

A black and white photograph of a large, layered rock formation, possibly a natural arch or a large rock pile, in a grassy field. The rock formation is composed of many horizontal layers of varying thicknesses. The foreground is a field of tall grass. The sky is overcast. Three semi-transparent circles are overlaid on the image: a dark grey circle at the top containing the title, a medium grey circle in the middle containing the subtitle, and a light grey circle at the bottom containing the editor's name.

NATIVE AMERICAN LANDSCAPES

**An
Engendered
Perspective**

**Edited by
Cheryl Claassen**

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An Engendered Perspective

Edited by Cheryl Claassen

The University of Tennessee Press / Knoxville



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CONTENTS

Acknowledgments	xi
Introduction. Native Women, Men, and American Landscapes: The Gendered Gaze <i>Cheryl Claassen</i>	xiii

Part 1: The Cumberland and Ozark Plateaus

1. Rock Shelters, Boulders, and Bleeding Rocks: Uncovering Elements of Women's Ritual Landscape in the Midcontinent <i>Cheryl Claassen</i>	3
2. Bedrock Mortar Hole Sites as Artifacts of Women's Taskscapes: Late Archaic and Early Woodland <i>Chaîne</i> <i>Opératoire</i> on the Upper Cumberland Plateau of Tennessee <i>Jay Franklin, Lucinda Langston, and Meagan Dennison</i>	35
3. Rock Art, Gender, and the Dhegihan Landscape <i>James R. Duncan and Carol Diaz-Granados</i>	85
4. Women as Symbols and Actors in the Mississippi Valley: Evidence from Female Flint-Clay Statues and Effigy Vessels <i>Natalie G. Mueller and Gayle J. Fritz</i>	109

Part 2: The Plains

5. Indian Lake Medicine Boulder and Fertility on the American Northwestern Plains at Euroamerican Contact <i>Mavis Greer and John Greer</i>	151
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WOMEN AS SYMBOLS AND ACTORS IN THE MISSISSIPPI VALLEY

*Evidence from Female Flint-Clay Statues
and Effigy Vessels*

Natalie G. Mueller and Gayle J. Fritz

Introduction

Native women probably domesticated the seed-bearing plants that came to be economically important across a large swath of precolonial eastern North America. Women were the major, if not sole, producers and local breeders of the tropical crops, especially corn (*Zea mays* ssp. *mays*), that sustained their families and fed the invading armies and colonists who came from the Old World after 1500 A.D. Acknowledgment of the dominant role played by American Indian women in agriculture is explicit in a number of publications, including those by Watson and Kennedy (1991); Smith (1993); Fritz (1999); Mueller (2013); and Scarry and Scarry (2005). By extension, the contributions made by women to environmental transformations caused by farming can be assumed if not specified (Fritz 2000; Hammett 2000; Wagner 2003). Men were instrumental in the initial clearing of wooded areas for new fields, but most Mississippian farmers were not primarily shifting agriculturalists. Instead, they probably planted crops in fields that, following initial clearance of woody vegetation, were open permanently or at least for decades. Farmers shifted plots around within these spaces as needed to rest the soil but not allow mature forests to regenerate (Doolittle 1992). In addition to the considerable labor involved in keeping fields open and productive, women augmented the productivity of harvested wild and

managed fruits from bushes, small trees, and herbaceous plants growing at the edges of fields and habitation areas. Furthermore, as gatherers and harvesters, women participated in the maintenance of orchard-like groves of nut- and fruit-bearing trees near farmsteads, villages, and towns located in suitable environmental zones. Most of the settlements themselves were probably enhanced by home gardens where an array of edible and medicinally valuable plants could be readily accessed. Since the landscape of both cultivated and "wild" but managed food-bearing plants was associated with women and their work, we expect that the propitiation of the forces of fecundity would employ feminine symbols.

