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One Hundred Years of Investigations at the Linn Site in Southern Illinois

Charles R. Cobb

The Linn site represents one of the major Mississippian occupations in the Mississippi River floodplain of southwestern Illinois. The multiple mound center has received sporadic professional attention over the years dating from Bureau of Ethnology investigations in the latter part of the nineteenth century; however, little work by modern standards has been conducted at the site. Consequently, very little is known about the Linn site and its relationship to other Mississippian traditions in surrounding regions. This study synthesizes data from past research on the site, the results of which indicate that the Linn site likely played a major role in late prehistoric developments in the central Mississippi River valley.

The region of southwestern Illinois that extends from the southern end of the American Bottom to the confluence of the Mississippi and Ohio rivers is known to be home to a number of important Mississippian sites, including mound centers, special-use sites (e.g., chert quarries and workshops), as well as the usual array of hamlets, farmsteads, and villages. As a result of the conspicuous Mississippian presence in the region—particularly as evidenced by several multiple mound sites—southwestern Illinois became one of the prime targets of the Bureau of (American) Ethnology's Division of Mound Exploration in the late nineteenth century (Thomas 1894). Despite that early interest, however, very few archaeological investigations have been conducted on any of the sites in the intervening century. With the resulting lack of knowledge, southwestern Illinois has received little mention in studies of Mississippian occupation in the central Mississippi River valley.

One of the major Mississippian sites in southwestern Illinois is the Linn (or Linn-Heilig) site (IAS U-28; SIU 24D1-2). Before historic modification, the Linn site was defined by an area of about 11 ha encircled by an earthen embankment and contained at least seven mounds, including one large platform mound. The sizable mound center drew the attention of several investigators from the Smithsonian Institution during the last decades of the nine-
teenth century and was the subject of periodic visits by archaeologists during the twentieth century. Yet, no sustained, systematic investigations have been conducted at the Linn site, an omission made more unfortunate by the fact that most of the earthworks have been deflated through plowing and erosion. The ongoing site destruction from farming practices, as well as uncontrolled surface collecting and "pothunting," makes future spatial reconstruction and research at the site a formidable task.

Because the Linn site is rapidly disappearing, this article focuses on the synthesis of past research conducted at the site. The effort is guided by recent analyses of Linn site collections from the Smithsonian Institution's nineteenth-century investigations and from the Illinois Historic Sites Survey (HSS) investigations carried out during the 1970s. Results of that research allow preliminary statements about the nature of Mississippian occupation in southwestern Illinois and the relationship of the occupation to the larger Mississippian presence in the central Mississippi River valley.

Previous Investigations

The Linn site is situated in western Union County, Illinois, on the Mississippi River floodplain about 8 km east of the river (Figure 1). Approximately 1 km to the east is an extensive bluff line that defines the eastern edge of the floodplain. The bluffs and adjacent uplands form the easternmost extension of the Ozark Plateau. The alluvial plain setting of the Linn site is typical for the Mississippi Valley, being characterized by numerous meander scars, oxbow lakes, and sloughs. Like most Mississippian sites in the Mississippi River bottomlands, the Linn site sits on a low ridge and is surrounded by sandy, well-drained soils suitable for agriculture, as well as poorly drained clayey soils. Originally, Clear Creek, a tributary of the Mississippi River, abutted the northeast corner of the site before it was channelized sometime in the twentieth century.

In its original state, the Linn site consisted of at least five to six mounds enclosed by an earthen embankment that surrounded about three-fourths of the site and presumably supported a palisade wall. Another mound was located outside the southwest corner of the embankment. The northeastern corner of the site apparently lacked the embankment and was defined by Clear Creek, which likely served similar defensive purposes. The Linn site has been greatly altered through time, and there are discrepancies in the interpretation of the site configuration by earlier researchers. Thus, it is useful to first develop a site description that examines some of the discrepancies in the context of a historical overview of past research and then to follow that description with a discussion of some of the substantive results of the investigations.

Site Configuration

Thomas M. Perrine, working for the Bureau of Ethnology in the 1870s, provided the first systematic description of the Linn site (Perrine 1873). The embankment appears to have been relatively intact at the time of his visit, standing about 4 ft (1.22 m) high (Figure 2). Perrine believed that the site entrance was along the south side of the earthen enclosure where a break was evident. He also observed that several mounds were inside the earthen enclosure, one of which he described as a "sepulchral remain" (1873:418) because of the
number of burials that had been removed by various people over the years. Perrine excavated on one of the mounds, although, as discussed below, which one is unclear.

