Cahokia, located in the American Bottom portion of the Mississippi River floodplain, is the largest pre-Columbian center in North America (see fig. 9.1). Home to more than 100 flat-topped and pyramidal mounds, it is also considered the most complex political phenomenon in pre-Columbian North America (Fowler 1997; Kelly 1990; Pauketat 1994; Pauketat and Emerson 1997b). It was during the Lohmann phase, the earliest Mississippian phase for the American Bottom (cal a.d. 1050–1100), that a process of political consolidation termed the “Big Bang” saw its fruition (Pauketat 1994, 1997a). This process saw the initiation of monumental construction, in the form of mounds and plazas, and the movement and resettlement of large numbers of people. This process also brought about a more overt system of social inequality and profound changes in the local settlement patterns as well as in material culture for the people of this region and beyond (Emerson 1997a, 1997b, 1997c; Pauketat 1994, 1998b).

This transformation was accomplished in a very short period of time, grounded in the actions of the people living in and around Cahokia (Pauketat and Emerson 1999). Evidence from Cahokia suggests that residential zones were shifted, with those once used for daily living transformed into spaces for massive public works such as the Grand Plaza. At the same time, new, seemingly preplanned, residential areas were established (see Dalan 1997; Pauketat 1994). Along with these residential changes came new technologies. There were new ways to construct houses and new ways to make pottery.

Outside of Cahokia proper, villages shifted locations, with new settlements such as Halliday—which I will discuss later—suddenly appearing on the landscape. Within these settlements were domestic areas that provide evidence of more intensive craft production than had been seen in the preceding Emergent Mississippian period (see Alt 1999; Pauketat 1997b; Yerkes 1991). Yet in some ways the situation for these villages in the rural
uplands just ten miles away from Cahokia appears to have been distinct. Rather than being caught up in all of the events taking place at Cahokia and in the surrounding floodplain—that is, the American Bottom—it seems that change came more slowly and in a more piecemeal fashion for the upland people (Alt 1998).

It is this disjunction in the way change occurred at Cahokia versus the way change occurred in the uplands that presents an opportunity to view the process of changing traditions in detail. Cahokia is believed to have accommodated a population in all probability too large to be sustained by local floodplain resources yet perhaps too small to have easily accomplished the massive landscape alteration that occurred at this site (Pauketat 1997a; cf. Milner 1998). Thus, it is impossible to look at settlements near Cahokia without considering the relationships between Cahokians and those living in other settlements (contra Mehrer 1995). Investigations addressing such considerations have suggested that nearby settlements both in the American Bottom and in the uplands are best un-
understood as dispersed parts of a single “greater Cahokian” community (Pauketat 1998b). Nevertheless, recent investigations have also uncovered many differences between the settlements.

I argue that the variability at two upland settlements discussed in this paper, Halliday and Knoebel, is representative of some deeper processes involving the maintenance and alterations of traditions and community identities. Given a new political order, new social practices, and the introduction of new technologies at Cahokia, it may seem reasonable to expect lag in the participation of the more distant parts of a community in those new social practices or in the adoption of the new technologies. However, it would be more satisfying to explain the variable adoption of practices between settlements. It is the actual processes of change, and the resistance to change in traditional practices, whether overt or inadvertent, that need to be examined. The evidence from the Halliday and Knoebel sites, now seemingly reinforced by two more recently excavated sites, Hal Smith and Pfeffer, suggest that this lag should not simply be attributed to the uplanders’ ignorance of the new ways of doing things at Cahokia (see fig. 9.1). It is better explained as the result of choices made by people negotiating the recognized authority of the past (as exercised in traditional lifeways) and the newly risen religious and political authority of Cahokia.