Less obvious in the literature, but growing in volume, is appreciation of the roles played by living women where ideological, ritual, socioeconomic, and physical elements of the landscape intersect (Claassen 2011; DeBoer 2001; Duncan and Diaz-Granados 2004; Galloway 1997). We expand this conversation by focusing on two prominent classes of Mississippian art: (1) Cahokia-style female flint-clay "fertility" statues and (2) ceramic Kneeling Woman effigy vessels from the central Mississippi River Valley region. These remarkable works combine themes from realms that we, non-Native social scientists, might view as mythic and spiritual, agricultural, mortuary, and connected to human reproduction. The flint-clay itself came from the cedar glades of the Missouri Ozarks (Duncan and Diaz-Granados Chapter 3). Duncan and Diaz-Granados discuss the possibility that journeys to harvest flint clay also served as pilgrimages to boulder and rock shelter fertility shrines. Creation, renewal, and regeneration are associated both with the raw material and with the iconographic content of these objects. One spiritual personage—Old Woman Who Never Dies or Grandmother—connects the beliefs and behaviors that we think involved and sometimes combined commemoration, supplication, and devotion. We begin by looking into the spiritual and agricultural roots of the domesticated landscape in which Mississippian farmers lived. Traces of the gendered institutions that maintained this landscape, both practically and spiritually, are suggested by Mississippian iconography and ritual spaces. We have used one mythical figure, Grandmother or the Old Woman Who Never Dies, as a cipher to guide our understanding of these traces.

Woodland Roots of a Gendered Landscape

Grandmother is, in Siouan Plains Village mythology, "the custodian of all vegetation that ripens or sheds its leaves in the fall and is 'rejuvenated'

in the spring with the northern flights of the waterbirds, which she accompanied" (Bowers 1992:338). As such, rites performed on her behalf, or seeking her blessing and aid, may have preceded the domestication of crops in the Eastern Woodlands, and devotion to her probably long predated the intensification of maize. The retreat shelters and marked crevices of the Ozarks and Cumberland Plateau discussed by Claassen in Chapter 1 may have been Late Archaic and Early Woodland expressions of the Grandmother propitiation (Duncan and Diaz-Granados Chapter 3). Whether or not this can ever be recognized archaeologically, we argue that women were active participants, not only in the planting and tending of gardens and fields that produced the chenopod, knotweed, maygrass, sunflower, sumpweed, squashes, and other crops grown in significant amounts during Middle Woodland times (200 BCE–400 A.D.) but also in the large gatherings that took place in those years at Hopewellian mound centers located across the Midwest.

Mueller (2013) has recently made a plausible case for the exchange of seed stock as explaining key aspects of the archaeobotanical assemblage at Mound House, a floodplain mound complex in the lower Illinois River valley dating to the early first millennium A.D. The exchange of plant products including crop seeds was very likely dominated by women, who would not only have spread attractive varieties to new regions but would also have broadcast knowledge essential to successful production of unfamiliar crops, along with processing and preparation techniques. We see this exchange as including actions such as offerings, prayers, performances, and bundle-opening ceremonies and taking place within the ritually-charged backdrop of multi-community feasting, mound building, and world renewal rites. Thus, the significance of these seemingly lowly grains extended well beyond the purely domestic, economic, and functional spheres.

The building of Hopewellian mounds and other earthworks ceased during Late Woodland times (400–850 A.D.), but production of native Eastern Agricultural Complex (EAC) crops was intensified, and populations in the midcontinent grew in density as villagers applied successful skills for the farming, hunting, and management of wild plant resources. Ceramic technology and storage practices clearly improved in conjunction with evolving agricultural intensification (Braun 1983; Buikstra et al. 1986). We assume that early spiritual beliefs and traditions of previous generations persisted and evolved throughout the second half of the first millennium A.D., in spite of the reduced visibility of large-scale, multi-community ceremonialism and long-distance exchange networks.

The spread of maize into eastern North America, often viewed by archaeologists as a hallmark of economic transformation, does not appear to have had a major impact on either Late Woodland subsistence or ritual practice although the exact timing of that event is still being fine-tuned, and the causes and consequences of the process continue to be debated (Hart et al. 2013; Smith and Cowen 2003). Between 850 and 1050 A.D., however, Emergent Mississippian farmers set the stage for dramatic subsequent events (Kelly 1990), notably the coming together of tens of thousands of people at Cahokia Mounds and the surrounding bottomland and upland region of eastern Missouri and western Illinois during the eleventh century A.D. (Pauketat 2009). By this time, maize was an important component of the subsistence economy, balanced by maygrass, chenopod, knotweed, sunflower, squash, and other EAC crops. The dynamics of feeding—not to mention otherwise integrating—this unprecedented density of people, many of whom appear to have relocated from hundreds of kilometers away (Slater et al. 2014) and belonged to linguistically and culturally diverse societies must have been challenging.