Cyrus Thomas' (1894:155-159) summary of Linn site investigations conducted by various Smithsonian Institution Mound Exploration personnel stands as the most complete description of the site, including estimates of earthwork dimensions and site area. He recorded the length of the east side of the embankment as 400 ft (122 m); a southeast bend as 126 ft (38 m); the south side as 1,168 ft (356 m); the west side as 1,036 ft (316 m); and the north side as 569 ft (173 m), terminating at Clear Creek. Within those confines, he estimated the site area to be about 28 acres (11.3 ha). The plan map of the Linn site produced by Thomas shows four designated mounds (A – D) and two apparent small mounds within the earthen enclosure and one mound outside it to the west. Thomas also recorded about 100 "hut rings" (circular concentrations of material that usually represent structure locations), 20 to 25 ft (ca. 6.2-7.8 m) in diameter and 1 to 3 ft (ca. 0.3-1 m) deep, located in the northwestern and eastern portions of the site area.

There is some confusion in mound designations between Perrine and Thomas. Perrine (1873:418) describes a "large oblong mound" near the south wall of the embankment that he later returned to and excavated. The location of the mound, combined with his description of a round mound to the west that was 30 ft in diameter and 50 ft high (closely fitting the description of Mound C), strongly indicates that the oblong mound is Mound B.
However, Thomas (1894:158) describes Perrine's excavation as being on Mound A. There are no mounds to the west of Mound A within the embankment, indicating that the oblong mound and Mound A are not the same. Unfortunately, Perrine did not provide a plan map of the Linn site, but two likely solutions to the dilemma are either that Perrine confused Mounds A and B in writing up his notes from the two visits or that the excavation observed by Thomas in Mound A was the result of work done by someone other than Perrine, possibly by pothunters.

Bruce W. Merwin (1935) provided the final systematic description of the Linn site before it was largely leveled. In contrast to Thomas, Merwin notes the presence of only five mounds inside the enclosure; this discrepancy obviously shows the loss of a smaller tumulus to plowing in the intervening years. The embankment, however, was still intact, and Merwin noted that the linear dimensions of the feature provided by Thomas were quite accurate. He differed with Perrine over the location of the entrance to the site, arguing that it was on the west side of the enclosure where there was an obvious widening of the embankment.
It is not clear why Merwin would argue that an increase in the width of the embankment would indicate an entrance. If Perrine was able to document a break in the southern line of the enclosure when the Linn site was relatively intact, that would seem to represent stronger evidence for an entrance. Yet, Merwin (1935:87) also pointed out that the west side featured a "causeway" leading into the interior of the site. On the basis of these descriptions alone, it is difficult to establish which interpretation of the site entrance is the stronger.

Merwin (1935) also documented four large depressions inside the embankment and two outside it, representing likely borrow pits. Thomas (1894:159) noted that three "circular excavations," or borrow pits, were outside the wall. Merwin also recorded 10 to 15 ft (3.1-4.6 m) square projections (probable bastions) along the earthen wall at approximate 100 ft (30 m) intervals. He does not provide an exact number of the posited bastions, but 19 are visible on his plan map (1935:79). The hut rings were still evident at the time of Merwin's investigations, and he added that they were laid out in rows.

In terms of mound dimensions (Table 1), Perrine (1873) stated that Mound B was 30 ft (9.3 m) high and measured 30 ft (9.3 m) by 50 ft (15.5 m) in area; and he described Mound C as being 15 ft (4.6 m) high and 30 ft (9.3 m) in diameter. By the time of the next excavations by Smithsonian Institution personnel some 10 years later, mound destruction already seems to have been well advanced. Thomas (1894:159) records Mound B as only 5 ft (1.5 m) and Mound C as 9 ft (2.8 m) high. Merwin (1935) describes Mound A as a platform mound about 12 ft (3.7 m) high, with the small conical mound on the southeast corner standing 2 ft (0.6 m), similar to dimensions provided by Thomas. Mound A spanned approximately 160 ft (49.6 m) on a side. Merwin further described Mounds D, E, and F as smaller mounds standing 3 to 6 ft (ca. 1-2 m) high, and he noted that Mound C was a truncated conical mound, a somewhat unusual shape.

The most recent investigations at the Linn site include the excavation of a single test unit by Joseph Caldwell of the Illinois State Museum in the 1950s (Caldwell n.d.) and a surface survey conducted as part of the Illinois Historic Sites Survey program under the auspices of the Illinois Department of Conservation, the Illinois State Museum, and the Illinois Archaeological Survey (Porter 1971, 1972). Although the two later studies did not add new information on the configuration of the earthworks, they did provide important substantive data, as discussed below.

