

It is reasonable to assume that the individuals interred in Structure 17 enjoyed a special status in the community. To begin with, they had the privilege of being interred in what was arguably the community's most important public building. In addition, the pits they were interred in are on average more elaborate and costly to construct than those characteristic of burials located elsewhere in the site. Three are stepped, two are shaft-and-chamber pits, and eight have board covers. The only burials lacking boards are the two with shaft-and-chamber pits.

Several types of grave goods indicative of higher-ranking statuses are represented in the Structure 17 burials, including bifacial blades, discoidals, large numbers of points and point styles, FKK, unifacial end scrapers, and beaver incisors. There is, however, nothing distinctive about these grave goods, nor are they especially common in the burial group. Only half the Structure 17 burials have grave goods compared to two-thirds of all reliable and lightly disturbed adult male burials interred elsewhere on the site; 20 percent have bifacial blades compared to 11 percent; 40 percent have points compared to 43 percent; and 30 percent have FKK compared to 21 percent. None of the Structure 17 burials, furthermore, have iron artifacts or marine shell ornaments. This could be due to sample size and, in the case of shell beads, organic decay,

but the absence of iron certainly does not support the proposition that Structure 17 burials represent an elite segment of the community.

There is a fair amount of artifact variability among the five burials with grave goods. Four have points and three have FKK, but blades and pipes are the only other artifact types to occur in multiple burials. There is no one artifact type or group of artifact types held in common by all five burials that would indicate they represent a single status, rank, or social group.

The distribution of burials in Structure 17 is not homogenous either. Most burials, including all with grave goods, are located on the north side of the structure. In contrast, no burials are present on the west side. These differences may be due to random factors such as mortality and organic preservation conditions, but it seems more likely that they reflect differences in the use of space in Structure 17 and the people interred therein.

Summarizing eighteenth- and nineteenth-century accounts and information provided by his own Creek informants, Swanton (1928a:180) suggests that seating arrangements in rotundas may have been similar to those in the square ground: "It is to be added that, although the seats ran all the way around this building on the inside, it was divided into separate 'beds,' maintaining the same general position as those in the 'big house' out of doors. It was, as nearly as could be managed, an indoors version of the latter."

Structure 17 further resembles the square ground in that the outer floor space is divided into 11–12 sections by the posthole alignments identified as bench supports. If these posts extended above the level of the benches, they may have also served as frameworks for partitions. The result would be as many as 12 bench segments, the same as the number of "cabins" or apartments described for eighteenth-century square grounds. The only real difference between the two arrangements is that each of the four buildings or "beds" in the square ground was subdivided into three cabins, whereas each wall of Structure 17 had two centrally located compartments and shared its two corner compartments with the adjacent walls.

Seating in historic square grounds followed a fairly regular pattern, with the *mico* and other high-ranking officials occupying one bed, usually on the west; prominent warriors occupying another bed, usually on the north; the *heniha* occupying a third bed, usually on the south side; and youths "busking for the first time" (Swanton 1928a:191) occupying the remaining bed, along with visitors and equipment for preparation and consumption of the black drink and other "medicines." The *mico* and other important officials occupied the central cabin of their bed, but it is not clear that there was a similar arrangement for

prominent warriors and the *heniha* in the other beds. Seating in the remaining cabins was assigned by clan affiliation (Swanton 1928a:181–200).

It is possible that the seating arrangement in Structure 17 corresponded to some degree to what Swanton describes for historic Creek square grounds. If so, we might expect differences in burial location and grave goods to reflect square ground seating arrangements in a general fashion. The absence of burials on the west side of Structure 17, for example, might be due to the use of this area for preparation of medicines and storage of related equipment and for seating of youths and visitors who may not have qualified for burial within the council house. All but one of the five burials on the north side of Structure 17 have points and two have blades, suggesting that these individuals were interred here because of their status as warriors.

While I suspect that the square ground seating arrangement model is relevant to understanding variability in the Structure 17 burials, it is not without its problems. To begin with, the area assigned to medicine preparation and youths and visitors is on the east side of the square ground in most historic-period accounts, although Swan (Swanton 1928a:181–182) placed it on the west side. More important, the lack of grave goods with burials on the east and south sides of the structure is difficult to fit with accounts of who should have been seated in those areas: town chief, subchiefs, and officials such as the *heniha.* Such individuals should have been interred with at least some artifacts commensurate with their status, although as was argued in the preceding section, some of these offices (i.e., *mico*) were more likely to be interred in the north plaza. Alternatively, it is possible that the burials lacking grave goods—Burials 104 and 106–109—were lower-ranking individuals who were interred in the bench sectors assigned to their clans. This explanation, however, begs the question of why individuals were selected for interment in Structure 17. Burial location may correspond in some fashion to seating arrangement, but this does not tell us why individuals were selected for interment in the building.

Other than that they are all adult males, there is nothing distinctive about the 10 burials in Structure 17. They are not significantly older (34.4 vs. 30.2 years) than adult males interred elsewhere at the site. They were apparently drawn from a number of different households. They do not have any distinctive grave goods or an unusually large quantity or variety of high-status grave goods. All statuses represented by grave goods—lower and middle warrior grades, chunkey game official, skilled flintknapper, skilled woodworker, ceremonial usage of pipes—are also represented in burials interred in the habitation zone. In short, the Structure 17 burials appear to constitute a representa-

tive cross section of the King site adult male population. Why then were these particular individuals selected to be interred in the town's council house?

The only criterion that satisfies most of the characteristics of the burials is manner of death, specifically death in combat. Ten deaths out of an estimated adult male burial population of approximately 160 is not an unreasonably high combat mortality rate.[1] Combat mortality would tend to limit selection to adult males. It also would account for the selection of males of varying ranks and statuses and from different households and kin groups. Such a democratic selection process is also compatible with the lack of iron grave goods. It fits with the square ground seating model as well. Prestigious warriors would tend to have a higher battlefield mortality rate than those individuals who were less actively involved in warfare. If these individuals were more likely to be assigned seating in the northern floor sector, there should be a greater concentration of burials with warrior-related grave goods in the same sector. Burials in the eastern and southern floor sectors may represent individuals of the lowest warrior grade or lacking warrior grades who were affiliated with clans assigned seating in those areas.

The only thing that fails to support combat mortality as the criterion for interment in Structure 17 is the lack of skeletal evidence for wounds. This is not a problem for the human remains recovered from Structure 17 because bone preservation is so poor. Only Burials 100 and 101 are sufficiently well preserved to allow most kinds of wounds to be detected. It is problematic, however, that Burial 23, a 32-year-old male killed with a celt blow to the head, is not interred in Structure 17. We do not know that the blow was struck in combat, but more likely than not it was. If Burial 23 was a battlefield casualty, why wasn't he interred in Structure 17?