Changing Traditions

How do traditional practices change? The perspective I adopt here is that change is inherent and inescapable in the maintenance and enactment of day-to-day practices and traditions. As presented by Bourdieu and Giddens in terms of “doxa” or “structuration” (Bourdieu 1977; Giddens 1984), changes in everyday practices are a necessary consequence of day-to-day living. The actions of individuals are bounded by specific structures such as group interests and expectations, as well as know-how and habits; those structures are, at the same time, created and maintained by the actions of those individuals. It is this tension between the enactment and creation of structure in the process of daily living that ensures change; this is also a process that often occurs outside of the awareness of most participants. To them, traditions are being practiced much as they always have been, not an uncommon view in many societies. Shils (1981) has noted that traditions can undergo great changes and these changes can go unnoticed by actors, especially if they occur over time or if they occur while the core of such traditions remains intact.

However, the magnitude of the changes emanating from Cahokia, in
the time frame when they are posited to have occurred, suggests a more sudden and conspicuous series of modifications than the type of everyday change often associated with doxa and structuration. The movement of populations, the sudden coordination of labor to create monumental architecture, the reorganization of community structure, the introduction of new architectural forms, and the manufacture of new vessel types and other material goods—particularly when taken as a whole—seem to suggest that people in the American Bottom were not only very aware of the changes occurring at Cahokia but must have been active participants in those alterations.

This is not to say that all of the changes that did occur were planned or even anticipated by the people of the American Bottom. Presumably, the differences between Cahokia and the upland villages were embedded in the day-to-day practices of the people living in either location. Shennan (1993:55) has pointed out that the “practices of which archaeology provides a record are two extremes: on the one hand, important ‘events’ which affect the way social space was structured, on the other, and much more frequent, at least in non-state societies, the routinized activity of individuals going about their daily round.” The archaeological record consists of the material remains of day-to-day living, and this material can be considered as an integral component of those practices (McCall 1999; Shennan 1993). Such practices include the technological choices made by those who produced the artifacts, and such choices reflect and construct the identities of these individuals.

Cahokian Changes

The changes that came with the Big Bang can be seen in many of the material aspects of life during the Lohmann phase in the American Bottom proper and at Cahokia (Kelly 1990; Pauketat 1994; Pauketat 1998b). Most noticeably, mound and plaza construction began, forcing the movement of people into and out of residential districts (Dalan 1997; Pauketat 1994). The spatial arrangements of these residential districts also underwent a clear transformation. In the pre-Mississippian period, structures were smaller and arranged in courtyard groups, each residential area comprised of multiple courtyards (Kelly 1990). However, with the advent of the Lohmann phase, the courtyard groups were replaced by less formalized clusters of houses, which were no longer organized around a central space (see Collins 1990; Mehrer and Collins 1995; Pauketat 1998a). The smaller, more intimate communal space of the courtyard was translated
into massive public space for the community in the form of plazas (Alt 1998).

In addition, houses at Cahokia were no longer built using single-post technology but were constructed using wall trenches and were now somewhat larger. This probably produced buildings that were visibly distinct, owing to the concomitant alterations in wall angle and roof type. More importantly, a change (from single post to wall trench) would have required a new construction technology and plausibly altered labor practices. The Lohmann phase residents at Cahokia also developed new house forms, such as circular, T-shaped, and L-shaped structures, arranging these in ways that suggest special uses and meanings for the new building types.

An equally dramatic transition in style and technology is expressed in ceramic vessels, with changes seen in temper preferences, vessel surface treatments, and vessel form (Holley 1989; Milner et al. 1984; Pauketat 1998a). For instance, the use of shell temper more than doubled in vessel pastes after Cahokia’s abrupt beginning, with the use of slips and burnishing techniques greatly increasing at the same time and at the expense of lip notching and cord marking on vessel surfaces (see Pauketat 1998a). New vessel forms appeared, such as bottles and beakers, and vessel shapes changed, with jars being constructed with more pronounced shoulders and lip modifications (see also Vogel 1975).