**Material Culture**

In addition to site layout, several of the investigations described above have provided considerable information on important aspects of the material culture of the Linn site. Although contextual data are frustratingly meager, in sum the information provides an important background on the nature of the Linn site in relation to nearby Mississippian manifestations and provides suggestive insights into external ties and influences.

Perrine excavated on the largest mound on a second visit to the site (Mound A), demonstrating a complex stratigraphy with several features likely attributable to numerous mound-building episodes (Perrine 1873:419-420). That work discovered a number of ceramic vessels, a female figurine, and a fluor spar (fluorite) bead, among other items. The following entry on Mound A remains the only published description in any detail of internal mound features at the Linn site:

After going down about three feet we came to what looked like a chimney made of sun-burned brick, and on removing some four feet of this we came
Table 1. Mound Dimension Estimates.\textsuperscript{a}

<table>
<thead>
<tr>
<th>Mound</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>49.6 (160)</td>
<td>— b</td>
<td>3.9 (13)</td>
<td>Thomas</td>
</tr>
<tr>
<td>A</td>
<td>49.6 (160)</td>
<td>49.6 (160)</td>
<td>3.7 (12)</td>
<td>Merwin</td>
</tr>
<tr>
<td>B</td>
<td>15.5 (50)</td>
<td>9.3 (30)</td>
<td>9.3 (30)</td>
<td>Perrine</td>
</tr>
<tr>
<td>B</td>
<td>57.8 (190)</td>
<td>20.1 (66)</td>
<td>1.5 (5)</td>
<td>Thomas</td>
</tr>
<tr>
<td>B</td>
<td>57.8 (190)</td>
<td>18.3 (60)</td>
<td>1.2 (4)</td>
<td>Merwin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diameter</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>9.3 (30)</td>
<td>4.6 (15)</td>
<td>Perrine</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>30.4 (100)</td>
<td>2.7 (9)</td>
<td>Thomas</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>38.1 (125)</td>
<td>3.0 (10)</td>
<td>Merwin</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>30.4 (100)</td>
<td>1.8 (6)</td>
<td>Merwin</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>45.6 (150)</td>
<td>0.9 (3)</td>
<td>Merwin</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>30.4 (100)</td>
<td>0.9 (3)</td>
<td>Merwin</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a}Dimensions are in meters, with English measurements in parentheses.  
\textsuperscript{b}Thomas does not provide a width, although he noted that the circumference of the mound was 544 ft.

to the foundation. We then ditched both ways, east and west, and came on one side to a wall, on removing the earth from which, we found it to be arched. The arch appeared to have been formed in three layers of stone with a layer of grass between each, but looked as though it had been exposed to fire. At the bottom and around the chimney there appeared to have been placed a matting of cane, but not firm enough to be moved only in small particles. Here we found earthen pots respectively of the capacity of one, one and a half, and two gallons [Perrine 1873:419–420].

The two individuals responsible for much of the Bureau of Ethnology work in the Linn site environs were James D. Middleton and L. H. Thing, who were field assistants for the Division of Mound Exploration during the early 1880s. Smithsonian Institution accession records (SIAR) indicate that excavations were carried out on at least two of the mounds, the bank of Clear Creek, and “sinks” on the site, yielding a number of faunal remains, lithic tools, and several intact ceramic vessels. Thomas (1894:157–158) described the excavation of several pits on Mound A, the same one explored by Perrine. In addition to recovering a wide variety of artifact remains, Thomas documented several instances of layers of burned clay, charcoal, and burned straw (thatch?), possibly attesting to the presence of burned structures. Excavation in Mound B yielded a small amount of human skeletal remains. Testing in the borrow pits was noteworthy, mainly for showing them to be clay lined.

Another important finding of that work was the discovery of numerous stone-box graves on the bluffs to the east of the Linn site. Although it is impossible to tie these burials directly to the Linn site, their presence indicates a pattern of locating human burials on both bluff and floodplain locations—a pattern also seen in the American Bottom (Milner 1984).
Notable finds from the stone-box burials include intact vessels, lithic tools (usually Mill Creek chert bifaces), bone needles, a chunky stone, a quartz crystal, and two repoussé copper plates (SIAR). One of the copper plates displays an eagle, and the other has two dancing figures (Figures 3 and 4). The latter plate was described as having a bone pin fragment inserted in it.