It is, of course, quite possible that the characteristics that led individuals to be interred in Structure 17 are not visible archaeologically. Elaborate costume items or religious paraphernalia made from organic materials may have disappeared as a result of decay. Preservation conditions in most of the burials were bad, with eight burials having preservation ranks of 2.00 or less. Marine shell ornaments, however, should have been part of any elaborate costume, and they should not have disappeared completely from all Structure 17 burials.

Burials 104 and 106–108 cannot be sexed. Any or all of them could have been adult females. The presence of females in Structure 17 would change the way the 10 burials are interpreted in several important ways. To begin with, if six of the burials are male and four are female, it becomes more feasible for them to belong to a single household or descent group. As with the plaza burials, the 10 individuals could represent an elite descent group rather than

a group of individuals sharing one or more presumably achieved social identities and drawn from a number of different households or descent groups. There is also less need to explain why four burials lack grave goods, since adult females are much less likely than adult males to be interred with nonperishable artifacts. The square ground seating model is also less relevant because females were seldom admitted to square grounds in the historic period and probably were not assigned seats then or in prehistoric times. The contrast between male burials with grave goods in the northern floor sector and female burials lacking grave goods in the eastern and southern floor sectors, furthermore, could be interpreted as an expression of a dualistic belief system. Finally, the interpretation favoring combat death as the criterion for interment in the council house loses much of its appeal, since females are unlikely to have been killed in battle.

Several interpretive problems arise if we identify some of the burials in Structure 17 as female and the entire group as an elite descent group or household. To begin with, why are subadults not represented, as they are in the north plaza group? What descent group or household do the Structure 17 burials belong to? The plaza group is identified as representing a portion of the town chief's matriline. If north plaza and Structure 17 burials both represent members of the town chief's matriline, why was interment split between two locations? The winter/inside and summer/outside distinction present in the habitation zone could answer that question, but again the absence of subadults from the winter/inside context presents a problem. It is possible, of course, that the Structure 17 burials represent members of a different descent group or household. The question then is, what group? There is no indication in the ethnohistorical literature of who they would be.

In the final analysis, the most likely interpretation of the Structure 17 burials is that (1) they were all adult males, (2) they were drawn from households or descent groups scattered throughout the community, (3) interment location within Structure 17 reflects assigned seating arrangements in the council house, and (4) individuals were selected for interment in the council house because they had been killed in combat.

Household Variability

It is clear from mortuary data presented in this and earlier chapters that individuals differed in the social statuses they held, their prominence in the community, and their wealth as measured by marine shell grave goods. Households, as corporate groups, can be expected to differ along these general lines

as well. The rank and wealth of household members would have contributed to the relative prominence of the household, as would historical factors, such as being among the community's founding households, and social factors, such as being the household of the town chief. In this section, I will use the available architectural and burial evidence to identify variability in household wealth, craft production, and sociopolitical standing.

Six households—Households 1, 2, 6, 8, 15, and 23—were identified in Chapter 8 (Figure 8.3). There were originally many more households in the community, but these are the only ones for which we can be reasonably certain that all or most associated structures have been identified. Most burials in the eastern and northeastern sectors of the habitation zone can be assigned to a specific household, but, unfortunately, we cannot be certain that all burials belonging to each of the six households have been correctly identified. Burials 21, 22, 25, 28, and 29, for example, cannot be assigned to Household 1, 2, or 6 with certainty.

Household 8 has only a single PDS and was probably made up of a single conjugal family. The other five households have between two and four PDS and were made up of multiple conjugal families at some point in their existence. There were probably a number of factors responsible for these differences in household composition, including initial size and composition and stage in developmental cycle. Figure 8.3 is misleading, as it presents a picture of the six households as static and unchanging. In reality, some PDS were probably added to households through time, while others may have ceased being occupied. Structures 4, 9, and 24 in Household 2 and Structure 7 in Household 23 are examples of the former, while Structure 11 in Household 15 may be an example of the latter. Presumably the same variability in size and composition characterized households across the entire site.

The eastern and northeastern sectors of the habitation zone differ in many respects from the northern and southern sectors. They have, among other things, more PDS, more multistage PDS, more burials, and more grave goods and shell wealth per burial. Some, if not all, of these differences may reflect social and economic differences between households and the life history of the town. Before we can make such interpretations, however, we must consider the role of differential site destruction. It is clear that many burials located in the more heavily eroded northwestern and southern sectors of the excavated habitation zone have been destroyed. The relative paucity of PDS in the southern sector is probably the result of some structures being destroyed. The fact that most extant PDS and burials in this sector lie relatively close to the palisade suggests that destruction was greatest along the edge of the plaza.

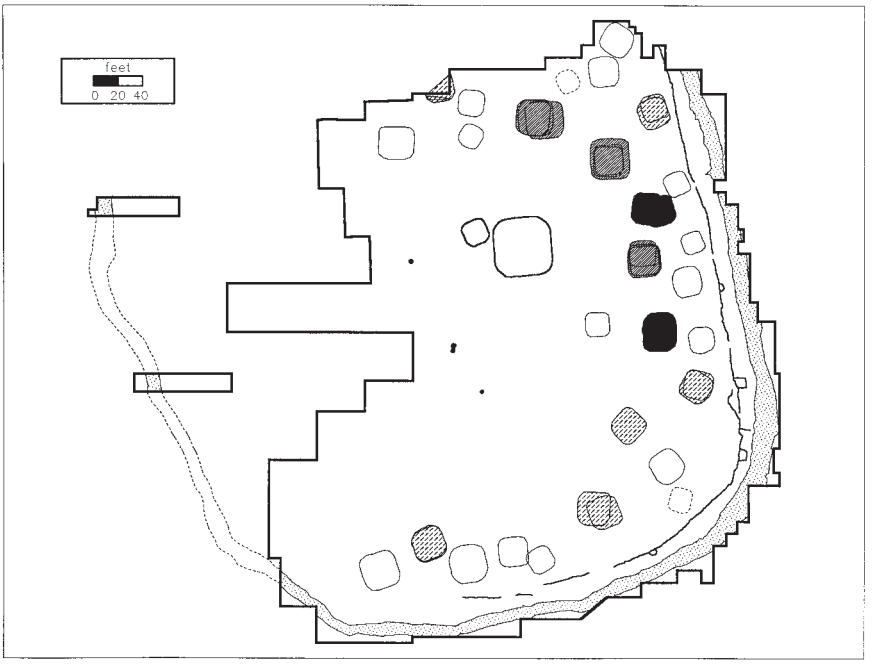


Figure 12.1. Spatial distribution of primary domestic structures with two (dashed), three (hatched), and four (black) construction stages.