Upland Sites

The Halliday site is located approximately ten kilometers southeast of Cahokia on the edge of an upland prairie (see fig. 9.1). During the excavation of Halliday, it became apparent that—although clearly identifiable as an early Cahokian Lohmann phase site—there were obvious deviations from expected Lohmann phase patterns as identified in the American Bottom. Likewise, another upland site with a Lohmann phase component, Knoebel, appears to be clearly similar to and yet unlike the Lohmann phase sites in the American Bottom.

Radiocarbon dates confirm that Halliday was occupied during the Lohmann phase, with occupation beginning early in the phase; ceramic and architectural evidence suggests that the occupation ended not long after A.D. 1100. Knoebel, excavated in the late 1960s by Charles Bareis and recently reanalyzed by myself, was occupied during the entire Lohmann sequence, based in part on the existence of earlier and later occupations at the site. Cahokia’s Tract 15A and the Lohmann site also were
occupied throughout the entire Lohmann phase. In short, then, temporal considerations as a cause for variation in the evidence should be minimal in these data sets.⁴

Space and Architecture

According to Thomas Emerson (1997a, 1997c), there is a characteristic architecture and spatial arrangement for nodal farmsteads (settlements where special political and religious activities occurred). This architecture is not present at Halliday or Knoebel. Although special structures are often associated with mounds (Bareis 1972; Collins 1990; Pauketat 1993), circular, T-shaped, and L-shaped structures also appear in residential precincts at Cahokia, and at settlements in the Bottom (see Collins 1990; Emerson 1984; Pauketat 1998a). Beyond having specialized structures related to new ceremonial activities at Cahokia, space and architecture in residential districts at Cahokia indicate that new social relationships had emerged. Space and architecture at the upland sites do not reflect these same relationships.

Halliday appears to have been founded at about A.D. 1050 as a Lohmann phase village without Cahokian-style Lohmann phase houses or settlement organization. Based on the Cahokia and Lohmann sites, the expected village arrangement for this phase would consist of wall-trench houses in clusters, often associated with a single village plaza. Instead, at Halliday, construction methods and settlement configurations exhibit the typical pre-Mississippian style single-post houses arranged around cleared oval courtyards, often marked by central posts (see fig. 9.2). Of the total of fifty-one excavated structures (in the 1995–1996 sample), only twelve are of wall-trench construction. At Cahokia’s Tract 15A, 86 percent of the Lohmann phase structures were built with wall trenches, and 83 percent of structures at the Lohmann site consisted of wall-trench construction (see fig. 9.3; see Esarey and Pauketat 1992; Pauketat 1998b).⁵ The superposition of wall-trench structures over single-post structures at Halliday and Knoebel suggest that wall-trench construction was introduced later in the Lohmann phase at upland villages than in the American Bottom. The mean floor area of the houses at Halliday, however, is not consistent with the pre-Mississippian standards in the American Bottom. Instead, it conforms closely to the mean for Lohmann phase house sizes at Cahokia and the Lohmann site and exceeds the mean structure size at Knoebel (see fig. 9.3). Pre-Mississippian Edelhardt phase structures at Cahokia’s Tract 15A average a mean of 7.7 square meters, an average that
Fig. 9.2. Upland Mississippian site plans.
jumps to 12.1 square meters in the Lohmann phase (Pauketat 1998a). Halliday structures average 12.5 square meters. In summary, wall construction and community organization persist in a traditional mode in the uplands, while house size increases, as it does in the wall-trench houses in the American Bottom.

Knoebel was occupied before, during, and after the Lohmann phase. During all of this time, settlement configuration and structure size did not significantly change. At any given point in time, a few structures coexisted on either side of an open space (too few to form a full courtyard but situated similarly). House construction methods did change however. While the residents of Halliday preferred single-post construction for almost all dwellings, residents at Knoebel retained fewer single-post structures. At Knoebel, 55 percent of the Lohmann phase structures were of wall-trench construction, a figure closer to that seen in the American Bottom. Although a trend to larger structures over time has been noted elsewhere (Mehrer 1995; Pauketat 1994), at Knoebel, structure size varied considerably over time. Pre-Mississippian (Edelhardt phase) structures have a mean floor area of 11.23 square meters (much greater than the size of contemporaneous structures in the Bottom), while the mean size of Knoebel’s Lohmann phase structures is only slightly larger, at 12.06 square meters; this size conforms with that seen at Halliday and Cahokia.