The few intact vessels recovered from both mound and nearby bluff contexts are representative of types common to the central Mississippi Valley and are typical of those found in southeast Missouri (see Chapman 1980:286–288, 290–291; Phillips et al. 1951:105–110, 132–134, 147; Williams 1954:202, 223–224). They include a black burnished water bottle that would be described as Bell Plain and a Matthews Incised jar with strap handles (Figure 5). Two bottles representing typical Mississippian Plain vessels were also recovered (Figure 6).

Merwin's work at the Linn site apparently was restricted to surface collecting. Importantly, his mention of the "large number of broken flint hoes found on the site" (1935:91) presaged the realization that the Linn site was associated with large-scale Mill Creek hoe manufacture.

Caldwell's (n.d.) limited work on the Linn site is notable mainly for providing restricted insight into the site stratigraphy and for obtaining the only radiocarbon date from the site. He excavated a 10 x 10 ft unit in the northern portion of the site that Cyrus Thomas had documented as the village area. The work recovered a number of Mississippian artifacts but is most important for discovering an Emergent Mississippian Dillinger phase stratum below the Mississippian occupation. A radiocarbon sample from a pit feature has been dated at A.D. 1000 ± 150 (Fowler and Hall 1978:562), comfortably within the latter part of the Emergent Mississippian time frame. The Dillinger phase appears to occur within much of south-central and southwestern Illinois (Hargrave et al. 1991; Maxwell 1951). Recent excavations at the Pettit site, located 15 km southwest of the Linn site, revealed a sizable Dillinger occupation (Webb 1991) and, taken with the evidence from the Linn site, may indicate that a number of substantial Dillinger occupations are to be found in the Mississippi Valley in southwestern Illinois.

The Illinois HSS investigations included surface collections from the Linn site and surrounding areas. At least two important lines of evidence were provided by that work: (1) findings indicate that occupations or activity areas may have extended appreciably beyond the site limits as defined by the former embankment, and (2) sufficient artifact collections were made to allow initial statements about the regional placement and ties of the Linn site.

Illinois Archaeological Survey (IAS) site records stemming from the HSS work indicate that extensive Mississippian materials were found in the open fields to the west and southwest of the Linn site. At least 10 concentrations of artifacts were identified on ridges trending east-west and extending south and west of the site. Collected materials included Mill Creek chert bifaces and both Dillinger phase and Mississippian ceramics. Comments on the IAS site forms propose that those areas represent an extension of the Linn site beyond the locus defined by earthworks.

The assemblage of diagnostic rim sherds recovered from the Linn site during the HSS survey conforms with the expectations of previous work (Table 2). A wide range of Mississippian vessel types are represented, including jars, bowls, pans, plates, and bottles. It is of interest that shell-tempered ceramics (N = 45) and grog- or grit-grog-tempered
Figure 3. Copper cutout of raptorial bird from stone-box grave on bluff line east of the Linn site (Smithsonian Institution Photo No. 89-1781).

ceramics (N = 42) are present in near-equal ratios, although it must be cautioned that the sample is not necessarily representative. Many of the nonshell-tempered types are characteristic of Dillinger phase ceramics (Hargrave 1991; Maxwell 1951), supporting Caldwell's limited excavation and arguing for a significant Emergent Mississippian component on the site.

One of the more important results of the HSS investigations is in providing hard evidence for the presence of a Mill Creek chert large-biface (hoe) production system in the environs of the Linn site. Mill Creek hoes represent one of the most prominent exchange items
on central Mississippi Valley Mississippian sites (Brown et al. 1990; Cobb 1989; Winters 1981) and in quantitative terms were probably the most commonly exchanged items during the late prehistoric era in the larger region (Winters 1981:31). From early investigations onward, interest has focused on the Hale site as a possible central place for organizing production and initial exchange of Mill Creek hoes (Holmes 1919:192–193; May 1984:76; Winters 1981:24; but cf. Brown et al. 1990:267–268). The Hale site, a small mound center near the major Mill Creek chert quarries in the Ozark uplands about 10 km east of Linn, exhibits abundant evidence for use as a large-biface workshop. The early documented investigations on the site by the Division of Mound Exploration (Thomas 1894:148–155), combined with a lack of systematic survey in that upland region, has reified the view of the Hale site as assuming a central role in hoe production and exchange. More recent study, however, suggests that quarrying and production activities were much more extensive than previously assumed. For
example, whereas up until recent times only one major quarry had been identified in addition to a number of smaller quarries, it is now known that there are at least two major quarries and one intermediate-size quarry, as well as smaller ones (Cobb 1988, 1989).