Almost half the 26 known PDS were constructed in multiple stages. Structures with two construction stages are distributed throughout the excavated site area (Figure 12.1). PDS with three or four construction stages, however, are located only in the eastern and northeastern sectors of the habitation zone. Whether this pattern reflects the actual settlement plan or is the result of differential preservation is not altogether clear. In the better-preserved portion of the habitation zone, multistage PDS tend to be located adjacent to the plaza. On the basis of this pattern, we can argue that at least some PDS located along the edge of the plaza on the southern side of the site would have had three or more construction stages and that the observed distribution of multistage PDS is therefore a product of differential preservation. Any multistage PDS located along the edge of the plaza, on the other hand, are likely to have had a number of interior burials, and these would have extended 1–3 feet below the floor of the house basin. Given the existence of posthole alignments belonging to Structures 25–29 and 31 just a few dozen feet to the south, it is highly unlikely that erosion would have been so great as to destroy all such burials. The fact

that there are only three burials (Burials 172–174) in this part of the habitation zone suggests that few if any multistage PDS existed there.

In Chapter 8, I attempted to reconstruct the life history of the King site town. I argued that, with the possible exception of Structure 13, Structures 1.1, 2.1, 5.1, 15.1, and possibly 23.1 were the residences of the town's earliest inhabitants. I also argued that sometime after these people settled at King, the town was formally established, an event that entailed construction of the council house, lighting of the town's sacred fire, laying out of the plaza and habitation zone, and construction of the defensive perimeter. One implication of this reconstruction is that the households represented by Structures 1.1, 2.1, 5.1, and 15.1 were the oldest in the community and would have been associated in peoples' minds with its founding. The male head of one of these households is likely to have been the individual responsible for leading these first settlers to Foster Bend and for actually founding the town. It is reasonable to suppose, therefore, that these three or four households would have been among the most prestigious and highest ranking in the community.

Large-size PDS are widely distributed across the site. The two largest, Structures 1.1 and 15.1, are located in the northeastern sector, while the third and fourth largest, Structures 27 and 29, are located in the southwestern sector (Figure 5.1). Structures 23.2, 23.3, and 25.1, located in the eastern and southeastern sectors, are also relatively large. To the extent that structure size is related to the wealth and/or prominence of occupants, these data suggest that prominent households were distributed widely throughout the town.

As discussed in Chapter 8, the size of multistage PDS may fluctuate markedly from one stage to another. Structure 1.2 is 46 percent smaller than its predecessor; Structure 2.2 is 36 percent larger than its predecessor; and Structure 23.4 is 45 percent smaller than its predecessor. Structure 15 is unusual in this regard, as it maintains its large size through all three construction stages. It starts out as the second-largest PDS at 955 square feet and decreases to 850 square feet and 778 square feet—the fifth- and sixth-largest PDS—in subsequent stages. No other construction stage in a multistage PDS, except Structure 1.1, comes within 100 square feet of these sizes.

Rectangular structures are much more difficult to identify than PDS because of their lighter construction. Several posthole patterns identified as rectangular structures—RS 8, RS 11, and RS 15—are, in fact, of questionable validity. For this reason and because of the likelihood that I have failed to identify some RS, any attempt to compare these structures by household should be undertaken with caution. With this in mind, it is noteworthy that the two larg-

est identified RS are associated with Household 15. RS 7 is a fairly good example of a rectangular structure and, at 179 square feet, is the largest recorded structure of its kind. RS 15 measures 178 square feet but is not very reliable. The next-largest example is RS 8, which is associated with Structure 14 and measures 168 square feet but is not very reliable. Most other RS measure between 80 and 140 square feet.

We saw in Chapter 9 that Households 2 and 15 differ from the other four in having a greater variety of grave goods represented in their burials and a larger number of grave goods as measured by the frequency with which types occur in all burials (Table 9.8). To a great extent these differences are due to the presence of artifact-rich Burials 92 and 117—but not entirely. Even without these burials the two households still lead the others in these categories.

All households except Household 6 had at least one adult male burial who was a skilled craftsman or craft specialist (Table 12.5). The number of such individuals ranges from one to three. The number of different craft skills/specializations represented in each household is more variable, ranging between one and seven. Households 2 and 15 lead the way with five and seven craft skills/specializations, respectively. In general though, craft skills are fairly evenly distributed among households. All of the larger, multistructure households have at least two, a flintknapper and a woodworking specialist.

Bipointed bone tools, which have been tentatively identified as bow-fishing points, are known from only four burials. Three of these are associated with Household 15 and one is associated with Household 1. Sample size is too small to make much of this distribution. Nevertheless, Household 15, once again, stands out.

Households vary considerably in number of burials with marine shell beads and quantity of beads, but Household 15 has by far the most in both categories (Table 12.1).[2] Among those households for which the burial inventory is likely to be complete, Household 8 has no bead burials; Household 1 has one burial with two *Olivella* beads; Household 6 has two burials with 45 *Busycon* bead units; Household 23 has two burials with 106 *Busycon* bead units and one *Anadara* bead; Household 2 has three burials with 111 *Busycon* bead units and one *Olivella* bead; and Household 15 has six burials with 1,268 *Busycon* bead units and three *Anadara* beads.[3] Six additional burials (Burials 83, 88, 90, 91/259, and 110), with a total of 1,227 *Busycon* bead units and three *Olivella* beads, are located within the walls of Structure 15, but cannot be assigned to Household 15 with certainty. Some could belong to the household. Even if we control for number of building stages represented in PDS, Household 15 still

Table 12.5. Household distribution of adult male statuses

	Household 1	Household 2	Household 6	Household 8	Household 15	Household 23	Household 30	Other Households	Plaza	Structure 17
First warrior grade	2	3			4	2	1	10	3	4
Second warrior grade	1				1		1	2	1	2
Third warrior grade					1					
War honor		1					1			
War trophy		1		1	1					
Sacred fire					1	1				
Black drink					1			1		
Chunkey game	1	1							1	1
Pipe use	1	1			2	1	1		1	2
Medicine use		2			3					
Flintknapping	1	1			2	1		3	2	3
Woodworking	1	2		1	2	2			1	2
Bone tool use		2			2				1	
Stone tool use					1	1	1		1	1
Bow fishing	1				3					
Total number of different statuses	7	9	0	2	13	6	5		8	7
Number of burials with statuses	8	14	0	2	24	8	5		11	15
Number of burials	28	21	3	10	14	33	6			
Number of reliable burials	14	17	3	3	9	22	3			
Number of male burials	9	3	0	4	5	4	3		3	10
Number of reliable males	6	3	0	1	3	4	1			

predominates, with at least 423 *Busycon* bead units per stage, as opposed to Household 6 with 23 bead units per stage, Household 23 with 27 bead units, and Household 2 with 37 bead units.

