EVALUATING CAHOKIAN CONTACT AND MISSISSIPPIAN IDENTITY POLITICS IN THE LATE PREHISTORIC CENTRAL ILLINOIS RIVER VALLEY

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This paper employs a practice-based framework for investigating early Mississippian period culture contact and identity negotiation in the Central Illinois River Valley (CIRV) through the lens of foodways. The Eveland phase (A.D. 1100–1200) was a setting of significant cultural change as a result of the movement of Cahokian people, objects, and ideas into the region. Recent analysis of excavated materials from the Lamb site in the southern portion of the CIRV affords a closer look at this historical process. Using ceramic and pit feature data, I assess Cahokian influence on traditional Late Woodlandera culinary practices. I conclude that although local residents were actively adopting some aspects of Mississippian culture (including Cahokia potting traditions), they retained traditional Late Woodland organizational practices of cooking, serving, and storing food. By placing the organization of foodways at the center of this study, this paper illuminates another dimension of Cahokian contact in the region.

Este artículo utiliza un enfoque basado en la teoría de la práctica para investigar el contacto cultural y la negociación de identidades durante el periodo Mississippian Temprano en el valle central del río Illinois (CIRV), a través de la óptica de las costumbres alimentarias. La fase Eveland (AD 1100–1200) fue un escenario de cambio cultural significativo como resultado de la circulación de personas, objetos e ideas procedentes de Cahokia en la región. Los recientes análisis de materiales excavados del sitio Lamb en la parte sur del CIRV permiten un examen más detallado de este proceso histórico. Usando datos de la cerámica y los pozos del sitio, evalúo la influencia de Cahokia en las prácticas culinarias tradicionales de la población Late Woodland en esta area. Concluyo que aunque los residentes locales estaban adoptando activamente algunos aspectos de la cultura Mississippian (incluyendo la cerámica de estilo Cahokia), conservaron las prácticas organizativas tradicionales de cocinar, servir y almacenar alimentos. Al colocar la organización de las costumbres alimentarias en el centro de este estudio, el presente ensayo ilumina otra dimensión del contacto cultural con Cahokia en la región.

ow are identities and practices created and transformed by the movement of peo-Lples, objects, and ideas between regions and across social boundaries? Archaeology is well positioned to shed light on this issue because two of its central study subjects, space and objects, played a key role in how past social agents negotiated their social, political, economic, and cultural relations (Silliman 2010:29; see also Joyce and Hendon 2000; Pauketat 2001a; Thomas 2000). Domestic foodways represent an ideal arena in which to investigate identity and practice, in so far as processes of food preparation, consumption, and storage require the use of various material media (ceramics, processing implements, foodstuffs) as well as movement through various spaces, pub-

lic and private, that provide opportunities for social interaction or restrictions on visibility and community integration (Gifford-Gonzalez and Sunseri 2007; Twiss 2012; Wright 2000). In this study, I employ a practice-based framework for investigating early Mississippian culture contact and identity negotiation in the Central Illinois River Valley through the lens of foodways, and, in doing so, I consider how archaeologists can address prehistoric contact situations in ways that move analyses beyond classificatory and categorical measures of change and continuity.

It is my goal in this article to articulate recent applications of postcolonial theory in historical archaeology and anthropology (e.g., Comaroff and Comaroff 1991; Jordan 2009; Martindale 2009;

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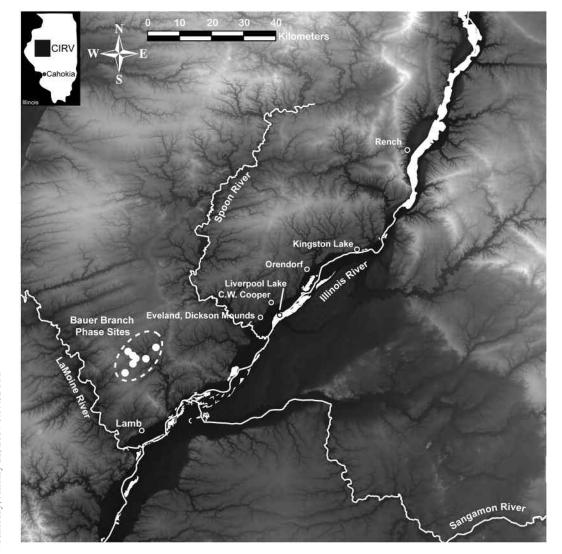


Figure 1. Map of the Central Illinois River Valley with relevant sites.

Silliman 2005; Thomas 1991; van Dommelen 2006) with studies of material practices in the more distant past of native North America. Archaeologists engaging with postcolonial theories have generated a productive set of analytical frameworks for understanding changes in identity, social organization, and material practices that resulted from European/Indigenous colonial encounters. These approaches have good potential for investigating similar issues in Mississippian (A.D. 1000–1500) archaeology (see, e.g., Alt 2006), and for precolumbian indigenous societies more broadly, with implications for the ways we interpret archaeological assemblages from pre-

historic contact settings as well as the types of datasets we select to analyze.

The early Mississippian expansion of Cahokian peoples, ideas, and practices has long been of interest to archaeologists. The political consolidation of Cahokia, the most complex prehistoric polity in North America (Emerson 1997; Fowler 1997; Kelly 1990a; Milner 1990; Pauketat 2004; Pauketat and Emerson 1997), had far-reaching impacts for indigenous groups in the Late Prehistoric Southeast and Midwest. Indeed, archaeologists have recognized a wide range of changes in material culture and spatial organization resulting from the northward expansion of Mississispian

frontiers during the eleventh and twelfth centuries, which resulted in the rapid transformation of native lifeways throughout portions of the upper Mississippi Valley (Caldwell 1964; Emerson and Lewis 1991; Pauketat and Emerson 1997; Stoltman 2000). However, the historical details of culture contact and the resulting adoption of Mississippian traditions by Late Woodland groups in Cahokia's hinterlands remain debated among local scholars.

In this study, I examine the impact of Cahokian influence on Late Woodland groups in the Central Illinois River Valley (CIRV) of west-central Illinois, with data from the early Eveland-phase (A.D. 1100–1150) Lamb site as a case study (Figure 1). The Eveland phase (A.D. 1100–1200) was a setting of significant cultural change as a result of the movement of Cahokian people, objects, and ideas into the region, evidenced archaeologically by the appearance of Mississippian ceremonial buildings, mounds, and mortuary complexes, as well as finely crafted Cahokia-style artifacts, including Ramey Incised and Powell Plain pots, tri-notched arrow points, and copper ornaments (Conrad 1989, 1991; Harn 1991). CIRV scholars have examined various artifact traditions, architectural construction techniques, mortuary practices, and settlement patterns in relation to American Bottom assemblages to broadly document interaction between Mississippian and local Late Woodland groups (e.g., Conrad 1989, 1991; Esarey 1996, 2000; Harn 1975, 1978, 1991). Less understood are the impacts on local foodways in these northward-expanding Mississippian frontiers. My interest lies in understanding what changes in foodways can tell us about the scale and depth of Cahokian contact—how influential were Cahokians in the broader Mississippian world?

Using data from the Lamb site in the southern portion of the CIRV (see Figure 1), I examine the ways in which the site's early Mississippian residents prepared, served, and stored foodstuffs, as a lens to examine the impact of Cahokian influence on Late Woodland-era culinary practices. To this end, I explore patterns in ceramic data as well as morphometric and artifact data from pit features. A close consideration of pit features offers a unique perspective because (1) pit features are a lesser-used medium for understanding changes in cultural practice, and (2) archaeological discus-

sions of food often focus on the foods themselves, in terms of contributions to ancient diet, rather than on processes of food preparation, specifically cooking (Atalay and Hastorf 2006:305). Foodways are a useful dimension along which to analyze culture contact scenarios, as they are of profound importance in social life, structuring daily social relations and reinforcing shared cultural values (e.g., Meigs 1988; Voss 2005; Wright 2000). By placing the organization of food preparation, serving, and storage at the center of this study, I hope to illuminate and engender another dimension of Cahokian contact.

Specifically, I argue that although the Evelandphase residents at the Lamb site were actively adopting some aspects of Mississippian culture (including Cahokia potting traditions), they retained traditional Late Woodland organizational practices of cooking, serving, and storing food. Certainly, the impact of Cahokian contact was transformative for the local inhabitants of the Eveland-phase CIRV, resulting in the rapid adoption of new politico-religious beliefs (Conrad 1989, 1991; Harn 1991; Wilson 2012a) as well as changes in subsistence strategies, including intensified maize production (Bardolph 2012; VanDerwarker et al. 2013). Alongside these changes, however, is evidence for a rural persistence of traditional household and community organization related to cuisine. To set the stage for assessing this dynamic, I turn to a brief review of recent theoretical developments related to culture contact, identity, and practice, followed by regional and historical background and then a case study from the CIRV.

Theorizing Identity and Practice

While studied broadly in archaeology, a wealth of research on social identity is situated within culture contact studies. Although there has been critique of the unproblematized use of the term "culture contact" (e.g., Silliman 2005), I use the term as a heuristic device for examining encounters of diverse groups that resulted in cultural interactions and entanglements (*sensu* Thomas 1991). This definition is particularly important, as "contact" is often thought of in terms of the pre-contact/post-contact divide of the sixteenth-century colonial era; however, culture contact scenarios extend back into the ancient past and are not nec-

essarily structured by violence or power imbalances. Indeed, in recent years, scholars have (necessarily) complicated perceptions of power relations in situations of contact, rejecting essentialized colonizer/colonized dichotomies that solely stress notions of power *over* one group by another and the rupture of native communities from their past (Voss 2005:461; see Panich 2013; Silliman 2005; Wilcox 2009). This facet of recent research articulates with a critical element of the politics of postcolonial and Indigenous archaeologies, the recognition that even in overtly asymmetrical colonial encounters, influence and change from dominant groups is not all encompassing. Groups selectively adopt and filter objects and ideas through their local perspectives, cultural referents are altered, and historical traditions become reconfigured (Pauketat 2001a:6; see also Alt 2006; Jordan 2009; Stein 2005).