Fig. 9.3. Comparison of structure type and size.
At Halliday, the walls of a few structures seem to have been constructed as a hybrid of wall-trench and single-post construction. When viewed in plan, these structures appear to be of wall-trench construction. Upon the excavation of only a few centimeters of soil from the trenches, however, these “wall trenches” resolve into the typical Halliday (and pre-Mississippian) pattern of post holes. This pattern is also very clearly seen at the nearby Hal Smith site (see fig. 9.2). The Hal Smith site appears to be an early Stirling phase (A.D. 1100–1150) village containing several houses with hybrid walls. Of the nine excavated wall-trench structures, four contained at least one hybrid wall.

The Hal Smith site also helps confirm the impression of a later use of wall trenches at some upland sites. At this site, individual houses were built using wall-trench and single-post construction. Other later structures had wall trenches conforming more closely to the typical wall construction technology seen at Cahokia, where hybrid walls have yet to be reported. The pattern of hybrid walls at the Hal Smith and Halliday sites, that is, may be evidence of people learning or experimenting with a new technology rather than whole-heartedly adopting a new form.

Perhaps, with the movement of people in and around Cahokia at the start of the Lohmann phase, wall-trench construction may have been developed to enable more houses to be built more quickly, digging out a trench with a hoe being less labor intensive than digging forty to fifty individual post holes. It has also been suggested that wall-trench houses were built with prefabricated walls and so entailed a new organization of labor (Pauketat 1994). On the other hand, a single individual could have constructed single-post structures; placing and securing an entire wall as suggested by the wall trench would have required more hands. In addition, there may have been less pressure to build new houses quickly in the uplands, unlike Cahokia with its abrupt restructuring. In the uplands, there may have been less need to radically change traditional patterns of construction, as well as less pressure to alter the social relations related to construction efforts. Hybrid walls may be more a result of people attempting to introduce a new house type without actually altering the traditional practices of building a house.

There are differences in the variability of structure types at the sites as well. As might be expected, neither the Halliday nor the Knoebel site has as much variability in structure type as is seen at or around Cahokia. Presumably, this is reflective of the more limited activities or architectural know-how at the upland sites. While Cahokia gives every indication of hosting complex political, religious, and ritual functions, the upland vil-
lages were for daily living. As indicated by the huge quantities of chert hoe-blade resharpening flakes recovered, the upland villages were also the location of intensive farming (Pauketat 1998b). For example, an L-shaped structure form, while uncommon, has been reported at pre-Mississippian and early Mississippian sites with single-post and wall-trench construction, respectively (for a pre-Mississippian example, see the Robinson Lake site [Milner 1984]). At Cahokia, there are rectangular, circular, and L-shaped structures. In contrast, Halliday has only rectangular and square forms, with no L-shaped buildings. The contemporaneous settlement of Knoebel, on the other hand, has L-shaped structures as well as the typical rectangular forms (fig. 9.2).

It is common at Lohmann phase settlements at Cahokia, and in both the American Bottom and the uplands, to find very small, often nearly square structures in addition to the common rectangular structures. I interpret these as storage structures. While Halliday has at least one of these structures for each courtyard group, Knoebel has only one, despite the fact that the other houses were rebuilt several times. However, it is possible that the L extension on Knoebel’s L-shaped houses is simply a version of the storage structure but in this case attached to an existing building rather than left freestanding.