On the basis of these burial figures, Household 15 can be said to have the greatest shell bead wealth of any known household in the King site community. The bead burials assignable to it include three subadults, two adult males, and the only adult female at the site known to have marine shell beads.

Shell gorgets are not as common as marine shell beads, nor are they as widely distributed across the habitation zone (Table 12.1). Yet, they appear to be more evenly distributed among households than beads. Households 1 and 15 each have two burials with gorgets, and two burials associated with Structure 14 also have gorgets. Household 2 and the burials associated with Structure 18 have one gorget burial apiece.

If Household 15 had a much larger number of gorget burials, matching its large quantity of marine shell beads, we could argue that gorgets were also functioning primarily as wealth items. It does not, and the identification of gorgets as wealth items, therefore, is less secure. Nevertheless, four burials in the plaza have gorgets, and three households with gorget burials were founding households and presumably among the most socially prominent in the community. We cannot equate social prominence with wealth, but it is probably not an accident that gorgets have the household and plaza associations that they do. Possession of a gorget probably carried with it a certain amount of prestige, and it may be that wealthy and socially prominent households tended to have greater access to gorgets than other households.

Knobbed and bracket shell pins have different associations than marine shell beads and gorgets. They are concentrated in Households 2 and 23, where beads are not especially common and where only one gorget has been identified. With the possible exception of Burial 83, they do not occur in Household 15 burials nor are they present in the plaza. All of this reinforces the idea that knobbed shell pins were markers for a distinct social group in the King site community. To what extent they also functioned as a sign of wealth is not clear.

At least seven adult male statuses identified in Chapter 11 were probably regarded as prestigious or high ranking in the King site community. These are the midlevel and higher warrior grades and honors and officials involved in the transport of fire, in black drink preparation, and in the chunkey game. Ritual specialists using pipes and medicine objects may also have enjoyed prestige and high rank. Household 15 has the greatest number of such statuses, with 10 held by different individuals, followed by Household 2, with six held

by different individuals (Table 12.5). Households 1, 8, and 23 each have three or fewer high-ranking statuses, and Household 6 has none. The great majority of high-ranking statuses in Households 2 and 15 belong to a single individual in each—Burial 92 with seven and Burial 117 with four. Without these individuals, the six households look quite similar.

The area around Structure 30 has been heavily impacted by erosion and pothunting. As a result, it is not possible to identify all the structures and burials that may have made up Household 30. Nevertheless, there is some suggestion that the household may have rivaled Households 2 and 15 in number of high-ranking statuses. Burial 234, an inside burial, had three such statuses (Table 12.5). Burial 267 (Looted Burial 3), which could be an outside burial associated with the household, had achieved a midlevel warrior grade. Shell wealth may also have been fairly great, as 92 *Busycon* bead units were recovered from the few burials (Burials 224, 229, and 235) in the area that had not been badly damaged. Burial 223, the female warrior, may also be an outside burial associated with Household 30.

The three burials with the most impressive resumes (see Figure 11.5) are distributed among the three households that we can be certain were involved in the founding of the town: Burial 92, with Household 15; Burial 117, with Household 2; and Burial 15, with Household 1. Household 23 may also have had a prominent member, as Burial 124 had a gravy boat bowl and may have lost a number of grave goods as a result of erosion and plowing. Only two other households had prominent members: Household 30, with Burial 234 and possibly Burial 223 and Burial 267 (Looted Burial 3), and an unknown household on the north edge of the site with Burial 65.

What can we conclude from the evidence summarized above? Household 15 was probably the most important household, at least within the excavated and better-preserved portion of the site. It had the largest PDS throughout most of its existence. It had a prominent location opposite the entrances to Structures 16 and 17. It may have had the largest corncribs. Its deceased members had considerable wealth in marine shell artifacts. Its deceased male members had the greatest number and variety of statuses marked by grave goods. And it included among its deceased members the most prominent individual known from the site. Given these characteristics and the fact that it was one of the three or four households responsible for founding the town, I think it is reasonable to conclude that Household 15 was the household of the town chief or his matriline. Assuming that town chiefs and their successors resided in a house that had been constructed for their use, and given the presence of Burial 92, I think the former interpretation is more likely.

Burial 92 is the best candidate we have for town chief. He was a high-ranking warrior; he had several official duties; he had several craft skills; he had considerable shell wealth; and he was recognized by the Spanish as an important person. The copper arrow symbol badges that hung from his ears have been interpreted as markers of an elevated warrior grade, but they could have been instead a symbol of the town chief position. The gravy boat bowl with which he was interred may also have been a symbol of the town chief position.

This interpretation would be strengthened had Burial 92 been interred in the north plaza. Since he was interred beneath the floor of Structure 15.1, he must have died very early in the occupation of the King site. In fact, it can be argued that he died before the town was formally established, and in the absence of a plaza cemetery was interred in his residence.

If Burial 92 predeceased the formal establishment of the town, his tenure as official town chief would have been brief and perhaps nonexistent. His early demise, however, coupled with his social prominence raises the possibility that he was the individual who led the first settlers to the King site and was as a result the founder of the town. This interpretation is supported by the presence of the gravy boat bowl that could have been used to transport sacred fire to the new town.

In this role as town founder, the individual interred as Burial 92 doubtless would have been accompanied by close matrilineal relatives who would have been responsible for perpetuating the line of town chiefs. Presumably these people constituted a separate household from that of Burial 92 and presumably they resided in one of the other multistage PDS. Structure 2 is the most eligible candidate. Household 2 burials have the second-richest array of adult male statuses. Compared with Households 15 and 23, the household has relatively few associated burials, especially given the number of PDS making up the household. This is what we would expect if some household members were interred in the north plaza.

Household 1 presents a problem. Structure 1.1 has a number of architectural characteristics that set it apart from other PDS and conform to those of Structure 17. It is the largest PDS, it is unique in having 44 exterior wall posts, and it has the largest ratio of central floor space to total floor space. We might conclude from this that the structure functioned as a council house for the first settlers before the town was formally established. Several things argue against such an interpretation, however. To begin with, there is little evidence for interior posthole alignments that can be interpreted as bench supports. Second, a two-stage domestic structure (Structures 1.2 and 1.3) was erected directly over it. I find it difficult to believe that a public building, in particular one that may

have held sacred fire in its hearth, would be converted into a domestic structure. Third, the hearths for the later two construction stages directly overlie the earlier hearth, implying a continuity in function as a domestic structure and a continuity in residence by the same inhabitants.