The challenge confronting archaeologists is how to operationalize these interactions, particularly in the absence of textual evidence. A longstanding assumption by archaeologists has been that either change or continuity from contact encounters comprises outcomes that are recognizable (if not measurable) through material remains, and therefore applicable to the cultural groups that produced those materials. However, interpretations of data are complicated by problematic assumptions that single types of objects or practices (pottery, architectural techniques, burial styles) are representative of a single group, class, or identity of people. Silliman (2009; see also Loren 2001) highlights this important interpretive problem in culture contact studies—that archaeologists, when confronted with various materials, require some form of categorical scheme to make sense of them. At the onset of analysis, data must be classified into taxonomically meaningful categories, often created to identify geographic or temporal variability (e.g., European/Indigenous, Historic/Prehistoric, Late Woodland/Mississippian).

As a result, those pre-defined categories take on "ontological" statuses (Silliman 2009:213), generating problematic expectations of what identities should look like archaeologically. Deciding a priori what is local vs. non-local taxonomically does not allow for consideration of how objects may have been differentially adopted, interpreted, or reused by diverse groups. Pushing these colonial taxonomic distinctions further into the past, we can think about how we evaluate prehistoric contact situations in the absence of textual evidence, and about the categories we construct to organize and understand our data. Our approaches are necessarily materialist, and our understandings of past cultures become structured by stages and phases, with distinctive horizon markers that fall into chronological periods with clear-cut beginning and end dates (e.g., Late Woodland, Mississippian).

To avoid the pitfalls of rigid categorical schemes, archaeologists have turned to relational theories that stress human action for evaluating social identity (e.g., Dobres 2000; Hegmon and Kulow 2005; Lightfoot et al. 1998; Pauketat 2001b). Current work grounded in practice theory (Bourdieu 1977; Giddens 1984) is centered on how identities are constructed through material media and use of space. The way people make things, or do things that result in material patterns, "typically and perhaps mainly represent choices that are learned in participation in particular social and cultural settings" (Wills 2009:286). Thus, the complexity of prehistoric contact encounters can be best understood through multiple lines of evidence that evaluate (1) objects and spaces that are used to overtly express and communicate certain identities and affiliations; and (2) behind-thescenes contexts and daily practices that unconsciously structure and reify social identities (the habitus of domestic routines, see Bourdieu 1977). To demonstrate the utility of this approach, I turn to an archaeological study of foodways from the Eveland-phase (A.D. 1100–1150) Lamb site, situating my case within broader discussions of eleventh- and twelfth-century processes of Mississippianization.

Regional Background

The mid-eleventh century emergence of political complexity in the greater Cahokian area had a profound influence on neighboring groups. Located in the American Bottom portion of the Mississippi floodplain, Cahokia was the largest Precolumbian city center in North America, with a multi-tiered settlement hierarchy, an estimated peak population of 8,000–15,000 people, and more than 100 earthen monuments (Fowler 1997; Kelly 1990a; Milner 1986, 1990; Pauketat and Emerson 1997). Cahokia-centric models for the origin and spread of Mississippian culture (e.g., Pauketat 2002) emphasize the uniqueness of the Cahokia polity, where a new social order was created and disseminated through material expressions of Mississippianism across the Southeast and Midwest beginning around A.D. 1050. Different regional groups made local organizational changes in order to generate aspects of Mississippian identity, evidenced by architectural shifts from single-post to wall-trench houses, reinvented religious expression, and the new and intensified crafting of material items, including shell beads, adze and hoe blades, triangular arrowheads, celts, and shelltempered, red-slipped, incised pottery (Kelly 1990a; Milner 1990; Pauketat 1998; Yerkes 1983).

Scholars, including Emerson and Pauketat (2002; Pauketat 1997), argue that by the Lohmann phase (A.D. 1050–1100), Cahokians were increasingly engaged in producing new local symbols that promoted their unique political community. The rapid conversion to wall-trench architecture at Cahokia and the surrounding uplands has been interpreted as a symbolic statement of a new Mississippian identity or authority (Emerson 1997; Mehrer and Collins 1995; Pauketat and Alt 2005). The magnitude of feasting debris in central locations such as sub-Mound 51 at Cahokia indicates the importance of commensal politics in the acceptance and accommodation of Cahokian organization, identity, and lifeways (Pauketat et al. 2002:275). The archaeobotanical record in the American Bottom reveals a substantial increase in maize production during the period of Mississippian political consolidation (Lopinot 1997; Simon and Parker 2006), likely tied to its symbolic value and currency in competitive prestige-building activities (sensu Scarry 1993).

The Stirling phase (A.D. 1100–1150), the apogee of Cahokia's political power, witnessed a further elaboration in the rules for cooking and serving food (Johannessen 1993:202). A greater variety of vessels were used for presentation and serving, which scholars link to increasingly hierarchical negotiations involving foodways (Pauketat et al. 2002; Wilson 1999; see also Welch and Scarry 1995). Among these vessels were well-crafted, highly burnished Ramey Incised jars that would have served as potent symbolic expressions of Mississippian cosmological order and

worldview (Emerson 1989; Pauketat and Emerson 1991). Beyond the American Bottom proper, Cahokia-style material culture appears around A.D. 1050 in the archaeological record of various regions of the northwestern Midwest, including the CIRV, the Lower Illinois River Valley, the Apple River Valley of northwestern Illinois, the Upper Mississippi Valley (including the driftless area of southeastern Wisconsin), and the Red Wing area of Minnesota (Delaney-Rivera 2004; Emerson and Lewis 1991; Green and Rodell 1994; Price et al. 2007; Stoltman et al. 2008). Scholars have proposed a range of direct and indirect contact scenarios, including detached emulations of Cahokia by local people; limited engagements with or small-scale movements of southern peoples; or whole-group site-unit intrusions into northern regions. Recent analyses of excavated materials from the CIRV afford a closer look at this historical process.

Mississippianization in the CIRV

Conrad (1991) divides the Mississippian occupation of the CIRV into four sequential phases—the Eveland (A.D. 1100–1200), Orendorf (A.D. 1200–1250), Larson (A.D. 1250–1300), and Crable (A.D. 1300–1450) phases, which correspond roughly to the growth and florescence of Mississippian culture in the American Bottom. There is limited evidence of early contact with Cahokia in the northern CIRV during the preceding Mossville phase (A.D. 1050–1100); ceramics recovered from the Rench site exhibit a mix of Cahokian and local Late Woodland stylistic influences (McConaughy et al. 1993:87). A strong Cahokia Mississippian influence is witnessed throughout the region during the early Eveland phase (A.D. 1100–1150) (Conrad 1991), the time period that is the focus of this paper.

Based on site distribution and ceramic stylistic data, scholars suggest that two contemporaneous Late Woodland groups occupied the CIRV, represented by the Bauer Branch phase in the south and the Maples Mills phase in the north (Esarey 2000; Green and Nolan 2000). I focus my discussion on the Bauer Branch phase, as the Lamb site (located in the southern CIRV) exhibits cultural continuity with local Bauer Branch traditions. Green (1976, 1987) originally defined the Bauer Branch phase as dating to A.D. 600–950, with sites primarily lo-

cated in the Sugar Creek and LaMoine River drainages in Schuyler and Brown counties. Diagnostic of the Bauer Branch phase is a distinctive grit-tempered, cordmarked, punctated-shoulder, notched-lip pottery series (Green 1976, 1987; Green and Nolan 2000:364). Additional investigations have extended the spatial boundaries of the Bauer Branch complex to include the southern Illinois Valley floodplains (Esarey 1988), and the Lamb site ceramic data suggest that Bauer Branch traditions persisted in the region until the period of contact with Cahokia-Mississippians, beginning around A.D. 1100 (see below).

Situated on bluff tops and upland ridges, Bauer Branch settlements are characterized by small residential units forming dispersed communities (Green and Nolan 2000:362). Burials with multiple interments and individuals with embedded projectile points indicate inter-group violence; however, Wilson (2012b:526; see also Emerson 2007) argues that regional hostilities were sporadic and small in scale, citing the lack of village fortifications in the area. Intrasite settlement data indicate that Bauer Branch-phase residents constructed both cold and warm weather domiciles, using deep pit features for storage and earth ovens (Green 1987:133, 251). Subsistence data from upland sites suggest low level food production of native starchy/oily seed crops and a limited amount of maize, combined with the collection of wild plants; faunal exploitation likely was focused on deer, fish, and freshwater mussels (Green 1987).