Grandmother, with her long mythic history, emerges as a key figure in the ritualized Mississippian landscape (Duncan and Diaz Granados 2004). She is manifested across the landscape at rock art sites and within settlements close to Cahokia where special structures have been interpreted as world renewal temples. We turn now to the female flint-clay statues and effigy vessels that, through the symbolism they project and the contexts in which they were uncovered, speak to the roles played by women in the social and productive transformation of the Mississippian landscape.

Mississippian Women as Symbols

Aspects of a Dominant Symbol

Images of women in Mississippian art potentially reflect both the referents of women as symbols and the prerogatives of women as actors. In linguistics, the referent is the object or concept that is invoked by a word (or symbol, in this case). Complex concepts can often be referred to by many different symbols. For example, a crown of thorns and a cross both invoke the story of the crucifixion of Jesus and all of the abstract meanings associated with it. Conversely, a symbol can be polysemous: it can have many different specific referents depending on the context in

which it is deployed. A polysemous symbol with a complex and culturally important suite of referents can be manipulated to perform a variety of social actions. A cross can also designate a sacred space, declare a religious affiliation, or act as a talisman to ward off evil. Is it possible to recover the nuances of representation intended by Mississippian people from their symbols?

In his classic scheme for parsing symbols, Victor Turner described three aspects of symbolic meaning: *exegetical*, *positional*, and *operational* (1967:50–52; Figure 4.1). For Turner, exegetic meaning was obtained from conversations with informants or other testimony from within the symbolic community. It is the meaning consciously invoked by a person using the symbol in a given context. As archaeologists, we receive our exegetic meanings indirectly and imperfectly from the oral histories and ethnographies of descendent communities. But through archaeological context, we have fairly direct access to positional meaning, which is contingent on the interaction of multiple symbols, and operational meaning, which is dependent on how and by whom a symbol is deployed (Turner 1967; Figure 4.1). Turner's classic scheme helps us to bring both ethnohistorical and archeological observations to bear on our analysis of the two different types of Mississippian woman effigies: flint-clay figurines and hooded effigy vessels.

Ethnographies and oral histories of descendent communities are imperfect reflections of the beliefs consciously held by the communities who created Mississippian symbols. Yet by comparing many different mythologies and rituals from later communities, it may be possible to

DOMINANT SYMBOLS	EXEGETICAL	OPERATIONAL	POSITIONAL
According to Turner	Obtained from informants: What meanings do people consciously associate with symbols	Obtained from observing informants: How is the symbol used? Who uses it, and who is excluded from using it? What is the affective quality of performances using this symbol?	Obtained from observing symbols in relation to other objects and persons: What is the web of relationships surrounding a symbol? How is the meaning of a symbol affected by its context?
In archaeology	Obtained from ethnography or oral history of descendant communities, or, with less reliability, from historical accounts	Inferred from archaeological context, but only the final deployment of the symbol is usually accessible	Inferred from associated symbols, objects, and structures

Figure 4.1. Victor Turner's (1967) scheme for parsing dominant symbols, adapted for archaeologists.

triangulate what Turner called *dominant symbols* by taking note of motifs that are particularly widespread and consistent in their associations. According to Turner, "each dominant symbol has a 'fan' or 'spectrum' of referents, interlinked by what is usually a simple mode of association, its very simplicity enabling it to interconnect a wide variety of *significata*" (1967:50). One seemingly dominant symbol from Plains and eastern American Indian lore is Old Woman Who Never Dies, or Grandmother.