Alternatively, Structure 1.1 may have been the residence of the town founder. This individual would have needed a large residence in order to accommodate meetings and to entertain visitors. This interpretation has at least three problems. To begin with, the PDS that replaces Structure 1.1 at the time the town is formally established is small, being less than average size. It also means that the roles of Household 15 and Burial 92 need to be rethought. This is not altogether bad, at least for Household 15. The evidence that the outside burial cluster located northeast of Structure 15 is associated with Household 15 is not strong. There is sufficient space north of Structure 15 along the unexcavated edge of the site for another PDS to which the burials in this cluster and the burials underlying and predating Structure 14 could be assigned. This would leave Household 15 with a deficit of outside burials, which in turn could be filled by those in the north plaza. In other words, Household 15 could be the natal household of the town chief. This interpretation, however, raises the question of who Burial 92 was and what role he played in the town's political life.

Household 23 differs from the other three households that have a three- or four-stage PDS in that its associated burials have relatively few adult male statuses. The picture would be different if Burial 124 had escaped plow destruction and had a large number of statuses. It is also possible that Household 23 was not one of the early households at the site. It has four construction stages, implying a long life history, but the fourth stage clearly postdates the town's main period of occupation. With three construction stages, one would still expect Structure 23 to date back to the period of initial settlement. There is no major change, however, in structure size, location, or orientation at the time stage 2 is built. While not definitive evidence, this does suggest that the building was not in existence prior to the time the town was formally laid out. If this is correct, then Household 23 and its members may not have enjoyed the prominence that Households 1, 2, and 15 did. This may explain the relative impoverishment of its burials.

The Regional Political Context

To this point in this chapter, I have focused on the internal social, political, and economic organization of the King site community. One of the distinctive

features of the King site is that a great deal is also known about the archaeological, historical, and regional context in which it existed. It is to this aspect of the site and the community that developed there that we now turn our attention.

The Coosa River valley in Georgia was occupied at least twice during the Mississippian period prior to the sixteenth-century Barnett phase. Late Etowah phase pottery from the Coosa Country Club (9FL161) and Plant Hammond (9FL3) sites indicates the first occupation dates to the Late Etowah phase, approximately A.D. 1075–1150 (Figures 3.6 and 3.7) (Chamblee et al. 1998; Hally and Langford 1988). Presumably there was a chiefdom polity in the area at the time, with an administrative center located either at Plant Hammond or at Nixon (9FL162). Fewer than a dozen Late Etowah phase sherds were recovered in extensive excavations at Plant Hammond in 1967, suggesting that the site was only lightly occupied and that mound building had not begun. Surface artifact collections from the Coosa Country Club site contain a high proportion of Late Etowah sherds and were recovered from two widely separated locations, suggesting that the Etowah component was a major occupation. Little is known about the Nixon site, but with a significant occupation across the river at 9FL161 it is reasonable to assume that mound building had begun and that Nixon was the administrative center for the Late Etowah polity.

The Coosa Valley was next occupied during the Late Savannah period, A.D. 1250–1350. The mound at Plant Hammond was constructed at this time and Wilbanks phase pottery is known from at least two other sites in the area (Chamblee et al. 1998; Hally and Langford 1988). Sometime in the middle to late fourteenth century the valley was again abandoned. This conclusion is based on the lack of ceramic evidence for an Early Lamar occupation at any of the 421-plus sites recorded in the Georgia Archaeological Site File for Floyd County.

The final prehistoric occupation of the Coosa River valley began sometime in the late fifteenth century or early sixteenth century. Five large town-size habitation sites with Middle Lamar period Barnett phase occupations are known to exist in the 20-km stretch of the Coosa River downstream from the junction of the Etowah and Oostanaula rivers (Figure 3.7). The five towns are King (9FL5), Mohman (9FL155), 9FL175, Johnstone (9FL49), and Coosa Country Club (9FL161). A sixth site, Nixon (9FL162), was probably also occupied and probably had mound construction. At least six other sites, located on the Etowah, Oostanaula, and Coosa rivers near Rome, have yielded small collections of Lamar pottery and probably date to the Barnett phase. Except for King, little is known about any of the Barnett phase sites in the Coosa River

valley beyond their components and site size estimates based on surface artifact distributions.

As described in Chapter 3, the available archaeological evidence indicates that the King site was part of a chiefdom polity that included Mohman, 9FL175, Johnstone, Coosa Country Club, and probably Nixon. Except for the latter two, which are located on opposite banks of the Coosa River at the junction of the Etowah and Oostanaula rivers, these sites are distributed at fairly regular intervals downstream (Figure 3.7). The straight-line distance between King and Mohman is 7.2 km; between Mohman and 9FL175 is 5.3 km; between 9FL175 and Johnstone is 6.8 km; and between Johnstone and Coosa Country Club is 6.9 km. This regular spacing suggests that all of the major towns making up the Rome polity have been identified.

We do not know how large the Nixon site was, but the area between the Etowah and Oostanaula rivers at their junction is sufficiently great that the site could have covered a number of hectares. King is known to cover 2.05 ha. Surface artifact distributions indicate that Mohman covered 2.3 ha; 9FL175, 2.2 ha; Johnstone, more than 0.5 ha; and Coosa Country Club, more than 1.0 ha. Forest vegetation cover at Johnstone and twentieth-century construction activity at Coosa Country Club prevented an accurate determination of site size, but given the size of the other three towns, it is probable both were well in excess of 1 ha. The average size of all measurable mid-sixteenth-century towns in the Upper Coosa and Upper Tennessee river drainages is 2.8 ha (Hally et al. 1990).

The regular spacing between the five non-mound sites and the similar size of three of them suggest that all played the same role in the local settlement system; that is, they were large habitation sites. We have no evidence for what the settlement plans of the four unexcavated sites looked like, but there is no reason to believe they differed significantly from King, with its plaza, public buildings, and surrounding habitation zone. Presumably, like King, each site was a separate, distinguishable community.

King and the four upriver settlements were apparently subordinate towns in a polity ruled by a chief residing at the Nixon site. As in most questions involving archaeological data, this relationship cannot be proven beyond a doubt, but the available settlement pattern evidence does make a strong case for it. There are no large contemporary settlements within at least 20 km downriver in Alabama or along the Etowah and Oostanaula rivers above Rome. If the mound at Nixon was constructed and used during the sixteenth century, we have a site hierarchy (Peebles and Kus 1977) involving at least five habitation sites and one administrative center. Several sixteenth-century site clusters located else-

where in the Upper Coosa and Upper Tennessee river drainages are similar to the one at Rome in terms of area encompassed, number of component towns, and settlement hierarchy (Hally et al. 1990). If Hudson (1997) is correct in identifying the Coosa River sites with the province of Ulibahali, then we also have documentary evidence for the polity. I think it is reasonable to conclude that the Coosa River sites constituted a politically centralized chiefdom.