The introduction of Mississippian culture in the region resulted in important changes in settlement, subsistence, and artifact traditions. Situated in resource-rich floodplain and blufftop environments, early Mississippian settlement organization in the CIRV consisted of dispersed habitations linked to nodal ceremonial centers and mortuary complexes (Conrad 1989); settlements do not appear to be fortified. In contrast to the American Bottom, political development occurred at a much smaller scale in the CIRV; a regionally consolidated polity never developed, and dispersed settlement areas appear to have been politically autonomous (Conrad 1991). Archaeobotanical data from Eveland-phase sites indicate that subsistence strategies in the region changed with the transition to the early Mississippian period, including an intensification of maize production and decrease in

nut collection (VanDerwarker et al. 2013). A range of finely crafted Cahokia-style material culture also appeared during the Eveland phase; early excavations at the Eveland site in Fulton County revealed evidence of wall-trench construction and Cahokia-style ceramics manufactured with local pastes (Conrad 1991; Harn 1975, 1991). Eveland has been interpreted as a nodal religious center for outlying communities; among the excavated structures at the site were three burned Mississippian ceremonial buildings, including a circular structure, a large rectangular building with a ramped entryway, and a cross-shaped building (Conrad 1989; Harn 1991). With no local precedent for these types of structures in the Woodland-era CIRV, Cahokian religion appears to have played an important role in the Mississippianization of the region. Whether the attraction of Cahokia Mississippianism to local Late Woodland groups was religious, political, economic, or otherwise, rapid affiliations with Cahokians and/or Cahokia-style material culture may have downplayed long-standing ethnic divisions among local groups in the region (Wilson 2013).

Citing the absence of fortifications and a paucity of violent skeletal trauma during the Eveland phase, Conrad (1991:124) suggests that initially, Mississippians were welcomed or invited into the region, and that abrupt cultural changes occurred as a result of migration. However, biodistance research negates the movement of a large number of people from the Cahokia region into the CIRV (Steadman 1998, 2001), and Wilson (2012a; Wilson and Delaney-Rivera 2012) argues that the appearance of Cahokia-style material culture and Mississippian practices was structured more by strategies of emulation by local groups than by in-migration of Cahokians. Pauketat (2004:114, 2013) suggests that people from various regions of the Upper Mississippi Valley made pilgrimages to Cahokia, and, upon returning home, replicated what they had seen, overlaying new Cahokian principles and cultural practices onto their local traditions. Thus, Mississippianization may have been driven more by the movement of ideas than by migration of Cahokians—objects may have served as agents of change along with (or possibly more so than) the people that produced them or introduced them in the Eveland-phase CIRV. Regardless, the arrival

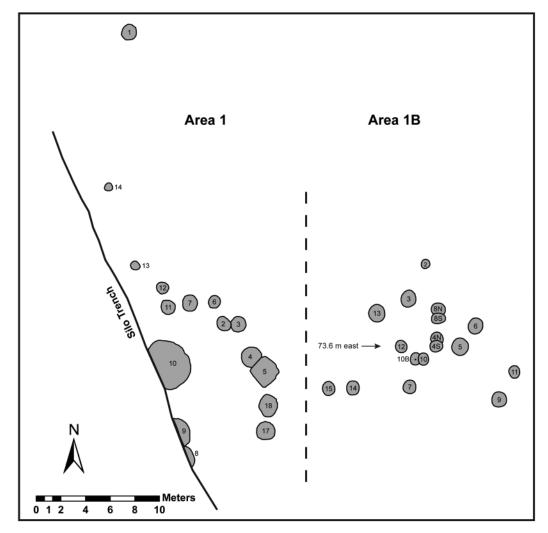


Figure 2. Plan map of the Lamb site excavations.

of Cahokian groups (small or large), objects, and ideas resulted in rapid changes to the lifeways of local Late Woodland groups, evidenced by many sites with both distinctively Mississippian and hybridized Mississippian/Late Woodland archaeological assemblages. But to what extent did Mississippianization impact local organizational conventions in the Eveland-phase CIRV, particularly with regard to foodways?

To assess this issue, I turn to my case study. The Lamb site is a small rural settlement in Schuyler County in west-central Illinois (see Figure 1). Salvage excavations conducted in 1990 by avocational archaeologist Glenn Hanning uncovered 33 pit features in two excavation areas (Figure 2); no

structures were documented. As all but two pits contained a mix of Mississippian and Late Woodland ceramics in the cultural fill, I assume that the Lamb site sherds and pits are contemporaneous in manufacture or use (i.e., in terms of site occupation), rather than representative of discrete temporal occupation sequences. The material assemblage (ceramics, chipped stone, and groundstone tools)¹ indicates a wide spectrum of domestic activities, including the processing, consumption, and storage of foods, which comprise terrestrial and aquatic animals as well a variety of plant cultigens and wild plants. An abundance of cultigens, including maize, and the presence of large storage pits (discussed below) suggest that inhab-

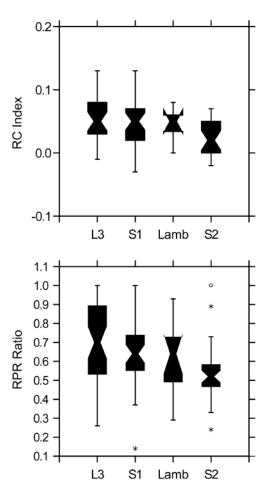


Figure 3. Box plots of rim protrusion ratios (RPR) and rim curvature (RC) indices from the Lamb site and Cahokia Tract 15A-Downtown ceramic assemblages. Phases: L3 = late Lohmann (A.D. 1050–1100), S1 = early Stirling (A.D. 1100–1150), S2 = late Stirling (A.D. 1150–1200).

itants cultivated and stored crops at this residential site (see also VanDerwarker et al. 2013).

Ceramics in Context

The Lamb ceramic assemblage comprises 833 sherds (6732.0 g) recovered from pit features. Following standard regional methodology (Holley 1989; Pauketat 1998:33), vessels were seriated using categorical and continuous attributes related to rim shape and lip form. Rim curvature (RC) indices and rim protrusion ratios (RPR), combined with the presence of Cahokia-style Powell Plain and Ramey Incised jars (see below), indicate an early Eveland-phase (A.D. 1100–1150) date for

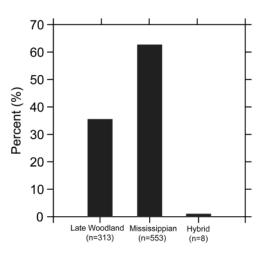


Figure 4. Bar chart of relative percentages of the ceramic assemblage, by sherd type.

the Lamb site, coeval with the Stirling phase in the American Bottom (Figure 3). Indeed, box plots reveal that the Lamb vessels fall well within the range of documented rim attributes for early Stirling-phase jars from the Cahokia Tract-15A assemblage (Pauketat 1998:195-207). CIRV scholars are in general agreement that Mississippian ceramics in Eveland-phase assemblages represent local production as opposed to trade items; thin section analyses from the Eveland site and associated Dickson Mounds mortuary complex indicate that Mississippian-style vessels were manufactured from local clays (Harn 1991:142–143).

The Lamb ceramic data reveal the extent to which the assemblage appears "Mississippianized" (Figure 4). Sixty-three percent of the sherds (n = 553) are diagnostically Mississippian; they are shell-tempered, burnished, brown-toblack-exterior-slipped, Ramey Incised, or otherwise fall into categories with attributes of recognized Mississippian assemblages (see Holley 1989; Pauketat 1998). Of the remaining sherds, 35 percent (n = 313) are Late Woodland, and only a very small portion (less than one percent, n = 8) can be classified as "hybrid" (i.e., that they have attributes in overlapping categories).² The Lamb assemblage consists primarily of finely crafted Cahokia-style Powell Plain and Ramey Incised jars (Figure 5), the polished and decorated surfaces of which were clearly intended for display. Lacking stylistic antecedents, their appearance in the

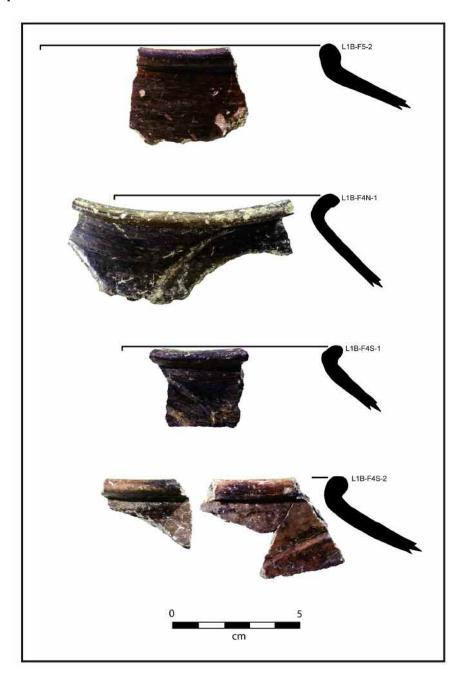


Figure 5. Ramey Incised jar profiles.

Eveland-phase CIRV would have stood in marked contrast to the thicker, grit-tempered, cordmarked Late Woodland vessels from the local Bauer Branch tradition (Figure 6).

The Ramey Incised vessels, embellished with cosmological symbolism related to fertility and

world renewal (Emerson 1989; Pauketat and Emerson 1991), may have served as vehicles for the Lamb site residents to communicate ties to Mississippian authority and worldview (*sensu* Wobst 1977). The Ramey jars are of particular interest, in that they reveal the extent to which the

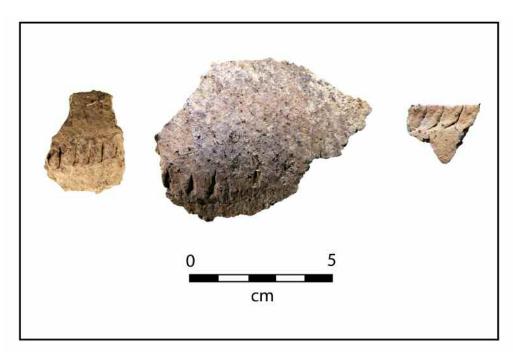


Figure 6. Grit-tempered, cordmarked Bauer Branch sherds.