The HSS collections demonstrate that the Linn site likely played a key role in the Mill Creek hoe production and exchange system. Several incomplete examples of hoes were recovered, confirming Merwin’s (1935) earlier observations on their presence. Only a small number of the large bifaces was in the HSS collections, but farmers in the region have a history of clearing the large bifaces from workshop fields because of the obstacles they pose to plowing (Cobb 1988:216). That practice, combined with an attrition from surface collecting over the years, makes it likely that many large bifaces have been removed from the Linn site area. Nevertheless, identified chert types from the Linn site indicate a heavy dependence on Mill Creek chert (Figure 7). Although not all Mill Creek chert necessarily went into hoe production, the dominance of that chert type does suggest a regular access to the chert source areas. Moreover, the debitage samples of Mill Creek chert from the HSS collections include specimens from all stages of a large-biface reduction trajectory. In addition to the typical large early-reduction and small thinning flakes, the sample includes the very large thinning flakes (often displaying cortex) that are especially characteristic of large-biface production (Billings 1984:30; Cobb 1988:208). Much of the Mill Creek chert was located within the Linn site proper, indicating that some areas of the site defined by earthworks may have
been workshop loci. At least 11 hammerstones were identified in the collections, further supporting the emphasis on biface production. Evidence for hoe production was also found on the occupied ridges south and west of the site.

Other identifiable cherts recovered from the Linn site are representative of common types found in southwestern Illinois (Figure 7). A number of small triangular and corner-notched points are represented in the surface collections, and they are typically made from local cherts, including Mill Creek, Bailey, St. Louis, Cobden, Kaolin, and Elco varieties. It is noteworthy that the second most common type is Kaolin chert debitage, which derives from the Iron Mountain locality located in the uplands about 17.5 km northeast of the Linn site (Billings 1984; May 1984). Similar to Mill Creek chert, Kaolin chert was exploited for manufacture into digging implements, although apparently in much smaller numbers. However, there is no evidence for production of Kaolin chert large bifaces at the Linn site, and that activity seems to have been concentrated at workshops at Iron Mountain (Billings 1984) and at the Ware site, a small mound center located about 11 km north of the Linn site.

It should be emphasized that both Mill Creek and Kaolin cherts do occur as streambed and erosional residuum at various locations near the source areas and were likely exploited from those spots in addition to subsurface quarrying (see Koldehoff 1985:27; Lopinot and Butler 1981). However, the bulk of their procurement during the late prehistoric period appears to have been through quarrying.
### Table 2. Diagnostic Rimsherds from the Linn Site, HSS Collections.

<table>
<thead>
<tr>
<th>Period</th>
<th>Vessel Type</th>
<th>Temper</th>
<th>Surface</th>
<th>Other</th>
<th>Number</th>
</tr>
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<td>Mississippian</td>
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<td>Shell</td>
<td>Plain</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Bowl</td>
<td>Shell</td>
<td>Plain</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Bowl</td>
<td>Shell</td>
<td>Incised</td>
<td>Notched rim</td>
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</tr>
<tr>
<td></td>
<td>Jar</td>
<td>Shell</td>
<td>Plain</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Jar</td>
<td>Shell</td>
<td>Plain</td>
<td>Loop handle</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Jar</td>
<td>Shell</td>
<td>Plain</td>
<td>Lug</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Plate</td>
<td>Shell</td>
<td>Plain</td>
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<td>7</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
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<td>Grog</td>
<td>Plain</td>
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</tr>
<tr>
<td></td>
<td>Bowl</td>
<td>Grog</td>
<td>Cordmarked</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Bowl</td>
<td>Grog</td>
<td>Cordmarked</td>
<td>Folded rim</td>
<td>1</td>
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<td></td>
<td>Jar</td>
<td>Grog</td>
<td>Plain</td>
<td></td>
<td>16</td>
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<td>Jar</td>
<td>Grog</td>
<td>Cordmarked</td>
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<td>Cordmarked</td>
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<tr>
<td></td>
<td>Jar</td>
<td>Grit/Grog</td>
<td>Red slip</td>
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<td></td>
<td>Jar</td>
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<td>1</td>
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<td></td>
<td>Jar</td>
<td>Grit</td>
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<td><strong>TOTAL</strong></td>
<td>87</td>
</tr>
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</table>

The Linn Site in Regional Perspective

As noted above, the Linn site is located near the source areas of Kaolin and Mill Creek cherts, two of the most desired lithic resources in the central Mississippi River valley. It also appears to be one of the largest Mississippian sites in the floodplain south of the American Bottom and north of the confluence of the Ohio and Mississippi rivers. The following discussion considers the hinterland and external connections of the Linn site, suggesting that it played a major role in late prehistoric politico-economic systems in the central Mississippi Valley commensurate with its location and size.