Grandmother in Myth and Legend: Exegetical Aspects of Meaning

In Siouan mythology Grandmother is an important mythological figure who was responsible for teaching people how to live well on earth by growing and gathering food and hunting game. Grandmother in Siouan myth is the patroness of all vegetation and is honored in springtime festivals that celebrate rejuvenation. She is a protagonist in the Sacred Arrow myth, her part beginning when the culture hero Grandson falls from the sky with his mother, who dies in the descent. Grandmother takes in the lost child. She gives him food from her garden and teaches him how to hunt. She can call game with her sunflower whistle, or drive it away, depending on her whims. She brings rain in the summer and snow in the winter. Her consorts are giant water snakes, and she owns vessels that magically refill themselves (Bowers 1992:333–338). She is also mythically entangled with Two Men, the Siouan manifestation of the archetypal twins, who appear in many New World mythologies. In the Hidatsa version, Two Men want to marry Grandmother, but she refuses and becomes angry, using her magical whistle to bring winter storms and drive away their game (Bowers 1992:335–336). After many years of living among the people as a teacher, she tires of their constant demands and retires to an island. Her retreat is fabled to be near the mouth of the Mississippi River and guarded by her serpent consorts (Bowers 1992:336). She is immortal; she bathes in the river and becomes young again. It is by observing this power that Grandson knows "that she is the one who has control of the vegetation, causing it to grow each year when the water birds come north and the snakes appear" (Bowers 1992:335). (Other details of Old Woman Who Never Dies can be found in Duncan and Diaz-Granados, Chapter 3).

While clearly a multifaceted character, we hope to demonstrate that she is *not the same* as the Corn Mother of eastern Woodlands mythologies, a character who dies in various ways while giving corn and/or

fertile ground to the people. In this analysis we would like to point out what appears to be an important dichotomy in traditions related to women and plant fertility in eastern and plains traditions. An important woman deity, sometimes old, sometimes young and beautiful, also appears in the traditions of Muskogean, Iroquoian, Caddoan, and some Algonquian tales recounting the origins of maize, but her role is different. Corn Mother's body *is* (or gives rise to) maize and other crops. In some myths, she rubs her feet or body, and her skin turns into the first kernels of corn. In others, she dies in childbirth and her body gives rise to corn, beans, and squash. There are also versions of the myth where Corn Mother dies or is killed and her children have to drag her body around in order to make the soil fertile for the first maize or other crops (Lankford 2011:1557).

This latter group of myths *may be* derivative of or younger than the story of Grandmother and the Orphan because in Corn Mother tales an adopted child is sometimes also a part of the tale. When this occurs, the child is usually tasked with killing and/or manipulating the dead body of Corn Mother so as to produce more corn (e.g., Grantham 2002:62). This version of the myth has been "merged with the Grandmother-Orphan legend" writes George Lankford, who also recognizes the Grandmother/Corn Mother distinction (2011:157–158). The division of these two mythical figures is not always clear cut, as the preceding quote implies. For example, in the Hidatsa story recounted by Bowers there is no mention of what happens to the body of Grandson's mother (a version of Sky Woman) after she dies in her descent from the Sky World (Bowers 1992:334), yet in other versions the body of the Sky Woman is buried in Grandmother's garden and confers fertility (Duncan and Diaz-Granados 2004:200). In the Seneca creation myth, Sky Woman falls from the sky to an island and *does not die*, instead becoming the Grandmother figure in the myth. In this tale, it is Sky Woman's daughter who dies, and maize, beans, and squash grow from her body (Cornplanter 1963:19–25).¹ Despite the complexity of the mythical landscape, it seems that we can distinguish between Corn Mother and Grandmother on the basis of immortality: Grandmother is an eternal, ageless figure whereas Corn Mother's death is instrumental to her story. While it is impossible to prove, we can at least suggest that the spread of Corn Mother stories across the landscape accompanied the spread of maize as an important crop, merging with older tales of Grandmother in myriad unique ways. As suggested by Claassen in the Introduction, the spread of both maize and these stories also indicates that women traveled widely.