Lamb ceramics are "Mississippianized"—minute details of Cahokian ceramic traditions are emulated with these vessels. Indeed, these wares are virtually indistinguishable from contemporaneous vessels produced in the American Bottom; the potters that produced the Lamb vessels were not simply adopting the Mississippian hallmarks of shell temper and dark slips, they were emulating the rolled red-slipped lips, angled shoulders, and trailed lines of Ramey Incised jars specifically characteristic of Cahokian pots (Pauketat 1998:195; see Figure 5)³. However, the adoption of certain manufacturing and decorative techniques does not strictly correspond to Cahokian ways of using pots at the Lamb site.

Vessel Function and Use

The Lamb assemblage, which comprises 25 vessels, is dominated by jars and contains a paucity of servingwares (Figure 7). The assemblage appears functionally similar to a typical Bauer Branch assemblage; Green and Nolan (2000:364; Green 1976) report that the majority of formal vessels in Late Woodland Bauer Branch assemblages are jars (few to no servingwares, e.g., bowls, are present). When the Lamb ceramic data are compared

with four contemporaneous American Bottom assemblages (representing a range of site types), it is evident that Lamb lacks the full suite of Mississippian serving and processing wares documented in the American Bottom during the coeval Stirling phase (Table 1). The Stirling-phase assemblages include a variety of implements used for cooking and storage (jars), processing (pans, funnels, and

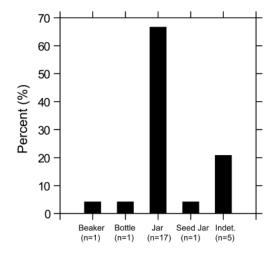


Figure 7. Bar chart of rim sherd percentages, by vessel type.

Table 1. Percentage Comparison of Formal vessel Rims of Coeval Assemblages from the American Bottom (AB), Central Illinois River Valley (CIRV), and Apple River Valley (ARV).

			Jars	Bowls	Seed Jars	Beakers	Bottles	Funnels	Stumpware	Pans
Site Name	Region	Site Type	%	%	%	%	%	%	%	%
Cahokia 15A ^a	AB	paramount center	56.0	16.0	6.7	12.0	5.3	2.7	1.3	0.0
Lohmann ^b	AB	mound center	60.9	25.0	7.7	1.9	3.2	0.6	0.6	0.0
Range ^c	AB	nodal farmstead	63.6	27.3	4.5	0.0	2.7	0.9	4.5	3.64
Miller Farm ^d	AB	small village	55.6	22.2	5.6	5.6	0.0	0.0	0.0	11.11
Lamb	CIRV	hamlet/farmstead	85.0	0.0	5.0	5.0	5.0	0.0	0.0	0.0
Lundye	ARV	village	81.4	17.2	1.4	0.0	0.0	0.0	0.0	0.0
John Chapman ^f	ARV	mound center	88.8	17.0	11.2	0.0	0.0	0.0	0.0	0.0

^aPauketat 1998.

stumpware), and serving (bowls, seed jars, beakers, and bottles). The functional similarities in the Stirling-phase assemblages appear to represent relatively shared organizational conventions of foodways involving ceramics in the American Bottom and that occurred regardless of site size or site structure.

The Lamb site, in contrast, has conspicuously fewer servingwares than the corresponding American Bottom sites. Although the Lamb assemblage contains a single seed jar, beaker, and bottle, it lacks bowls entirely, as well as food processing implements such as funnels and stumpwares (see Table 1). A calculation of serving-to-utility ware ratios (the number of servingwares divided by the number of cooking, storage, and processing vessels per assemblage) provides a useful way to examine this trend (Figure 8; see also Wilson and Delaney-Rivera 2012). Indeed, serving-to-utility ware ratios are substantially higher for the American Bottom sites. The Lamb assemblage exhibits proportionally less servingwares compared to other functional vessel types, and lacks the diversity of wares present in the coeval Stirling-phase American Bottom.

Thus, the Lamb site residents do not appear to have used pottery to engage in serving practices to the degree of their Cahokian neighbors. The diversity of functionally specific serving containers used in the American Bottom during the Stirling phase is indicative of the increasing complexity of Cahokian foodways. At the Lamb site, however, foodways appear to have been embedded in local Late Woodland conventions, which involved

cooking, storing, and serving in multi-purpose jars, a trend documented at Bauer Branch sites (Green 1976; Green and Nolan 2000). And while the Lamb ceramic sample is small, similar patterns of low serving-to-utility ware ratios are evident in ceramic assemblages from the Lundy site (Emerson et al. 2007) and John Chapman site (Millhouse 2012) in the Apple River Valley (see Figure 8). The Apple River Valley of northwestern Illinois witnessed a similar dynamic of contact with Cahokians, with cultural developments in the early Mississippian period also occurring in the absence of clear political hierarchies. It appears that while the Lamb site inhabitants quickly adopted Ca-

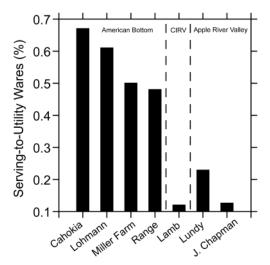


Figure 8. Bar chart of serving-to-utility ware ratios from contemporaneous vessel assemblages from the American Bottom, CIRV, and Apple River Valley.

bEsarey and Pauketat 1992.

cHanenberger et al. 2003.

^dWilson and Koldehoff 1998.

eEmerson et al. 2007.

fMillhouse 2012.

Delivered by http://saa.metapress.com Society for American Archaeology - American Antiquity access (392-89-746) IP Address: 128.111.165.177 Wednesday, January 22, 2014 6:07:32 PM hokian stylistic trends of manufacturing pottery; they retained local Late Woodland traditions in terms of the *types* of functional vessel classes they manufactured, and, by extension, the ways they served and stored food. This trend is further bolstered by an examination of the ways by which foods were prepared and stored in pits.

Foodways and Features

Thirty-three pits from the two areas at the Lamb site (see Figure 2) were documented; of these, 19 had sufficient data to merit functional analysis. A number of functional analyses of pits in the Southeast have been used to infer ancient practices of food processing, cooking, and storage (Fortier et al. 1984; Holt 1996; Kelly et al. 1987; Koldehoff and Galloy 2006; Stahl 1985). Determination of pit function is more problematic than determination of pit morphology, as the latter does not always determine the former (Holt 1996:63). Pit data must be used cautiously, as many taphonomic factors influence feature morphology; for example, some features may be uncharacteristically shallow due to plow shaving, skewing volume estimates and use-life assumptions based on depth (e.g., storage functions, see below). However, relative differences in pit depth and capacity, coupled with profile shapes, can lend great insight into pit function. It bears noting that pits often served as multifunctional facilities, "with complex use-lives and depositional histories" (Koldehoff 2002:43). Reuse of a pit for other purposes may mask its original function; for example, rocks may be removed from a cooking feature (e.g., earth oven) for use elsewhere (e.g., to line a storage pit), and ultimately be discarded in a refuse pit. Regardless of original function, pits often rapidly fill with erosional deposits or intentionally dumped refuse; it is unlikely that pits were dug primarily to serve as refuse pits (DeBoer 1988:4). Thus, as the Lamb pits all represent refuse disposal in their final context, I use morphometric analysis to infer possible original feature function, rather than solely as an assessment of artifact contents.

Pit Types and Functional Assignments

The Lamb site pits were placed into three types based on profile shape: basin-shaped, inslanted/flat-bottomed, and vertical-walled/flat-bottomed.

Based on morphology and principles of efficient food processing and storage, the pits were classified into three functional categories of multipurpose food processing, cooking, and storage. In total, 16 pits with sufficient morphometric data were confidently assigned to one of the three functional categories.⁴ Eight basin-shaped pits were classified as multipurpose food processing features. Food processing can encompass a wide range of activities associated with preparation for immediate consumption or storage, including threshing, winnowing, milling, leaching, grinding, etc. (Hastorf 1988:125). For the purposes of this study, I consider food processing to be activities that would not otherwise be considered a form of cooking. Although cooking activities—such as parching, roasting, boiling, baking, etc—are elements of food processing, in a technical sense, those activities, which require the use of fire or hot rocks, leave distinct archaeological signatures, and are classified in a separate category below.

Three inslanted/flat-bottomed pits, as well as one vertical-walled/flat-bottomed pit, were classified as *cooking* features, based primarily on the presence of heavily oxidized soil in each of the features. Evidence of in situ oxidation (Figure 9), along with an abundance of fire-cracked rock (see below), supports an interpretation that these cooking features were roasting pits or earth ovens. Whether rocks were heated by a fire built in the bottom of an oven, or heated and then placed in an oven, Lamb site residents appear to have practiced this hot-rock cooking method (rather than using formal hearths). Feature 10 in Area 1, a large, deep earth oven, may have been used for steam cooking (see Dering 1999; Thoms 2008), whereas three shallower cooking facilities (Features 3, 4, and 5 in Area 1) may have been used for parching, roasting, broiling, or open-air cooking (see Kelly 2007:73). Densities of non-chert lithics (NCL) lend support to the cooking functional assignment. As discussed earlier, artifact densities alone should not be used as an indicator of original feature function, as we cannot assume that feature contents represent primary refuse. However, a comparison of NCL by functional class, standardized by weight, reveals that features with insitu oxidation have the highest NCL density (Figure 10). The vast majority of the NCL are fire-cracked rocks (limestone and igneous rock),



Figure 9. Earth oven feature with evidence of in situ oxidation.

consistent with what we would expect a hot-rock cooking feature to look like archaeologically (Holt 1996:65).