The implication then, is one of change entering the upland settlements, with each village adopting different pieces of the new Cahokian forms and neither village adopting the full suite of changes seen at Cahokia. What is important is the type of changes that first came to the uplands. In both upland settlements examined here, people retained traditional settlement organization. Halliday people retained the courtyard, just as Knoebel residents retained some semblance of the courtyard. Halliday people maintained pre-Mississippian domestic spatial relationships and house construction technology; wall-trench structures appeared later, even though larger houses appeared right away. Knoebel people retained pre-Mississippian organizational patterns and house sizes (although the average Knoebel pre-Mississippian house was larger than its average American Bottom contemporary) but seem to have adopted wall-trench construction more quickly, at the same time that they utilized L-shaped additions (a rare but seemingly traditional form). Halliday residents opted for freestanding storage buildings.
A pattern of differential change at the upland settlements similar to that seen in space and architecture may be observed in ceramic assemblages. As with architecture, a greater variability in type characterizes Cahokia’s ceramic assemblages, and a mixed adoption of new Cahokian styles and technologies seems to characterize the uplands. The upland settlements shared many stylistic and technological similarities with Cahokia and with each other, but the changes that were adopted were specific to each settlement.

During the pre-Mississippian period, most ceramic vessels in the American Bottom were tempered with grog or grit (Pauketat 1998a); shell and limestone tempers also commonly occur (Kelly et al. 1984). With the advent of the Lohmann phase, the use of shell temper dramatically increased. During the Edelhardt phase, 15 percent of the jars at the BBB Motor site, a small settlement near Cahokia, and 28 percent at Cahokia’s Tract 15A were shell tempered (Emerson and Jackson 1984; Pauketat 1998a). In contrast, more than 50 percent of all Lohmann phase ceramic vessels are shell tempered (Holley 1989; Pauketat 1998a).

The use of shell temper in ceramics (thought by many to be a technological innovation) is considered one of the hallmarks of the Mississippian period. As expected, Cahokia and nearby sites saw an increase in shell temper use with time, with nearly all ceramics being made with shell temper by the end of the Lohmann phase. At Halliday, shell temper is used in 87 percent of all vessels. At Knoebel, this figure is 73 percent. This is interesting in that, for the same period of time, only 58 percent of Cahokian vessels and 67 percent of the Lohmann site vessels were shell tempered (Esarey and Pauketat 1992; Pauketat 1998a). It would seem that shell-tempered ceramic technology was adopted for use in the uplands with an enthusiasm that surpassed even that of the American Bottom communities, despite the fact that this temper does not appear to have been the best choice for use in the pottery clays available to upland people. Indeed, the extraordinarily large quantities of broken sherds, the poor quality of the upland ceramics, and the many visible breaks and poorly welded coils in shell-tempered vessels from the upland sites would seem to support this claim. Given this situation, why did the uplanders so readily adopt shell temper?

The surface treatments of pottery vessels were also altered in the Lohmann phase; cord marking became much less common, while the use of slip increased at Cahokia. These innovations were adopted at different
rates in the uplands. Cahokia and Halliday have nearly identical proportions of slipped vessels but nearly twice as many as at Knoebel, which (at 15 percent) had fewer slipped vessels than has been reported for pre-Mississippian Edelhardt phase sites in the American Bottom (for example, 26 percent of the jars are slipped at BBB Motor [Emerson and Jackson 1984]). On the other hand, Knoebel potters reduced the use of cord marking to the same proportion as is seen at Tract 15A, while Halliday pots show cord marking more than twice as often as is found at the other sites.