**The Linn Site Hinterland**

A number of Mississippian mound sites have been reported in the Mississippi floodplain of western Union County. Perrine (1873) observed a number of small mounds with burial remains within a 5 mi radius of the Linn site. The Ware site was reported as the
Figure 7. Chert debitage frequencies from the Linn Site, HSS collections.

"Mound on Running Lake" by Cyrus Thomas (1894:159), and a site with two mounds yielding stone-box graves was also noted by Thomas (1894:159-160) on Round Pond to the north of the Linn site. Merwin (1935:84) also reported two apparent small Mississippian mound groups (two to three mounds each) located between the Linn and Ware sites. Beyond such facts, site locational data in the region are too spotty to draw inferences about site-size hierarchies or the existence of sizable polities centering on the larger mound sites such as Linn, although such patterns are pervasive during the Mississippian period, and it would not be unusual to expect similar developments in southwestern Illinois as well.

The evidence for hoe manufacture on the Linn site raises intriguing questions about its relationship to other sites in the region and about the possible nature and size of polities in the region. At a minimum, the evidence suggests that—with the Hale site—there are at least two mound centers involved in the organization of hoe manufacture and exchange. It remains to be seen whether a similar involvement of other mound sites in the region will be identified, either in the Mississippi floodplain (such as Dogtooth Bend to the south) or in the upland drainages in the locale of the Mill Creek quarries. At present it is unknown whether any quarry areas are to be found in the uplands to the immediate east of the Linn site or whether Mill Creek chert is coming from the large, documented quarries in the vicinity of the Hale site. Assuming contemporaneity, however, it is likely that some form of regular interaction took place between the Linn and Hale sites. The issue of interest is whether that interaction involved dominance of the Linn site over the Hale site and surrounding quarries or whether the two sites represented peer polities (sensu Renfrew and Cherry 1986).

A crucial question is what impact the large-biface industry had on the internal political organization of the Linn site, i.e., whether resident elites were able to manipulate production and exchange to promote their own positions of status. This issue is especially rel-
evant to the ongoing debate over the nature of producer specialization in Mississippian societies (Muller 1984, 1986b; Yerkes 1983, 1986) and indicates that the Linn site may make an important contribution to the issue. Unfortunately, the degree of mound destruction indicates that many of the funerary artifacts and prestige goods that might contribute to answering such questions have been destroyed or dispersed. Yet at the least, the strategic location of the Linn site in relation to the Mississippi River suggests that it played a key role in moving Mill Creek hoes into the central Mississippi Valley. It is also likely that systematic surface collections and subsurface investigations still have a high potential for gaining important insights into the structure of the large-biface manufacturing process at the Linn site.

A related issue concerns the possible relationships between the Linn and the Ware sites, which are separated by a distance of about 15 km. The proximity of the Ware site to both Mill Creek and Kaolin chert-source areas has led some to propose that it may have played a key role in the distribution of digging implements made from those materials (May 1980:5; Winters 1981:31–32). Smithsonian collections from the site observed by the author demonstrate a high proportion of Kaolin chert bifaces and debitage. However, the ability of Ware site residents to control chert procurement and biface production from the Kaolin source is unknown and involves the same questions as the exploitation of Mill Creek chert by Linn inhabitants. There is no documentation of sizable quantities of Mill Creek chert debitage or bifaces from the Ware site, nor do the Smithsonian or HSS collections reveal a substantial use of Kaolin chert at the Linn site concomitant with large-biface production. The separate spheres of chert procurement and large-biface production suggest that the Ware and Linn sites may have been separate polities for a substantial portion of their occupations, despite the likelihood of interaction implied by their relative proximity (although the lack of Mississippian chronometric dates to establish the contemporaneity of the sites makes any such arguments tentative at best).

At a methodological level, such trends suggest that attempts to define the size of polities and the nature of their interaction are unlikely to be addressed through ceramic type distributions alone, which may be too coarse grained in and of themselves to address these questions satisfactorily. It is enlightening in this regard to note that the boundaries of the Contact period chiefdom of Coosa in the interior Southeast may have encompassed several ceramic traditions, including shell-tempered Dallas and grit-tempered Lamar wares (Hudson et al. 1985). At the other extreme, it is likely that a given ceramic tradition or style zone may include a number of relatively autonomous social entities.