Four vertical-walled/flat-bottomed pits were classified as *storage* pits. These pits are all relatively deep (mean depth 0.64 m) and capacious (mean volume 1.41 m³); indeed, these pits fall well within the range of storage pits identified by other researchers (DeBoer 1988:4; Holt 1996:63; Koldehoff and Galloy 2006:285–286). Although

depth and volume can be good indicators of the space and capacity needed to conduct a chosen activity (e.g., storage), a calculation of the ratio between orifice area and volume provides additional support for this functional argument. Storage pits should have relatively small orifice diameters to protect against animal intrusion and effects of the environment, but have the capacity to accommodate comparably large volumes, so that a large quantity of goods can be stored (Fortier 1991;

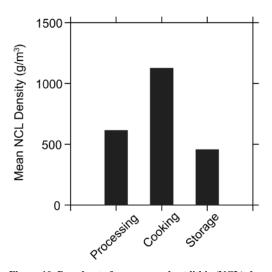


Figure 10. Bar chart of mean non-chert lithic (NCL) densities of pit features, by functional class.

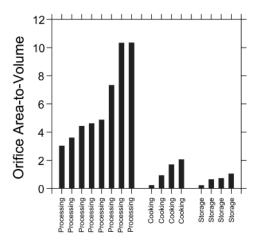


Figure 11. Bar chart of orifice area-to-volume ratios, by pit function.

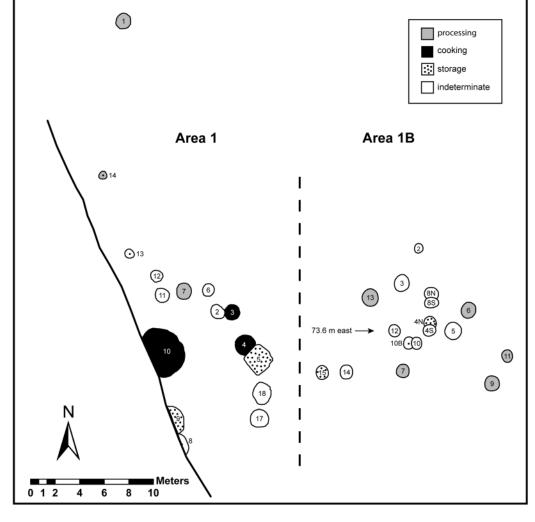


Figure 12. Plan map of spatial organization of subsistence activities.

Stahl 1985; Wilson 1917:87). Indeed, the Lamb storage pits have the lowest orifice area-to-volume ratios of the three functional types (Figure 11).

Spatial Organization of Foodways

With functional categories of pits assigned, we can consider the spatial organization of the Lamb site activities (Figure 12). I suggest that the two excavated areas represent communal spaces for activities related to foodways, probably at the edge of a small dispersed Eveland-phase village or cluster of homesteads. Because no structures were encountered in the excavation blocks, it appears that food processing, cooking, and storage were spatially separated from habitations. The practical ef-

forts of foodways appear to have been collaborative among residents, rather than individualized and private (i.e., restricted to within individual dwellings). This site-level organizational pattern suggests that few daytime activities took place inside; rather, cooking, eating, and other domestic routines took place outside in shared spaces.

If there was a focal point in this community, then it probablywould be associated with Area 1 (see Figure 12), where cooking, processing, and storage features are arranged in a circular fashion around a large central earth oven (Feature 10 in Area 1). The massive size of that central earth oven suggests that large quantities of food would have been processed at a single time, more than

could be consumed immediately by just one or two families. Such cooking events may have occurred for purposes of commensality or in preparation for bulk storage; such trends have been documented historically and cross-culturally (Dering 1999; Peacock 2008; Thoms 2008; Wandsnider 1997).

The Lamb site spatial pattern, including communal clusters of deep storage pits and earth ovens, is reminiscent of Late Woodland period settlements in the American Bottom (Kelly 1990b; Mehrer 1995), as well as Bauer Branch sites in the CIRV (Green and Nolan 2000). Kelly et al. (1987) document shared central pits in which foods were cooked and stored during the Late Woodland occupation of the American Bottom range site. Intrasite settlement data from six excavated Bauer Branch sites in the CIRV indicate that neighboring households used shared clusters of deep pit features as earth ovens and for storage during this time as well (Green 1987; Green and Nolan 2000:362). Eveland-phase Lamb site residents appear to have engaged in joint food preparation using the large earth ovens at the site, a continuation of a Late Woodland organizational trend. In contrast, the practice of earth-oven cooking had largely disappeared in the American Bottom by the coeval Stirling phase in the American Bottom. Kelly (1990b) documents this pattern qualitatively at the American Bottom range site; whereas communal cooking facilities were aggregated in shared public spaces during the Late Woodland period, earth ovens had largely disappeared by the early Mississippian period, and hearths were relocated inside structures. VanDerwarker et al. (2012) explore this pattern quantitatively through a comparison of feature data from several American Bottom sites, revealing a clear decrease in the number of exterior earth oven features by the early Mississippian period, also corresponding with an increase in the number of interior hearths inside domestic structures. These trends represent shifts from communal cooking in shared outdoor spaces to more private, individualized cooking involving heating foods in pots over hearths within private dwellings.

The presence of large outdoor storage pits at the Lamb site is significant as well. During the Late Woodland period in the American Bottom, pit storage facilities were located in outside shared spaces within household clusters (Mehrer 1995; Mehrer and Collins 1995). Green (1987; Green and Nolan

2000:362) describes this pattern for Bauer Branch sites in the CIRV as well. By the Stirling phase in the American Bottom, however, people had changed the ways they stored food, shifting from outdoor storage in communal clusters toward storage *inside* of dwellings, either in rafters or interior pits, likely indicating private, single-family storage (e.g., at the Cahokia ICT-II residential tract; see Mehrer and Collins [1995]). The size of walltrench houses also increased in the American Bottom at this time, possibly related to accommodation of internal storage. The Lamb site, in contrast, reveals retention of exterior (presumably communal) storage pits, rather than individualized private storage within homes. Overall, the spatial organization of the Lamb site, which comprises dense clusters of pit features, including outdoor communal earth ovens and storage pits, is more similar to earlier Late Woodland sites in the CIRV than to coeval Stirling-phase Mississippian sites in the American Bottom. The spatial layout of outdoor processing, cooking, and storage facilities would have structured the Lamb inhabitants' movements through the landscape throughout the course of day-to-day activities, as well as their broader cultural conceptions of communalism vs. privatism.

These trends are consistent with other findings that upland communities in the American Bottom retained traditional practices longer than their neighbors living in the floodplain areas directly in and around the Cahokia site (e.g., Alt 2002, 2006). In the upland Richland complex, for example, changes in pottery technology occurred as a result of influence from Cahokia, but traditional spatial relations were maintained—indeed, Alt (2006) documents the continuation of single-post house construction (as well as experimentation with hybrid post-and-trench construction [Pauketat and Alt 2005]), despite the rapid conversion to walltrench houses at Cahokia. While upland inhabitants were aware of Cahokian styles (and were willing to experiment with some new techniques), they did not adopt, wholesale, practices that would have fundamentally altered their spatial relations (Alt 2006:226).

Discussion: From Patterns to Practice

When evaluated together, the Lamb site ceramic and pit feature data present a nuanced portrait of

Delivered by http://saa.metapress.com Society for American Archaeology - American Antiquity access (392-89-746) IP Address: 128.111.165.177 Wednesday, January 22, 2014 6:07:32 PM local foodways in an era of Mississippian contact during the Eveland phase. We must be cautious in our interpretations, as the data come from a single settlement; regardless, the patterns presented point to the utility of rethinking the scale at which culture change can be investigated. In situations of contact, archaeologists often focus on the topics of either change or continuity, represented by the appearance of new material markers or retention of particular cultural elements in assemblages (Panich 2013:107; Silliman 2009). Following Silliman (2005), I shift my focus to consider change and continuity as part of the same process. A focus on practice, rather than the assignment of ethnicity through general categories of material culture, broadens our perspective to consider not only the presence of certain materials in an assemblage, but who was using them and how—an approach that may better reflect enculturated patterns related to individual and group identity (Silliman 2009). Whether a result of contact and interaction with Mississippian people, objects, or ideas, it appears that the Lamb site residents actively adopted stylistic and technological aspects of Mississippian pottery, likely to display connections to the expanding Mississippian frontier. The well-crafted Mississippian vessels would have been highly visible, perhaps emitting information to members of households and to visiting guests about ideas of place, origin, and cosmology (see Emerson 1989; Pauketat and Emerson 1991). The growing new Cahokian order would have had substantial impacts on local Late Woodland communities indeed, Mississippianization, which included profound religious influences, resulted in the spread of unified artifactual traditions across the CIRV, possibly quelling Late Woodland-era hostilities between groups that had previously demarcated sharp social boundaries through differences in their material culture (Wilson 2012b:526).