While Grandmother is often associated with Siouan mythology, she also appears in southeastern lore, in a different but highly enlightening narrative context. In several similar tales from the Yuchi and Alabama, two men attempt to bring their dead wives back from the Sky World. Along the way, they encounter an old woman who is working in her garden. She feeds them from food that replenishes itself, helps them pass by monstrous snakes unharmed, and gives them seeds to bring back to their communities (Swanton 1929). All of these actions, as well as the story's form—a prolonged interaction with a pair of adventuring men—link this Old Woman to the Siouan Grandmother. But these stories add a new set of enlightening referents. According to the Yuchi and Alabama, the old woman helps the men find the spirits of their wives. She catches the women's spirits and traps them inside of gourds. Then she tells the men that they can only be reunited with their wives if they bring the gourds home and smash them on the dancing grounds in their own village. One man is too impatient to see his wife and opens the gourd right away while the other is obedient and is able to resurrect his wife (Grantham 2002:167–177). In this set of myths, Grandmother is not only a symbol of regeneration and an immortal being, but she is also capable of resurrecting the spirits of the dead. The snake, a symbol closely associated with Grandmother, similarly invokes resurrection among the (Siouan) Osage: in legend, the snake assures the people “even though the little ones [people] pass into the realms of spirits, they shall, by clinging to me and using my strength, recover consciousness” (La Flesche 1932:368).

A survey of oral histories and ethnographies reveals at least two dominant woman symbols shared by many of the possible descendants of Mississippian people. Corn Mother is usually associated with maize and/or specific domesticated plants, whereas Grandmother is the patroness of *all vegetation* and is associated specifically with the actual work of cultivating. Unlike Corn Mother, she knows how to grow plants but does not personify or create them. She is also repeatedly associated with the guidance over time of an orphaned child and/or the entire community, whereas Corn Mother usually dies in the act of becoming an important figure. Grandmother also appears in epic tales of both Siouan and southeastern tradition; she is a dynamic character in the mythology, whereas Corn Mother's potency usually lies in a single act of creation. Corn Mother's death is often central to her story, whereas Grandmother is eternal (hence the moniker “Old Woman Who Never Dies”). Grandmother is invoked in regeneration, which is not the same as

birth. The act of regeneration implies the entire cycle of life, including old age and death. We agree with Duncan and Dias-Granados (2004:197) and Witthoft (1949:2) that new rituals and symbols likely accompanied maize kernels as they diffused throughout the eastern Woodlands, but we do not think that Grandmother was one of these new symbols. The fact that she is associated with all plant life, yearly renewal, and themes of resurrection and immortality—and that these referents are consistent among many linguistically and geographically disparate groups—makes us suspect that she is an older symbol with roots in the pre-maize ritual and subsistence systems of eastern North America (see also Fox 2004).

Iconography: Positional Aspects of Meaning

The positional and operational elements of Grandmother symbols (their spatial contexts, and their interactions with other symbols and actors) allowed Mississippian people to understand which aspect of this polysemous symbol was being invoked. We begin by reviewing the iconographic content of the Cahokia-style female flint-clay figures and the Kneeling Woman hooded effigy vessels. Specifically, we are concerned here with what Turner referred to as positional meaning, which are nuances of meaning that are derived from the interaction of several symbols.

These two classes of artifacts are united by their central theme: both depict kneeling women. Female flint-clay figurines are both rarer and more commonly covered in the literature. The corpus currently consists of no more than nine objects, but several articles, site reports, and theses discuss their meaning and significance (Colvin 2012; Duncan and Dias-Granados 2004; Emerson 1982, 1997; Emerson and Boles 2010; Emerson and Hughes 2000; Emerson and Jackson 1984; Emerson et al. 2000, 2003; Galloway 2001; Jackson et al. 1992; Prentice 1986; see Figure 4.2). There are many other flint-clay figurines that depict male or neuter persons. We do not review those here. Figure 4.2 summarizes the contexts and iconographic content of the nine figurines that depict women. Conversely, hooded effigy vessels depicting women are common but not very widely discussed in the literature. They appear in catalogues of finds from southeastern Missouri and elsewhere in the central Mississippi valley, unpublished theses, and two book chapters (Duncan and Diaz-Granados 2004; Hatchcock 1976; Holmes 1884; Phillips et al. 1951; Sharp et al. 2011; Sobel 1989). The two types of artifacts we are focusing on are separated by both time and space. The