Although the surface appearance of ceramic vessels changed, it seems that the basic methods for making pots did not. Ground shell rather than grit was being used as a temper additive, yet bowls and jars were still constructed with coils of clay, scraped to adjust wall thickness, and paddled into final shape. Cord marking was achieved by winding cordage around a paddle, and then the cord marking would be applied as the vessel was shaped. Interestingly, many Lohmann phase vessels that appear to have smooth surfaces show telltale marks of having been constructed with cord-wrapped paddles, the cord marking itself smoothed over after the fact. This means the surface appearance was often achieved by adding a step to the *chaine opératoire*, a counterintuitive step for those with a func-
tionalist viewpoint. That is, some analysts have suggested that cord marking produces a more efficient vessel: the uneven surface heats faster, holds heat longer, and is less likely to slip out of the hands (see Deal 1983; Henrickson and McDonald 1983). The use of shell temper and smooth surfaces, then, are both “innovations” that are not necessarily technologically “superior” choices but are nonetheless the choices made by the upland villagers.

In a comparison of vessel size, it appears that the upland sites contain somewhat larger jars and fewer but much larger bowls than those found at Cahokia’s Tract 15A or at the Lohmann site (see fig. 9.4). Since it is now well accepted that there were no major changes in food use with the advent of the Mississippian period at Cahokia, changes in vessel type and size cannot be attributed to the accommodation of new foods (see Lopinot 1997). However, vessel size may be considered indicative of changes in the meanings of pots and cooking practices. The greater number of larger vessels may indicate communal living related to the courtyards at Halliday. These vessels would have been made to feed and serve larger groups of people, while the more restricted size range of vessels and the use of smaller bowls at Cahokia may be derivative of the dissolution of these communal groups.

Conclusion

At around A.D. 1050 profound changes occurred in domestic and public practices at Cahokia and nearby settlements in the American Bottom, changes that were reflected in settlement reorganization, as well as in stylistic and technological innovations. In part, these changes can no doubt be explained as the unintended results of political events and as the result of the simultaneous appearance of more overt social inequality in the immediate Cahokian landscape. The wide range of styles and material goods at Cahokia during the Lohmann phase is missing in the uplands at the same time. But the upland settlements also provide no evidence for the political and social complexity, at least that which is expressed in public architecture and ceramic styles, of Cahokia proper. Lacking this complexity, some practical changes did not occur in the uplands. Instead, the styles and technologies adopted are those that villagers incorporated into their traditional community life, not those that would be more closely associated with more profound changes in political and social life.

The spatial organization of villages in the uplands did not change at the same time that spatial arrangements changed at Cahokia. Different as-
pects of construction techniques did change in the uplands. The first changes to arrive in the uplands, such as those associated with pottery technology, were those potentially least connected to social relations. While spatial relations cannot be decoded as if they were a specific text, they do speak to what people do and think. Bourdieu, Giddens, and Foucault have all theorized about relationships between space or architecture and day-to-day activities, as well as cosmological beliefs. Space conditions sensibilities; sensibilities in practice shape space (Bourdieu 1977; Foucault 1973, 1979; Giddens 1984). Spatial relationships at Cahokian residential tracts suggest more complexity than is found until much later in the uplands. At Cahokia’s Tract 15A, larger-than-normal structures were grouped near specialized circular structures and located on higher ground, while smaller structures are located at a distance, across a plaza, and are not associated with specialized structures (Pauketat 1998a). This suggests differences in social status, or in activities carried out in different parts of Cahokia’s residential neighborhoods. This architectural segregation is not seen at the upland villages. These differences in space are related to differences in practices.

A settlement consisting of several courtyards would have projected a specific set of social and familial relationships, a set of relationships that must have been altered in those places where the courtyard was dissolved into smaller clusters of houses without a communal space (as at Cahokia). Likewise, the enlargement of a structure or the alteration of wall type may have presented less of a threat to extant social relationships than the alteration of the spatial relationship of dwellings and workspace (although the delay in adopting wall trenches is no doubt related to the need to adopt new labor relations in order to construct a house). In any case, the alterations that were accommodated at the upland Lohmann phase settlements did not define changes in relationships in the same way as the alterations of space and architecture did at Cahokia. Those changes that were accommodated in the uplands seem to be those that permitted a surface likeness to events at Cahokia but that did not substantially alter social relations.