Marvin Smith, Jim Langford, and I have attempted to accurately estimate population size for a number of mid-sixteenth-century towns and chiefdoms in the Upper Coosa and Upper Tennessee river drainages (Hally et al. 1990). We divided the area excavated at King and the four Mouse Creek phase sites in Tennessee—North Mouse Creeks, South Mouse Creeks, Rymer, and Ledford Island—reported by Sullivan (1986) by the number of PDS recorded at each. The resulting figure, 470 m^2, gave us an average amount of site area per PDS.[4] We estimated the number of PDS that existed at 21 sites larger than 1 ha by dividing 470 m^2 into site size estimates that were obtained by measuring the spatial distribution of surface artifacts. Per house population estimates were obtained by using the average size (61 m^2) of PDS at King and the Mouse Creek phase sites in the formulas that Naroll (1962) and Cook (1972) developed for estimating settlement population size from dwelling space. Using Naroll's formula the average-size PDS housed 5.9 people; using Cook's formula, the figure was 11.0.

The average size of recorded PDS at King is 57.4 m^2 (618 square feet), slightly smaller than the figure used in the earlier study. The average number of occupants using Naroll's formula is 4.7 and using Cook's formula, 10.7. Using an average PDS size of 57.4 m^2 and the figure 470 m^2 to estimate number of PDS, the King site would have had 50 PDS and a population of 235 according to Naroll's formula or 535 according to Cook's formula. The comparable figures for Mohman are 56 PDS and 263 or 599 inhabitants and for 9FL175 they are 54 PDS and 254 or 578 inhabitants. If we assume that Johnstone and Coosa Country Club were each 2 ha in size and that Nixon, the administrative center for the polity, was 3 ha,[5] the total population for the Rome polity would have been approximately 1,560 using Naroll's formula and 3,552 using Cook's. Given the internal division of space in King site PDS and the number of cubicles that may have had benches for sleeping, an average number of 4.7 occupants seems reasonable, while an average of 10.7 occupants seems excessive. On the other hand, the Cook formula population estimate of 3,552 for the polity as a whole seems reasonable, while the other seems too small. The important point is that aboriginal populations of town and polity are probably bounded by these figures.

Sixteenth-century ethnohistorical evidence from the De Soto narratives (Clayton et al. 1993; Hudson 1997) and the Florida missions (Worth 1998) indicates that subordinate settlements such as King were administered by a town chief. The mission sources also indicate that town chiefs were either related to polity chiefs or at least appointed by them. We have evidence from King, in the form of burials interred in the north plaza, that a high-ranking descent group resided in the town. It is possible that they represent the matriline of the town chief. Several characteristics of Burial 92 suggest that he may have led the first settlers to Foster Bend and, for a brief period, may have been the first chief of the community that developed from those settlers.

King also has evidence for a public meeting house—Structure 17. A similar structure, Feature 36, is known from the roughly contemporary Mouse Creek phase Ledford Island site in eastern Tennessee (Sullivan 1987). I think it is reasonable to assume that similar structures existed at each of the towns in the Rome polity. Architecturally similar structures were used by the Creek and Cherokee in the eighteenth century as men's houses where adult males relaxed and socialized and as a council house where community members met periodically to deal with political issues. I see no reason these same activities would not have taken place in the King and Ledford Island structures. This implies that the political power of the town chief was limited to some degree by the existence of a council whose membership was drawn largely, if not entirely, from the community's adult male population.

The Rome polity was founded in the late fifteenth or early sixteenth century, early in the Barnett phase. We have no direct archaeological evidence for how the polity came into existence or how it grew through time. We do possess several key pieces of information, however, that allow us to make reasonably informed inferences about these processes. To begin with, we know that the polity consisted of at least five large towns and had a population of 1,500–3,000 people. We can be reasonably certain that it was administered from a sixth site, Nixon, which had a platform mound. We know that the component towns of the polity were strung out at regular intervals along the Coosa River for a distance of 20 km. Finally, we know that there was no significant population residing in the Upper Coosa River valley immediately prior to the existence of the Rome polity.

One obvious inference that we can make from these "facts" is that the polity was populated, at least initially, by immigrants from outside the valley. Where might these immigrants have come from? Two polities on the Conasauga and Coosawattee rivers during the Early Lamar period (A.D. 1350–1450) continued into the Middle Lamar period (Figure 12.2). Factional disputes within the

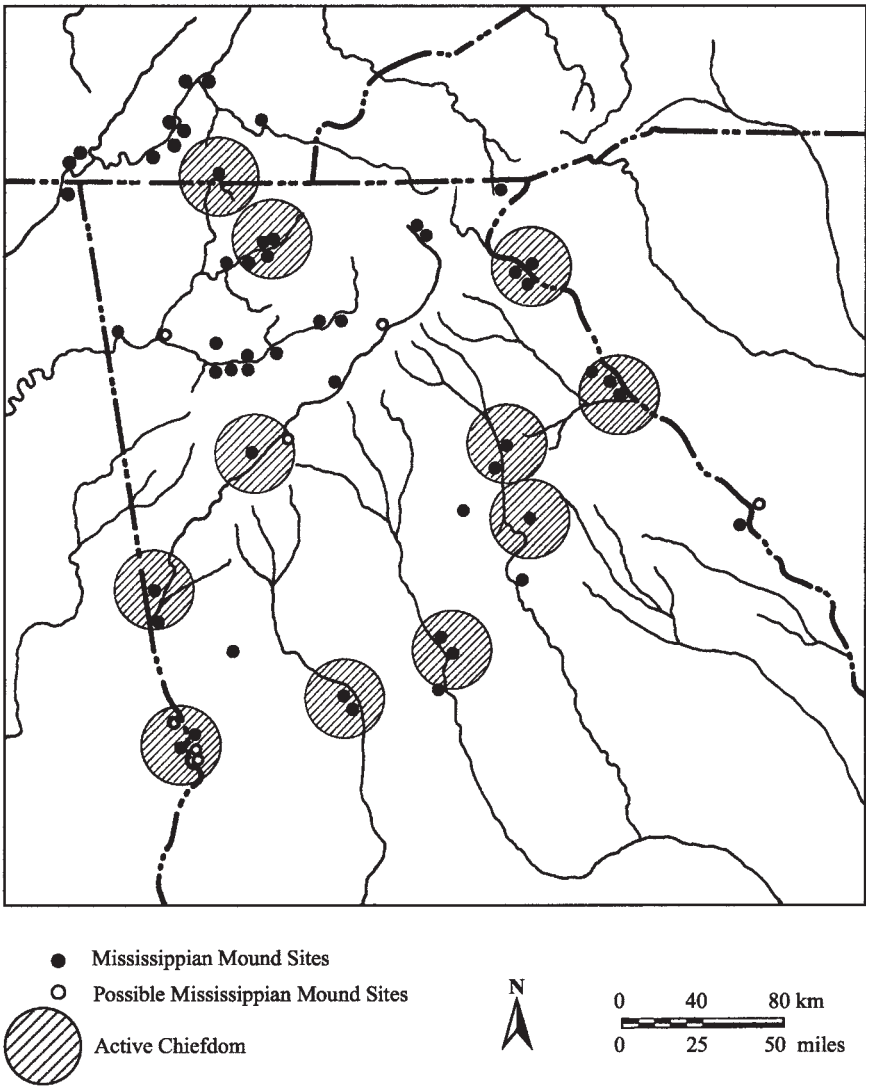


Figure 12.2. Geographical distribution of Early Lamar period polities.