However, the ready adoption of high-visibility Mississippian wares may have been more of a response to changing social, economic, or symbolic pressures than a fundamental signifier of changes in identity (see Peelo 2011:659). While objects including ceramic vessels may have been used to express affiliation with Cahokians, it is equally important to consider the behind-the-scenes contexts and daily practices that would have unconsciously structured identity formation for the Lamb site

inhabitants. Styles and symbols are often actively used to express social boundaries, cosmologies, and power; however, identities are also (if not primarily) defined and inscribed through routinized quotidian and periodic action, much of which occur as part of daily household practice.

Indeed, traditional Late Woodland methods of food preparation, presentation, and consumption do not appear to have changed in tandem with the adoption of Cahokian pottery styles. The diversity of servingwares in the early Mississippian American Bottom has been linked to the negotiation of hierarchical social relations (Pauketat et al. 2002:257; Wilson 1999; see Welch and Scarry 1995;) and an elaboration in the rules for cooking and serving food (Johannessen 1993). The fact that the Lamb assemblage lacks this frequency and diversity of servingwares is noteworthy; the site residents do not appear to have been pulled into complex social negotiations involving foodways (at least not to the degree of their Cahokian neighbors). With an absence of complex political hierarchies in the CIRV, foodways at the Lamb site likely were not structured in relation to competition, aggrandizement, etc. Rather, vessels likely served a multipurpose cooking/storage function in the way that earlier Late Woodland vessels did. A similar dynamic is witnessed at the Lundy and John Chapman sites in the Apple River Valley—while emulating certain high-visibility Cahokian stylistic trends, the Lamb site residents (as well as their Apple River Valley neighbors) appear to have retained many traditional, enculturated ways of organizing their everyday lives.

This consideration extends to the Lamb site pits as well. In contrast to corresponding Stirlingphase settlement data from the American Bottom, which indicate shifts toward restricted/privatized cooking and storage practices within dwellings by the early Mississippian period, the Lamb site residents retained traditional communal modes of outdoor cooking and storage. It bears noting that most, if not all, of Lamb site foodways, from producing/procuring to processing to consuming to storing, may have been communally organized to some degree. Given the presence of large earth ovens and storage pits and the paucity of formal, individualized serving vessels, the practical work of feeding the community at Lamb probably involved the collaborative work of men, women, and children. These communal values stand in contrast to the American Bottom region, which witnessed shifts toward increasing privacy and hierarchy during the Stirling phase.

Conclusion

The intent of this article has been to offer a closer look at Cahokian contact in the Late Prehistoric CIRV, and to employ a postcolonial framework for evaluating identity construction. In an examination of a specific social process—in this case, Mississippianization—my goal has been to extend analysis beyond just that of the materials themselves, in a way that allows us to imagine how individuals *used* material culture and spaces in recombinant ways that (re)shaped aspects of their social identities. To this end, the Lamb site ceramic assemblage and pit feature data were examined in relation to their functional and culinary significance. This study demonstrates the utility of multiple lines of evidence to evaluate organizational changes in practice rather than solely assessing material attributes as markers of prehistoric identities. Mississippian influence was profound in the Eveland-phase CIRV, resulting in important changes in social, economic, and symbolic relations in the region—new politico-religious beliefs were embraced by local peoples (Conrad 1989, 1991; Harn 1991; Wilson 2012a), and labor and scheduling likely were reoriented with changing subsistence strategies, including intensified maize production (Bardolph 2012; Van-Derwarker et al. 2013).

However, what surficially might appear to be a wholesale adoption of Mississippian identity through the appearance of certain horizon markers (i.e., Ramey Incised or Powell Plain pots) becomes a more complicated negotiation of identity and practice when other lines of evidence are considered, including the functional uses of different vessel types and the spatial organization of activities related to foodways. The juxtaposition of Mississippian and Late Woodland attributes in an archaeological assemblage can be interpreted beyond a categorization of cultural change or continuity; rather, those materials represent additions and transformations to Late Woodland practices set within social remembering. The lines of evidence I have discussed in this paper, including ceramics and feature data, highlight the relational nature of prehistoric identity construction—Lamb site residents in the Eveland-phase CIRV appear to have been negotiating an identity that responded to important changes and influences from Cahokia, while retaining elements of traditional social and economic organization. While this community expressed their material connection to a growing Mississippian frontier, earlier traditions and communal sensibilities were preserved in memory and practice.

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References Cited

Alt, Susan M.

2002 Identities, Traditions, and Diversity in Cahokia's Uplands. Midcontinental Journal of Archaeology 27:217–235.
2006 The Power of Diversity: The Roles of Migration and Hybridity in Culture Change. In Leadership and Polity in Mississippian Society, edited by Brian M. Butler and Paul D. Welch, pp. 289–308. Occasional Paper No. 33. Center for Archaeological Investigations, Southern Illinois University, Carbondale.

Atalay, Sonya, and Christine A. Hastorf

2006 Food, Meals, and Daily Activities: Food Habitus at Neolithic Çatalhöyük. American Antiquity 71:283–319.

Bardolph, Dana N.

2012 Community, Cuisine, and Cahokian Contact: Changes in Mississippian Plant Foodways in the Central Illinois River Valley. Paper presented at the 35th Annual Meeting of the Society of Ethnobiology, Denver.

Bourdieu, Pierre

1977 *Outline of a Theory of Practice*. Cambridge University Press, Cambridge.

Caldwell, Joseph R.

1964 Interaction Spheres in Prehistory. Illinois State Museum Scientific Papers Vol. 12. Springfield.

Comaroff, Jean, and John L. Comaroff

1991 Of Revelation and Revolution: Christianity, Colonialism, and Consciousness in South Africa, Volume 1. University of Chicago Press, Chicago.

Conrad, Lawrence A.

1989 The Southeastern Ceremonial Complex on the Northern Middle Mississippian Frontier: Late Prehistoric Politico-Religious Systems in the Central Illinois River Valley. In *The Southeastern Ceremonial Complex: Artifacts and Analysis*, edited by Patricia Galloway, pp. 93–113. University of Nebraska Press, Lincoln.

1991 The Middle Mississippian Cultures of the Central Illinois Valley. In Cahokia and the Hinterlands: Middle Mississippian Cultures of the Central Illinois Valley. In Cahokia and the Hinterlands: Middle Mississippian Cultures of the Central Illinois Valley.

sissippian Cultures of the Midwest, edited by Thomas E. Emerson and R. Barry Lewis, pp. 119–156. University of Illinois Press, Urbana.

DeBoer, Warren R.

1988 Subterranean Storage and the Organization of Surplus: The View from Eastern North America. Southeastern Archaeology 26:1–20.

Delaney-Rivera, Colleen

2004 From Edge to Frontier: Early Mississippian Occupation of the Lower Illinois River Valley. Southeastern Archeology 23:41–56.

Dering, Phil

1999 Earth-Oven Plant Processing in Archaic Period Economies: An Example from a Semi-Arid Savannah in South-Central North America. *American Antiquity* 64:659–674.

Dobres, Marcia-Anne

2000 Technology and Social Agency. Blackwell, Malden, Massachusetts.

Emerson, Thomas E.

1989 Water, Serpents, and the Underworld: An Exploration into Cahokia Symbolism. In *The Southeastern Ceremonial Complex: Artifacts and Analysis*, edited by Patricia Galloway, pp. 45–92. University of Nebraska Press, Lincoln.
 1997 *Cahokia and the Archaeology of Power*. University of

Alabama Press, Tuscaloosa.

2007 Cahokia and the Evidence for Late Pre-Columbian War in the North American Midcontinent. In North American Indigenous Warfare and Ritual Violence, edited by Richard J. Chacon and Ruben G. Mendoza, pp. 129–148. University of Arizona Press, Tucson.

Emerson, Thomas E., and R. Barry Lewis (editors)

1991 Cahokia and the Hinterlands: Middle Mississippian Cultures of the Midwest. University of Illinois Press, Urbana.

Emerson, Thomas E., and Timothy R. Pauketat

2002 Embodying Power and Resistance at Cahokia. In *The Dynamics of Power*, edited by Maria O'Donovan, pp. 105–125. Occasional Paper No. 30. Center for Archaeological Investigations, Southern Illinois University, Carbondale.

Emerson, Thomas E., Phillip G. Millhouse, and Marjorie B. Schroeder

2007 The Lundy Site and the Mississippian Presence in the Apple River Valley. Wisconsin Archaeologist 88(2):1–123. Esarey, Duane

1988 An Archaeological Survey of the Illinois River from Naples to the Peoria Lock and Dam. Illinois State Museum Quaternary Studies Program Technical Report No. 88-460-10, Springfield.

1996 Summary of the 1957-1995 Investigations at the Eveland Site (11F353): A Site Management Tool. Illinois State Museum Quaternary Studies Program Technical Report No. 96-000-6, Springfield.

2000 The Late Woodland Maples Mills and Mossville Phase Sequence in the Central Illinois River Valley. In *Late Woodland Societies: Tradition and Transformation across the Mid-continent*, edited by Thomas E. Emerson, Dale L. McElrath, and Andrew C. Fortier, pp. 387–412. University of Nebraska Press, Lincoln.

Esarey, Duane, and Timothy R. Pauketat

1992 The Lohmann Site: An Early Mississippian Center in the American Bottom. American Bottom Archaeology FAI-270 Site Reports 25. University of Illinois Press, Urbana. Fortier, Andrew C.

1991 Sponneman Phase Features and Community Organization. In The Sponneman Site: The Formative Emergent

Mississippian Sponemann Phase Occupations (11-Ms-517), by Andrew C. Fortier, T. O. Maher, and Joyce A. Williams, pp. 55–156. American Bottom Archaeology FAI-270 Site Reports 23. University of Illinois Press, Urbana.