FIGURE	SITE	COUNTY/ STATE	PROVENIENCE	ASSOCIATED ARTIFACTS AND HUMAN REMAINS
Schild	Schild	Greene, IL	Burial 96, one of hundreds in a Mississippian cemetery	Hooded frog effigy bottle "killed" Ramey incised jar Mussel shell spoon Adult male flexed burial Fragments of an infant's skeleton
Exchange Avenue	East St. Louis	St. Clair, IL	In s shallow pit filled with 2cm of red ochre, near the east- ern wall of Feature 181, a 6.9 X 4.1 m wall trench structure that was destroyed by fire.	Red cedar (used to construct F 181), possibly woven cane mats or baskets, acorns, maize, lumps of tempered and untempered Koalin clay, a 1m concentration of red ochre, Mill Creek hoes and other lithic tools and projectile points
Birger	BBB Motor	Madison, IL	Northern focus; shallow pit	None
Keller			Northern Focus; Head and upper torso: a pit in Struc- ture 87 (F150); Base and right hand: Feature 38, a pit 3m to the south	Structure 87: "Exotic" mate- rial: galena; jimsonweed seeds; red cedar charcoal; maize; erect knotweed; may- grass; two gourd effigy jars Feature 38: galena; maize, chenopod, sunflower, may- grass, erect knotweed, black nightshade, wild beans
Sponemann			Fragments from: Structure 282, third and final floor level of a building destroyed by fire. Feature 183, a large pit exterior to Structure 282	Structure 282: Unique ceramic forms; hooded human effigy bottle fragment; quartz crystal; Mill Creek hoe cache; metates, various utilitarian ceramics and chipped stone tools, red cedar charcoal, maize; wild- sized sunflower, tobacco, chenopod; maygrass, and wild bean seeds Feature 183: Red cedar, maize
Willoughby	Sponemann	Desha, AR	Central burial in a mound, at the bot- tom of a 1.91 m shaft	Disarticulated (headless) "small and fine-boned" individual; conch shell
West				
Westbrook	Opos- sum Fork Bayou Mound	Desha, AR	Central burial in a mound, at the bot- tom of a 1.91 m shaft	Disarticulated (headless) "small and fine-boned" individual; conch shell

Figure 4.2. Table of female or probably female flint-clay figurines and associated contextual and iconographic details.

DESCRIPTION	GRAND- MOTHER AS- SOCIATIONS	RITUALLY "KILLED"?	SOURCE(S)
Platform pipe depicting a kneeling figure (no secondary sexual characteristics are depicted) with a snake wrapped around the its base. The right hand holds or is inserted into a bag or vessel. The left hand rests over the heart.	Snakes Vessels Children	Yes, burned.	Perino 1971: 25;117-118
Kneeling woman holds half shell or gourd bowl in front of her knees. No secondary sexual characteristics are shown, but the costume and hair style strongly suggest that the figure is a woman.	Plant fertility (?) Gourd vessels (?)	Possibly burned before destruction of F181, but did not fracture.	Emerson and Boles 2010
Kneeling woman strokes or strikes a feline-headed serpent with a hoe held in her right hand, while resting her left hand on the serpent's body. She wears a backpack. Squashes are draped over her back. A broken flower element on the left side of her head may be a sunflower.	Plant fertility Sunflow- ers (?) Snakes Women's work/ agriculture	Possibly. Weathered breaks may have come from historic plowing.	Emerson and Jack- son 1984; Figure 3
A woman kneels on a mat or bundled objects (reeds?), a rectangular object that has been interpreted sacred bundle or basket lies in front of her knees. Her hand rest atop an elongated-rounded element which may an element of a sacred bundle or the lid of the basket.	Plant fertility Sunflowers Bundles OR Women's work/ basketry Gourd vessels	Yes, broken and depos- ited in two different pits.	Emerson and Jack- son 1984; Figure 5
Upper torso and head of a woman with up-turned palms. Stems or vines with evident nodes extend up from her palms, a broken element on the left side of her head is probably a flower, but cannot be identified as a sunflower.	Plant fertility Sunflowers Women's work/ basketry Snakes	Yes, broken then burned	Jackson et al. 1992; Figure 5
Upper torso and head of woman with both arms upraised, holding a square plates or palettes up to her head. A vine or stalk runs up her right side and encircles her head. On the left side of the figure's head is a broken element which may be a flower. Base fragment depicts kneeling legs atop an elaborate square paneled basket.			
Head and upper torso of a woman with at least two rattlesnakes coiled around her. She holds the head of one snake in her hand, another is coiled around her head.			
A kneeling woman holds pointed objects in both upturned hands. Rounded stems extend upwards from both hands; the stem on her left side ends in a sunflower draped over her left shoulder. The other pointed objects have been interpreted as maize, but see text for a counter argument. A basket or bundle is suspended from her back.	Plant fertility Sunflowers Bundles OR Women's work/ basketry	Yes, broken	Colvin 2012; Figure 4