leadership of either chiefdom may have caused a segment of its population to strike out on its own and establish a new polity along the Coosa. Ceramic similarities between the Middle Lamar Barnett phase occupations on the Coosawattee River and the Coosa River support this scenario. Mississippian chiefdoms in northeastern Alabama located along the Middle Coosa River and the Tennessee River (Figure 3.8) also may have been the main source or one

source for immigrants. The late prehistoric ceramic assemblages in these areas (Heimlich 1952; Little and Curren 1981) are not too different from those of the Barnett phase, but the chronologies of the two areas cannot be accurately tied into the northwest Georgia ceramic sequence. An Early Lamar period chiefdom centered on the Vandiver site (9DO1) on the Middle Chattahoochee River to the southeast ceased to exist early in the Middle Lamar period (Hally 1996) and is another possible source of immigrants. Ceramic differences between the Middle Chattahoochee and the Middle Coosa River areas, however, suggest that this was not the major source of settlers.

A second inference, based more on reason than facts, is that the Rome polity as we know it archaeologically did not spring into existence fully formed. There may have been an initial large influx of settlers, but maximum population size was probably reached only after several decades of continued immigration and natural population growth.

It is reasonable to suppose that initial settlement involved only one site. Kopytoff's (1987) internal frontier model and historic Creek and Chickasaw practices and beliefs relating to the founding of new communities suggest that this settlement may have assumed great symbolic importance as the place where the first immigrants resided and the polity began. Unless the first settlement was poorly situated with respect to natural environmental factors and defensive considerations, it is likely that it would become the administrative center for the growing polity. According to this line of reasoning, Nixon may have been the first settlement and subsequently became the administrative center.

We can assume that new settlements would be added to the polity as required by population growth. These would have been placed along the Coosa River at intervals great enough to ensure that each town had adequate territory to meet its needs for food and other natural materials. The regular spacing between towns along the Coosa suggests that each town required approximately a 6.5-km-long strip of bottomland and adjacent uplands. The average distance separating all known mid-sixteenth-century towns in the Upper Coosa and Upper Tennessee river drainages is 5.5 km.

It is likely that new towns were located adjacent to existing towns, so that through time there was an expansion of settlements from east to west down the Coosa River. In other words, the first town to be established following Nixon would be Coosa Country Club or possibly Johnstone, followed by 9FL175, Mohman, and King in that order. This makes sense from a defensive standpoint, as towns separated by 6 km would be better able to assist each other than those separated by 12 or 18 km. This kind of territorial expansion

also makes sense in terms of polity integration. It presumably would be easier to control the leaders of subordinate towns and involve their citizens in important ceremonial and symbolic events at the polity level if they were located close to the main town. The polity chief ultimately had to deal with a town (King) located 20 km away—but why travel such distances if other town locations are available closer in?

The King site, then, may have been the last town added to the Rome chiefdom. If so, the town may not have been settled until several decades after the polity began. At that point in the polity's development, most population growth may have been internal and King may as a result have been settled by people from other towns located along the Coosa River. As the westernmost town, King may have played an important role in polity defense. Any military forays by enemy from the west would have passed by King first. This may explain why King had such an impressive defensive perimeter. At the time the town was formally established and the palisade and ditch were constructed, the resident population may have been considerably below its ultimate size of 250–500 people. In this situation, the labor required to construct the palisade and ditch would seem to be well beyond what was available on site. Since King was to serve as a first line of defense for the chiefdom, it is possible that construction was a polity-level undertaking, with labor being supplied by other towns.

If Hudson and his colleagues are correct about the route of the De Soto expedition through northwestern Georgia, the Rome polity was the province controlled by a chief residing at the town of Ulibahali (Hudson 1997; Hudson et al. 1985). The expedition left Itaba (the Etowah site) on August 30, 1540, and, traveling down the Etowah River, arrived at the town of Ulibahali on the thirty-first. Rangel describes Ulibahali as "a very good town, next to a large river" and relates that "many Indians of evil intent were waiting, intending to take the cacique of Coca away from the Christians, because they were subjects of his; and so that the land would not rise in revolt or deny them supplies, they took him with them, and they entered in the town very much on guard. The cacique of Coca commanded the Indians to lay down their weapons; and so they did, and they gave them tamemes and twenty Indian women, and they went in peace" (Worth 1993b:285).

Elvas describes the town as follows: "The Governor ordered all his men to enter the town which was enclosed and near which flowed a small river. . . . On the other side of the river was a town where the cacique was at the time" (Robertson 1993:94). If Ulibahali was the Nixon site, the town across the river would have been the Coosa Country Club site.

The expedition departed Ulibahali on September 2. Rangel and Elvas both

provide brief descriptions of the expedition's movement down the Coosa River. Rangel states, "From this town of Ulibahali the Spaniards and their Governor left one Thursday, the second of September, and they spent the night in a pretty town hard by the river; and there they awaited Lobillo for one day, who, without permission, had gone to look for his black man, and on coming back the Governor reprimanded him severely. On Sunday they left there and spent the night in the open, and then next day, Monday, they went to Tuasi, where they gave them tamemes and thirty-two Indian women" (Worth 1993b:285). Elvas's description reads, "On the day the governor set out thence, he went to sleep at a town subject to the lord of Ulibahali, and next day reached another called Toasi" (Robertson 1993:94).

The relationship of the town of Tuasi to the chiefdom of Ulibahali is unclear. According to Rangel, Tuasi was three travel days from Ulibahali; Elvas puts it at two. Elvas implies that Tuasi was subject to the lord of Ulibahali, but Rangel describes sleeping in the open the night before reaching Tuasi, and this implies the expedition was traveling through unoccupied country. Whatever the case, there is no strong evidence in the narratives that the town visited by the expedition the first night out from Ulibahali was the King site.

Archaeological evidence indicates that King was only a small settlement and had not been formally established and laid out as a town in 1540. Burial 92, with three iron tools, was interred in the first construction stage of Structure 15. If I am correct in dating its replacement by Structure 15.2, the town had not been formally laid out when Burial 92 was interred. It is hard to believe that De Soto would have stopped at a small hamlet of three or four houses, much less present one of its residents with several iron tools. More likely the Burial 92 individual was residing at another established town, perhaps Johnstone, in 1540.