While the change to shell temper must have altered the steps in pottery making, the greater reliance on shell temper, the alteration of lip treatments and shoulder angles, and the changes in vessel surface treatments are all choices that themselves had little effect on social relations. The matter of vessel size does, however, speak directly to social relations. Both jars and, especially, bowls were larger in the uplands. This fact, in combination with the courtyards at upland Lohmann phase sites, paints a pic-
ture of upland peoples engaged in pre-Mississippian communal practices. The smaller clusters of houses, the smaller vessels, and the larger number of smaller serving bowls at Cahokia all suggest that the extended groups (families?) found at the upland settlements no longer existed as such at Cahokia during the Lohmann phase. This difference may be explained in part by the differences between the social, political, or economic practices at Cahokia as compared to the upland settlements; however, the cause and the result were evidently rejected at the upland settlements.

Maintaining some similarities with Cahokia does seem to have been an important concern for the upland villagers. Although several changes were made in ceramic construction and style, and any change in technology will involve changes in day-to-day practices, these are innovations that could have been implemented with the least effect on daily routines. Those ceramic changes that were adopted seem to have been, if anything, demonstrably deleterious. The shell temper was added to upland clays not suited to shell temper (see Porter 1964); vessel surfaces were smoothed, although this requires an extra step in the construction process that does not improve vessel performance. While not necessary, the adoption of such things would serve to create in a practical sense an identity consistent with the greater Cahokian community.

In sum, there seem to be two levels of change represented at the upland Mississippian sites coeval with early Cahokia: large-scale sociopolitical changes (seen in mounds, plazas, and community restructuring) and smaller-scale technological and stylistic changes (such as those seen in rim and temper changes in jars). Wall trenches and house sizes may not pose or reflect the same order of change in the built environment, and so in the social environment, as might the dissolution of the courtyard. Shell temper and surface treatment may not in this case be as indicative of changes in how people were interacting with each other as are the size and type of vessels commonly used at the various settlements.

In other words, upland people appear to have been willing to adopt—or perhaps it would be more correct to suggest that they actively sought—those changes that maintained an affiliation with the currents of change at Cahokia, while they resisted those changes that would have altered social life. The upland people apparently rejected the sociopolitical authority of Cahokia and retained more traditional patterns of living and doing.
Notes

1. These sites are still undergoing analysis at the University of Illinois Urbana-Champaign.

2. With single-post construction, individual posts are set into the ground and then the wall is constructed using the upright posts. With wall-trench construction, a trench is dug into the ground and then a preformed wall is placed into the trench and set up complete.

3. Halliday was partially excavated from 1995 to 1999 under the direction of Tim Pauketat. Another portion of the site was dug by the Illinois Transportation Archaeological Research Program in 2000. All materials are being analyzed at the University of Illinois under Pauketat’s direction, but the present sample includes only those remains excavated before the 2000 season.

4. I use published data from the Lohmann site and from Tract 15A at Cahokia to represent the Lohmann phase in the American Bottom, a phase defined as limited in time to A.D. 1050–1100 (Esarey and Pauketat 1992; Pauketat 1998a, 1998b). Published data from the BBB Motor site are also used for pre-Mississippian patterns (Emerson and Jackson 1984).

5. Another tract at Cahokia, the ICT-II, contains no structures with single-post construction in the Lohmann phase occupation, but occupation there began a bit later in the Lohmann phase than at the other locations (Collins 1990).

6. For further comparison with another American Bottom settlement, the BBB Motor site, Edelhardt phase structures have an average floor space of 7.5 square meters (Emerson and Jackson 1984).

7. The Hal Smith site was partially excavated in 1999 as part of Pauketat’s Richland Archaeological Project.

8. Notes on file at the University of Illinois Urbana-Champaign.

9. As discussed by Porter (1964), not all clays benefit from the addition of shell temper. Clays suitable for use with shell were available in the bottomlands, but not in the uplands.