This situation suggests that we may need to rely on numerous threads of evidence to assess levels of social integration. As implied here, distributional studies of the well-documented chert types and lithic technological traditions in that part of the central Mississippi Valley may lend themselves to these sorts of issues. As another example of this type, the distribution of the so-called Cahokia microdrill industry is one instance of the dispersion of a technological tradition that has been used as evidence of interregional interaction between the American Bottom and more distant areas, such as elsewhere in southern Illinois (Koldehoff 1990), northeastern Arkansas (Morse and Morse 1983:222–224), and northern Mississippi (Johnson 1987). It is obvious that the spatial dispersion of various technological traditions, ceramic types and traits, and site patterns do not cleanly overlap, and the extent of each may have different meanings; the challenge is to define the social significance of the relative distributions of the various artifact and feature categories.
External Relations

Milner (1990:7, 9) has pointed out that late prehistoric sites from the American Bottom to Thebes Gap in southwestern Illinois appear to make up two ceramic stylistic zones. One zone is represented by the American Bottom and extends southward about 100 km from Cahokia to the vicinity of the confluence of the Kaskaskia and Mississippi rivers; the other extends from that confluence south for another 100 km to Thebes Gap, and possibly beyond. Both Emergent Mississippian and Mississippian ceramic assemblages in the two regions are distinctive.

While it is extremely unlikely that the southern ceramic tradition that encompasses the Linn site represents a single polity, it does indicate a pattern of sustained regional interaction that deserves further scrutiny in future research. The issue is of special relevance when one is considering the degree and nature of the influence of Cahokia on Mississippian occupations outside the American Bottom region. Milner (1990:26–27) has forcefully argued that past models attributing an extensive and pervasive arm of influence to a highly centralized Cahokia polity do not stand up well under the present evidence. Intuitively, one would think that at least Cahokia would have maintained a strong sway over Mill Creek chert hoe production and exchange, given factors of relative proximity of the source area to the American Bottom and the large number of hoes that have been found there (e.g., Morse 1975:65; Winters 1981). Yet more recent studies examining the distribution (Brown et al. 1990) and production (Cobb 1989) of the hoes indicate that direct Cahokia influence on chert procurement and biface exchange has likely been exaggerated. Griffin’s (1952:188) examination of ceramics from the Linn and Hale sites also led to his conclusion that they did not reflect close ties to Cahokia or related polities in that region.

In light of the evidence, examination of the sphere of sustained regional and pan-regional interaction for the Linn site and adjacent polities would probably do best to look across the Mississippi River into Missouri rather than northward to the American Bottom. That is not to say that there were no north-south interactions, merely that the archaeological record as reflected in ceramic types and site configurations suggests that the routine inter-polity transactions and alliance networks characteristic of chiefly societies (Earle 1987) seem to link the Linn site environs closer to southeast Missouri than to the American Bottom. Chapman (1980:2–3) includes in his “Southeast Riverine Region” both the extreme southeast corner of the state that includes the “boothel” and the Mississippi River floodplain extending north almost to the St. Louis area (the latter portion being designated the “Mississippi Valley Central”), with Cape Girardeau representing the approximate dividing line between the two subregions. It is possible that Linn may manifest closer ties to the poorly known phases in the Mississippi Valley Central, but there are indications that it exhibits similarities to sites to the south as well.

For example, the structure of the Linn site closely resembles the compact, fortified Mississippian site type common to southeast Missouri, typified by mounds and a concentration of structures occupying a sizable portion of the area bounded by an embanked enclosure (e.g., Price 1978; Williams 1954). That pattern stands in contrast to such sites as Kincaid on the Ohio River in southeastern Illinois, for example, where a fairly expansive site area is defined by a palisade, but clusters of domestic structures represent a fairly small percentage of the enclosed site area (Muller 1978, 1986a:206). Farther to the south in western
Kentucky, fortified mound sites are prevalent, but they are often seen on bluff edges as well as in floodplain locations, a pattern not seen in southwestern Illinois (Edging 1985; Lewis 1986).

Although one is hesitant to push parallels in site plans too far, given the diversity of configurations evident within many regional traditions, it is noteworthy that the Linn site does conform to many of the specific spatial attributes of southeastern Missouri sites that Williams (1954:258–259) has documented. Attributes include embankment walls forming a rough rectangle on three sides, with the fourth side being delineated by a waterway or body of water; the main mound being located on the side of the plaza away from the water; and a plaza area being ringed by structures. The Linn site easily meets these criteria: the mounds apparently form a plaza in the southwestern quadrant of the enclosed area, with rows of structures found to the north and east and the main mound (A) on the side of the site opposite Clear Creek (Figure 2). Williams (1954:259–260) also noted that most of the southeastern Missouri mound sites appeared to be aligned on a north-south axis, but he was hesitant to assign a cultural meaning to that pattern because most of the waterways in the region run north-south, and the mere realignment of a site to a watercourse may have produced that orientation. It is worth mentioning, however, that in its original course Clear Creek ran southeasterly in the vicinity of the Linn site, yet the site was still clearly oriented on a north-south axis, as seen in the Cyrus Thomas rendering (1894:156). Thus, rather than constituting one of the four sides of the site, Clear Creek cuts at an angle across the northeast corner, apparently as a result of the intention to maintain a site orientation on the cardinal directions.