The possibility that the King site had not been laid out as a town when the De Soto expedition passed through the area raises an interesting question concerning the site's defensive perimeter. As noted in Chapter 6, large defensive ditches are a relatively rare phenomenon in the Mississippian Southeast. Few towns have one and most that do are the capitals of chiefdoms. Why, then, did a small town such as King have such a large defensive ditch? Perhaps the ditch at this site was constructed in response to the natives' experience with De Soto's army. What better way to defend a town from men on horseback than a deep ditch with a strong palisade located immediately adjacent!

To judge by the number of iron tools accompanying King site burials, the town must have been in existence by the time the Suaz party traveled up the Coosa River in 1560. Suaz, with a force of about 140 men, was headed to the chiefdom of Coosa, where sufficient food to feed the Luna expedition

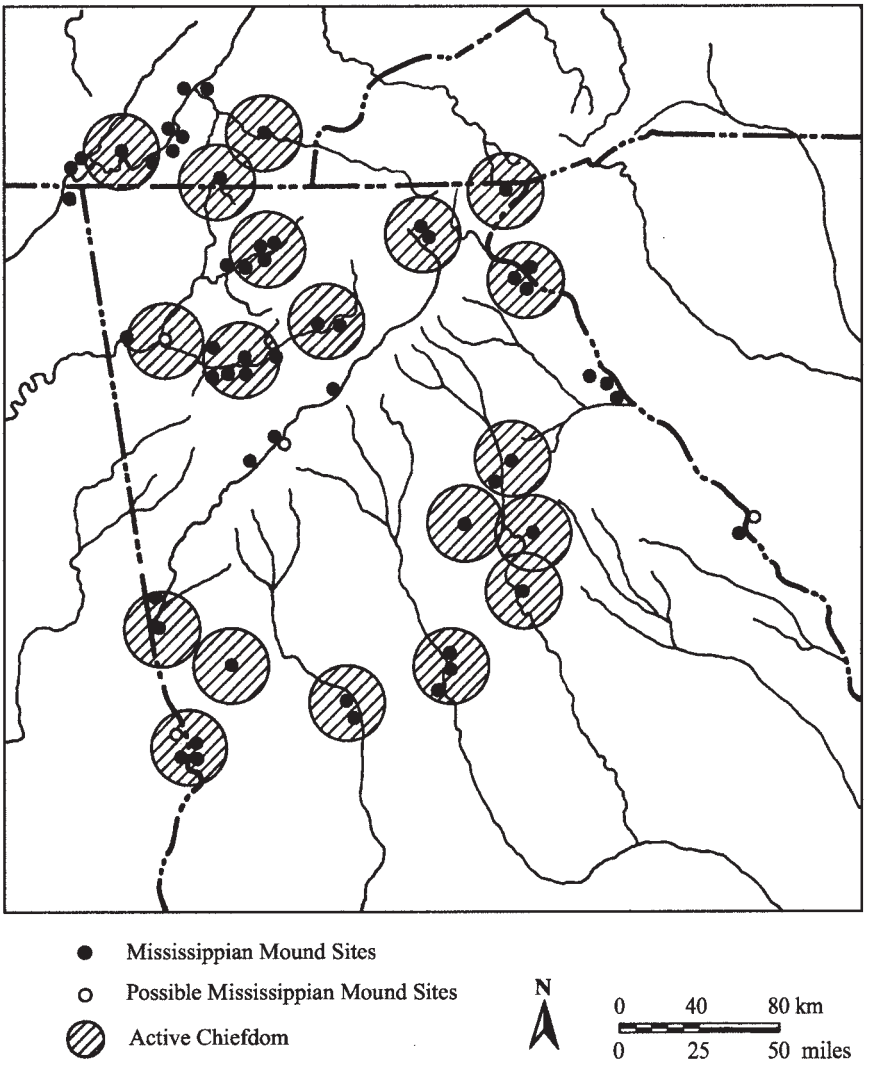


Figure 12.3. Geographical distribution of Middle Lamar period polities.

would be found. The party spent July 6 at a town named Apica, but no description has been provided of it. Apica, as Hudson (1997:225) notes, may have been King.

The Rome polity was not the only chiefdom in the Upper Coosa and Upper Tennessee river drainages in the sixteenth century (Figures 3.8 and 12.3). Archaeological evidence and the De Soto and Luna documents indicate that there

were chiefdoms to the east on the Etowah, Coosawattee, and Conasauga rivers where they entered the Great Valley; to the southwest on the Coosa River and along the Cartersville Fault in eastern Alabama; to the north on the Tennessee River at Chattanooga and on the Hiwassee River; and probably to the northwest on the Tennessee River in the Guntersville Basin (Hally 1999; Hally et al. 1990; Hudson et al. 1985). Much farther to the south, there was a chiefdom on the Middle Chattahoochee River on the border of Georgia and Alabama.

Many of the polities listed above were under the control of the chief of Coosa and paid tribute to him. The existence of this paramount chiefdom doubtless brought a certain level of political stability and peace to the northwest Georgia region. During the existence of the paramountcy, the Rome polity probably lived at peace with its neighbors to the southwest, east, and north. The paramountcy was breaking up by the time of the Luna expedition (Hudson 1997:422) and most individual chiefdoms in the region probably had collapsed by the end of the century (Marvin Smith 1987). The King site was probably formally abandoned as a town by the beginning of the third quarter of the sixteenth century, its inhabitants and those of the other Coosa River towns in Georgia consolidating into a few larger towns located downriver in Alabama (Smith 1987). A few families, represented by Structures 14 and 23.4, apparently continued residing at King for a few years more, but life along the Coosa would never be the same.

Notes

1. Assuming that the 249 excavated burials represent half of the burials originally interred at King, that two-thirds of these were adult, and that half of these were male, there would have been approximately 164 adult males in the King site burial population.

2. Burial 195, with 3,078 bead units, cannot be assigned to a household with certainty. In addition, erosion and plowing have probably destroyed other burials in the vicinity of Burial 195, some of which could have had marine shell beads. Whatever household Burial 195 belonged to, it clearly exceeded Household 15 at least in number of bead units.

3. These 1,268 *Busycon* bead units are reduced to 842 if the outside burial cluster located northeast of Structure 15 is not part of Household 15.

4. Since only two of the five sites, King and Ledford Island, contained plaza space and public buildings in the area excavated, the 470 m^2 figure is probably slightly on the low side.

5. Three hectares is not an unreasonable size estimate for a sixteenth-century mound center in this part of the Southeast, since the Little Egypt site (9MU102) measures 4.9 ha, Toqua (40MR6) measures 1.7, and the two Citico sites (40HA65 and 40MR7) measure 1.3 ha and 2.2 ha, respectively.

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Index