Fortier, Andrew C., Richard B. Lacampagne, and Fred A. Finney 1984 The Fish Lake Site (11-Mp-608). American Bottom Archaeology FAI-270 Site Reports 8. University of Illinois Press, Urbana.

Fowler, Melvin L.

1997 The Cahokia Atlas, Revised: A Historical Atlas of Cahokia Archaeology. Illinois Transportation Archaeological Research Program, Studies in Archaeology 2. University of Illinois, Urbana.

Giddens, Anthony

1984 The Constitution of Society: Outline of the Theory of Structuration. University of California Press, Berkeley. Gifford-Gonzalez, Diane, and Kojun U. Sunseri

2007 Foodways on the Frontier: An Early Colonial Pueblo in New Mexico. In *The Archaeology of Food and Identi*ty, edited by Katheryn C. Twiss, pp. 260–287. Occasional Paper No. 34. Center for Archaeological Investigations, Southern Illinois University, Carbondale.

Green, William

1976 Preliminary Report on the Bauer Branch Complex, a Late Woodland Manifestation in West-Central Illinois. Wisconsin Archaeologist 57(3):172–188.

1987 Between Hopewell and Mississippian: Late Woodland in the Prairie Peninsula as Viewed from the Western Illinois Uplands. Ph.D. dissertation, University of Wisconsin, Madison. University Microfilms, Ann Arbor.

Green, William, and David J. Nolan

2000 Late Woodland Peoples in West-Central Illinois. In Late Woodland Societies: Tradition and Transformation across the Midcontinent, edited by Thomas E. Emerson, Dale L. McElrath, and Andrew C. Fortier, pp. 345–386. University of Nebraska Press, Lincoln.

Green, William, and Roland L. Rodell

1994 The Mississippian Presence and Cahokia Interaction at Trempealeau, Wisconsin. American Antiquity 59:334–359.

Hanenberger, Ned H., George R. Milner, Stevan C. Pullins, Richard Paine, Lucretia S. Kelly, and Kathryn E. Parker 2003 The Range Site 3: Mississippian and Oneota Occupations. Illinois Transportation

Archaeological Research Program Research Reports No. 17. University of Illinois, Urbana.

Harn, Alan D.

1975 Cahokia and the Mississippian Emergence in the Spoon River Area of Illinois. *Transactions, Illinois State Acade*my of Science 68(4):414–434.

1978 Mississippian Settlement Patterns in the Central Illinois River Valley. In Mississippian Settlement Patterns, edited by Bruce D. Smith, pp. 233–268. Academic Press, New York.

1991 The Eveland Site: Inroad to Spoon River Mississippian Society. In New Perspectives on Cahokia: Views from the Periphery, edited by James B. Stoltman, pp. 129–153. Monographs in World Archaeology No. 2. Prehistory Press, Madison, Wisconsin.

Hastorf, Christine A

1988 The Use of Paleoethnobotanical Data in Prehistoric Studies of Crop Production, Processing, and Consumption. In Current Paleoethnobotany: Analytical Methods and Cultural Interpretations of Archaeological Plant Remains, edited by Christine A. Hastorf and Virginia S. Popper, pp. 119–144. University of Chicago Press, Chicago.

Hegmon, Michelle, and Stephanie Kulow

2005 Painting as Agency, Style as Structure: Innovations in

Mimbres Pottery Designs from Southwest New Mexico. Journal of Archaeological Method and Theory 12:313–334. Holley, George R.

1989 The Archaeology of the Cahokia Mounds ICT-II: Ceramics. Illinois Cultural Resources Study No. 11. Illinois Historic Preservation Agency, Springfield.

Holt, Julie Z

1996 AG Church Site Features and Community Organization. *Illinois Archaeology* 8:58–84.

Johannessen, Sissel

1993 Food, Dishes, and Society in the Mississippi Valley. In Foraging and Farming in the Eastern Woodlands, edited by C. Margaret Scarry, pp. 182–205. University Press of Florida, Gainesville.

Jordan, Kurt A.

2009 Colonies, Colonialism, and Cultural Entanglement: The Archaeology of Postcolumbian Intercultural Relations. In International Handbook of Historical Archaeology, edited by Teresita Majewski and David Gaimster, pp. 31–49. Springer, New York.

Joyce, Rosemary A., and Julia A. Hendon

2000 Heterarchy, History, and Material Reality: "Communities" in Late Classic Honduras. In *The Archaeology of Communities: A New World Perspective*, edited by Marcello A. Canuto and Jason Yaeger, pp. 143–160. Routledge, London.

Kelly, John E.

1990a The Emergence of Mississippian Culture in the American Bottom. In *The Mississippian Emergence*, edited by Bruce D. Smith, pp. 113–152. Smithsonian Institution Press, Washington, D.C.

1990b Range Phase Features. In *The Range Site 2: The Emergent Mississippian and Range Phase Occupations (11-S-47)*, by John E. Kelly, Stephen J. Ozuk, and Joyce A. Williams, pp. 313–386. American Bottom Archaeology FAI-270 Site Reports 20. University of Illinois Press, Urbana.

2007 George Reeves Phase Features. In The Range Site 4: Emergent Mississippian George Reeves and Lindemann Phase Occupations, by John E. Kelly, Steven J. Ozuk, Joyce A. Williams, Lucretia S. Kelly, Kathryn E. Parker, and George R. Milner, pp. 25–88. Transportation Archaeological Research Reports No. 18. University of Illinois, Urbana.

Kelly, John E., Andrew C. Fortier, Steven J. Ozuk, and Joyce A. Williams

1987 The Range Site: Archaic through Late Woodland Occupations. American Bottom Archaeology FAI-270 Site Reports 16. University of Illinois Press, Urbana.

Koldehoff, Brad

2002 The Woodland Ridge Site and Late Woodland Land Use in the Southern American Bottom. Transportation Archaeological Research Reports No. 15. University of Illinois, Urbana.

Koldehoff, Brad, and Joseph M. Galloy

2006 Late Woodland Frontiers: Patrick Phase Settlement along the Kaskaskia Trail, Monroe County, Illinois. Transportation Archaeological Research Reports No. 23. University of Illinois, Urbana.

Lightfoot, Kent G., Antoinette Martinez, and Anne M. Schiff 1998 Daily Practice and Material Culture in Pluralistic Social Settings: An Archaeological Study of Culture Change and Persistence from Fort Ross, California. American Antiquity 63:199–222.

Lopinot, Neil B.

1997 Cahokian Food Production Reconsidered. In Cahokia: Domination and Ideology in the Mississippian World, edited by Timothy R. Pauketat and Thomas E. Emerson, pp. 52–88. University of Nebraska Press, Lincoln.

Loren, Diana DiPaolo

2001 Manipulating Bodies and Emerging Traditions at the Los Adaes Presidio. In *The Archaeology of Traditions:* Agency and History before and after Columbus, edited by Timothy R. Pauketat, pp. 58–76. University Press of Florida, Gainesville.

McConaughy, Mark A., Terrance J. Martin, and Frances B. King 1993 Late Late Woodland/Mississippian Component. In Rench: A Stratified Site in the Central Illinois River Valley, edited by Mark A. McConaughy, pp. 76–130. Illinois State Museum Reports of Investigations No. 49, Springfield.

Martindale, Andrew

2009 Entanglement and Tinkering: Structural History in the Archaeology of the Northern Tsimshian. *Journal of Social Archaeology* 9(1):59–91.

Mehrer, Mark W

1995 Cahokia's Countryside: Household Archaeology, Settlement Patterns, and Social Power. Northern Illinois University Press, DeKalb.

Mehrer, Mark W., and James M. Collins

1995 Household Archaeology at Cahokia and its Hinterlands. In Mississippian Communities and Households, edited by J. Daniel Rogers and Bruce D. Smith, pp. 23–57. University of Alabama Press, Tuscaloosa.

Meigs, Anna

1988 Food as a Cultural Construction. Food and Foodways: Explorations in the History of Culture and Human Nourishment 2:341–357.

Millhouse, Philip

2012 The John Chapman Site and Creolization on the Northern Frontier of the Mississippian World. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Illinois, Urbana.

Milner, George R.

1986 Mississippian Period Population Density in a Segment of the Mississippi Valley. American Antiquity 51:227–238.

1990 The Late Prehistoric Cahokia Polity of the Mississippi River Valley: Foundations, Florescence, and Fragmentation. *Journal of World Prehistory* 4:1–43.

Panich, Lee M.

2013 Archaeologies of Persistence: Reconsidering the Legacies of Colonialism in Native North America. American Antiquity 78:105–122.

Pauketat, Timothy R.

1994 The Ascent of Chiefs: Cahokia and Mississippian Politics in Native North America. University of Alabama Press, Tuscaloosa.

1997 Specialization, Political Symbols, and the Crafty Elite of Cahokia. *Southeastern Archaeology* 16:1–15.

1998 The Archaeology of Downtown Cahokia: The Tract 15A and Dunham Tract Excavations. Illinois Transportation Archaeological Research Program, Studies in Archaeology 1. University of Illinois, Urbana.

2001a A New Tradition in Archaeology. In *The Archaeology of Traditions: Agency and History Before and After Columbus*, edited by Timothy R. Pauketat, pp. 1–16. University Press of Florida, Gainesville.

2001b Practice and History in Archaeology: An Emerging Paradigm. Anthropological Theory 1:73–98.

2002 A Fourth Generation Synthesis of Cahokia and Mississippianization. *Midcontinental Journal of Archaeology* 27:149–170.