It is likely that the lack of consideration of southwestern Illinois above Thebes Gap with southeastern or eastern Missouri is more a function of the segregation of archaeological research pursuits by state lines (and in this case exacerbated by the formidable Mississippi River as the boundary) as much as any division in the material record—although the lack of research in southwestern Illinois is certainly a major factor as well. For this reason, Milner’s (1990) successful efforts at spatially demarcating ceramic traditions on the eastern side of the Mississippi River indicate that such a pursuit would be worth extending westward across the river in order to better understand Linn site interactions. In that vein, Lewis (1990) has not unexpectedly noted similar Mississippian traditions between western Kentucky and the Missouri bootheel area. It is known that there was an apparent sizable Mississippian occupation around the present-day river town of Cape Girardeau, Missouri, just north of Thebes Gap, of which we unfortunately know very little (Chapman 1980:186) but which likely represents an area that must have had some degree of sustained contact with Mississippi occupations in southwestern Illinois.

Possibly one of the more hotly debated issues to which future research on Linn can potentially contribute is the “vacant quarter” question. Stephen Williams’ (1990) postulation of a depopulation of the Central Mississippi, Northern Lower Mississippi, and Lower Ohio valleys during the late Mississippian period has drawn considerable interest, including counterarguments (Lewis 1990). Currently, much of the debate in the Mississippi Valley region is framed in terms of evidence (or lack thereof) from western Kentucky and southeastern Missouri. As additional research is conducted in southwestern Illinois, Linn and other Illinois sites falling within the vacant quarter can be expected to provide a broadened perspective on this issue.

A consideration of long-distance relations would be remiss without returning to the two bluff-top grave copper plates. Phillips and Brown (1978:175) describe the one with
human figures (Figure 4) as reflecting common elements in Braden styles from the Craig Mound at Spiro, incorporating intertwined snake-men, broken maces, and the attachment of tassels to the maces. It is unfortunate that the authors did not have access to a depiction of the second plate (Figure 3), relying instead on a description from Thomas (1894:161) that noted its similarity to a raptorial bird plate from Etowah. It is thus intriguing that the southern Illinois example (which is unfortunately incomplete) is extremely similar to the hawk cutout style from a Craig Mound burial cache (Phillips and Brown 1978:186–187) and less like the Etowah example referred to by Thomas. Some of the more overt similarities to Spiro examples include two oval “nodes” on the bird breast, legs approximately parallel to the length of the body, and a head profile turned to the right. In contrast, the Etowah plate has three breast nodes, legs jutting at an angle from the body, and a head appearing to be turned to the left.

It is uncertain what one can make of the similarity of the plates to Spiro styles, especially since it is now questioned whether the Braden style is indigenous to Spiro (Brown and Rogers 1989:5). Furthermore, the hawk plate cutout design described above is also quite similar to the specimens found in the famous Wulfing plate cache from southeastern Missouri (Fowke 1910). Yet it is of interest that a Mill Creek chert mace has been recovered from the Spiro site (Bell 1947). Few today would accept the notion of direct exchange between such distant locations as southern Illinois and eastern Oklahoma. Nevertheless, the styles of the southern Illinois plates do add intriguing data to the issue of long-distance exchange of artifacts and styles during the Mississippian period.

Conclusion

The available data on the Linn site point to the potential of using curated collections and old records for reconstructing important aspects of Mississippian systems, despite limitations imposed by ambiguous provenience and biased assemblages. Much of the evidence more directly relates to regional and external ties and emphasizes the fact that the late prehistory of the central Mississippi Valley will be woefully incomplete without taking into consideration the Mississippian presence in southwestern Illinois. Fortunately, the neglected eastern side of the Mississippi River in other parts of the central Mississippi Valley is now receiving systematic attention from a number of researchers (Lewis 1990; Milner 1990). What is conspicuously absent from the Linn site and its environs is information on intrasite organization, subsistence strategies, site chronology, and a host of other basic factors necessary for building an appreciation of the nature of Mississippian settlement in the region.

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