2004 Ancient Cahokia and the Mississippians. Cambridge University Press, Cambridge.

- 2013 An Archaeology of the Cosmos: Rethinking Agency and Religion in Ancient America. Routledge, London.
- Pauketat, Timothy R., and Susan M. Alt
 - 2005 Agency in a Postmold? Physicality and the Archaeology of Culture-making. *Journal of Archaeological Method and Theory* 12:213–236.
- Pauketat, Timothy R., and Thomas E. Emerson
 - 1991 The Ideology of Authority and the Power of the Pot. *American Anthropologist* 93:919–941.
 - 1997 Cahokia: Domination and Ideology in the Mississippian World. University of Nebraska Press, Lincoln.
- Pauketat, Timothy R., Lucretia S. Kelly, Gayle J. Fritz, Neal H. Lopinot, Scott Elias, and Eve Hargrave
 - 2002 The Residues of Feasting and Public Ritual at Early Cahokia. *American Antiquity* 67:257–279.
- Peacock, Sandra L.
 - 2008 From Complex to Simple: Balsamroot, Inulin, and the Chemistry of Traditional Interior Salish Pit-Cooking Technology. *Botany* 86:116–128.
- Peelo, Sarah
 - 2011 Pottery-Making in Spanish California: Creating Multi-Scalar Social Identity through Daily Practice. American Antiquity 76:642–666.
- Price, T. Douglas, James H. Burton, and James B. Stoltman 2007 Place of Origin of Prehistoric Inhabitants of Aztalan, Jefferson Co., Wisconsin. *American Antiquity* 72:524–538. Scarry, C. Margaret
 - 1993 Variability in Mississippian Crop Production Strategies. In Foraging and Farming in the Eastern Woodlands, edited by C. Margaret Scarry, pp. 78–90. University Press of Florida, Gainesville.
- Silliman, Stephen
- 2005 Culture Contact or Colonialism? Challenges in the Archaeology of Native North America. *American Antiquity* 70: 55–75.
- 2009 Change and Continuity, Practice and Memory: Native American Persistence in Colonial New England. American Antiquity 74:211–230.
- 2010 Indigenous Traces in Colonial Spaces: Archaeologies of Ambiguity, Origin, and Practice. *Journal of Social Archaeology* 10:28–58.
- Simon, Mary L., and Kathryn E. Parker
 - 2006 Prehistoric Plant Use in the American Bottom: New Thoughts and Interpretations. Southeastern Archaeology 25:212–257.
- Stahl, Ann B.
 - 1985 The Dohack Site (11-S-642). American Bottom Archaeology FAI-270 Site Reports 12. University of Illinois Press, Urbana.
- Steadman, Dawnie
 - 1998 The Population Shuffle in the Central Illinois Valley: A Diachronic Model of Mississippian Biocultural Interactions. World Archaeology 30(2):306–326.
 - 2001 Mississippians in Motion? A Population Genetic Analysis of Interregional Gene Flow in West-Central Illinois. American Journal of Physical Anthropology 114:61–73.
- Stein, Gil (editor)
- 2005 The Archaeology of Colonial Encounters. School of American Research Press, Santa Fe, New Mexico.
- Stoltman, James B.
 - 2000 A Reconsideration of the Cultural Processes Linking Cahokia to its Northern Hinterlands during the Period AD 1000–1200. In Mounds, Modoc, and Mesoamerica: Papers in Honor of Melvin L. Fowler, edited by Steven R. Ahler, pp. 439–467. Illinois State Museum Scientific Papers Vol. 28, Springfield.

- Stoltman, James B., Danielle M. Benden, and Robert F. Boszhardt
 - 2008 New Evidence in the Upper Mississippi Valley for Pre-Mississippian Cultural Interaction with the American Bottom. American Antiquity 73:317–336.

Thomas, Nicholas

1991 Entangled Objects: Exchange, Material Culture and Colonialism in the Pacific. Harvard University Press, Cambridge, Massachusetts.

Thomas, Julian

- 2000 Reconfiguring the Material, Reconfiguring the Social. In Social Theory in Archaeology, edited by Michael B. Schiffer, pp. 143–155. University of Utah Press, Salt Lake City. Thoms, Alston V.
 - 2008 The Fire Stones Carry: Ethnographic Records and Archaeological Expectations for Hot-rock Cookery in Western North America. *Journal of Anthropological Archaeology* 27:443–460.
- Twiss, Katheryn C
 - 2012 The Complexities of Home Cooking: Public Feasts and Private Meals Inside the Çatalhöyük House. In Between Feasts and Daily Meals: Toward an Archaeology of Commensal Spaces, edited by Susan Pollock, pp. 53–73. Journal for Ancient Studies Special Volume 2.
- VanDerwarker, Amber M., Gregory D. Wilson, and Dana N. Bardolph
 - 2013 Maize Adoption and Intensification in the Central Illinois River Valley: An Analysis of Archaeobotanical Data from the Late Woodland through Early Mississippian Periods (A.D. 400–1200). Southeastern Archaeology 32:147–168.
- VanDerwarker, Amber M., Gregory D. Wilson, Kristin Hoppa, and Amy Gusick
 - 2012 Culture Contact, Earth Ovens, and Persistent Food-ways: Archaeobotanical Analysis of a Failed Corn Roast from the C. W. Cooper site in the Central Illinois River Valley. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, Tennessee.
- van Dommelen, Peter
 - 2006 Colonial Matters: Material Culture and Postcolonial Theory in Colonial Situations. In *Handbook of Material Culture*, edited by Chris Tilley, Webb Keane, Susanne Kuechler, Mike Rowlands, and Patricia Spyer, pp.104–124. Sage, London.
- Voss, Barbara
 - 2005 From Casta to Californio: Social Identity and the Archaeology of Culture Contact. American Anthropologist 107:461–474.
- Wandsnider, LuAnn
 - 1997 The Roasted and the Boiled: Food Composition and Heat Treatment with Special Emphasis on Pit-Hearth Cooking. *Journal of Anthropological Archaeology* 16:1–48.
- Welch, Paul D., and C. Margaret Scarry
- 1995 Status Related Variation in Foodways in the Moundville Chiefdom. American Antiquity 60:397–419.
- Wilcox, Michael
 - 2009 Marketing Conquest and the Vanishing Indian: An Indigenous Response to Jared Diamond's Guns, Germs, and Steel and Collapse. Journal of Social Archaeology 10:92–117.
- Wills, W.H.
- 2009 Cultural Identity and the Archaeological Construction of Historical Narratives: An Example from Chaco Canyon. *Journal of Archaeological Method and Theory* 16:283–319. Wilson, Gilbert L.
- 1917 Agriculture of the Hidatsa Indians: An Indian Interpretation. Studies in the Social Sciences 9. University of Minnesota, Minneapolis.

Wilson, Gregory D.

- 1999 The Production and Consumption of Mississippian Fineware in the American Bottom. Southeastern Archaeology 18:98–109.
- 2012a Merchants, Missionaries, or Militants? A Critical Evaluation of Cahokian Contact Scenarios in the Central Illinois River Valley. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, Tennessee.
- 2012b Living with War: The Impact of Chronic Violence in the Mississippian-Period Central Illinois River Valley. In *The Oxford Handbook of North American Archaeology*, edited by Timothy R. Pauketat, pp. 423–533. Oxford University Press, Oxford.
- 2013 Incinerated Villages in the North. In *The Medieval Mississippians*, edited by Timothy R. Pauketat and Susan M. Alt. School for Advanced Research Press, Santa Fe, New Mexico, in press.

Wilson, Gregory D., and Colleen Delaney-Rivera

2012 Mississippian Migration and Emulation: Variability in Cahokia Contact Scenarios in the Illinois River Valley. Paper presented at the 69th Annual Meeting of the Southeastern Archaeological Conference, Baton Rouge, Louisiana.

Wilson, Gregory D., and Brad Koldehoff

1998 The Miller Farm Site: Early Mississippian Occupations on Turkey Hill. *Illinois Antiquity* 33(2):4–8.

Wobst, Martin H.

1977 Stylistic Behavior and Information Exchange. In For the Director: Research Essays in Honor of James B. Griffin, edited by Charles E. Cleland, pp. 317–342. Anthropological Papers 61. Museum of Anthropology, University of Michigan, Ann Arbor.

Wright, Katherine I.

2000 The Social Origins of Cooking and Dining in the Ear-

ly Villages of Western Asia. *Proceedings of the Prehistoric Society* 66:89–121.

Yerkes, Richard W.

1983 Microwear, Microdrills, and Mississippian Craft Specialization. *American Antiquity* 48:499–518.

Notes

- 1. Artifact data as well as feature metrics are presented in detail, by feature, in a forthcoming site report.
- 2. The Lamb assemblage contains substantially fewer hybrid sherds than assemblages from other late eleventh and twelfth century sites in the CIRV. The Northern Mossville (A.D. 1050–1100) assemblage from the Rench site in the northern CIRV contains a variety of hybrid sherds, including grit-tempered plainware vessels with imitative Mississippian jar attributes (McConaughy et al. 1993).
- Harn (1991:142) notes a similar pattern in the Eveland site ceramic assemblage, in that the Mississippian wares are virtually indistinguishable from Stirling-phase vessels manufactured at Cahokia.
- 4. Pit depth, volume, orifice diameter, and in situ evidence of burning were used primarily to assess feature function. Three pits were not classified to a functional category due to unique morphological characteristics likely resulting from taphonomic processes (e.g., modern agricultural disturbance).

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