Figure 4.3. Map of the study area. A) approximate source area for flint clay; B) the American Bottom, BBB Motor, and Sponemann sites; C) the Cairo lowlands and Sandy Woods site; D) Nashville area sites surveyed by Sharp et al.; E) Lowlands of northeastern Arkansas, Nodena site; F) Confluence of the Arkansas and Mississippi rivers and approximate location of the mound containing the Westbrook figurine.

flint-clay figurines were probably produced in the greater American Bottom region, but not necessarily at Cahokia Mounds, using flint clay from deposits in eastern Missouri (Emerson and Hughes 2000; Emerson et al. 2003). Those artifacts with known provenience date to the Stirling Phase, ca. 1100–1200 A.D. (Emerson and Jackson 1984; Jackson et al. 1992) and come from the American Bottom, Lower Illinois valley, and the Middle Mississippi valley, respectively (Figure 4.2; Figure 4.3). On stylistic grounds and considering those objects that have been scientific-

cally excavated, the Kneeling Woman effigy vessels date from the Middle Mississippian to the Protohistoric period and mostly come from the four-state area around the confluence of the Ohio and Mississippi rivers (Sharp et al. 2011; Figure 4.3).

Female Flint-Clay Figurines

Without Grandmother as a bridge, these two classes of artifacts are only weakly connected by the posture and gender of their subjects, but both have clear iconographic connections to Grandmother. The connection is most evident on the most famous and iconographically rich of the corpus, the flint-clay Birger figurine (Duncan and Diaz-Granados 2004:196; Colvin 2012; Figure 4.4). Her adornments include squashes and probably a sunflower, the latter plant being so strongly associated with Grandmother that it was a part of her sacred bundle among the Mandan and Hidatsa (Bowers 1992:345–346). Like Grandmother, she is actively engaged in cultivation, wielding a hoe. She sits atop a round base reminiscent of an island, surrounded by a feline-headed serpent, invoking both Grandmother's mythical retreat and her consorts (Figure 4.4). A much less fragmentary rendition of the sunflower headpiece appears on the flint-clay Westbrook figurine (Figure 4.5) while references to diverse plants are to be found on many members of the flint-clay corpus (Figure 4.2; Figure 4.6).

While both specific and generic plants are portrayed on these figurines, we would like to stress that maize is never depicted. While the objects in the hands of the Westbrook figurine bear some resemblance to maize in photographs, they have no kernels, they are not attached to the stems by shanks, and diagonal lines below the distal points do not enclose the alleged ears in the manner of corn husks. We argue that it is impossible to interpret these elements as corn because the outer wrappings extend around part of the circumference of the adjacent stems, whereas real corn husks do not wrap around any section of the main stalk; instead, the husks enclose only the ears above the shank during all stages of development. We point out these inconsistencies because when the creators of these figurines wished to accurately portray a specific plant, they were more than capable of doing so. This is evident in the beautifully rendered sunflower on the very same figure (Figure 4.5) and in the squashes on the Birger figurine (Figure 4.4), which are rendered in such great detail that it is possible to identify them to species. On the basis of their thickened peduncle and the

corky ridges along the upper parts of the fruit, the artist was most likely representing green-striped cushaw (*C. argyrosperma* ssp. *argyrosperma*), a squash domesticated in Mexico but introduced to eastern North America by the Lohmann phase (A.D. 1050–1100) (Fritz 1994).

These figurines are linked to Grandmother by two other iconographic tropes in addition to plant imagery. Three of the figurines—Schild, West, and Birger—are holding or are entwined by snakes. Several others include references to women's work. These include representations of tools used to plant, tend, harvest, and prepare seed crops (e.g., hoes and baskets) (Figure 4.2). Arguably, all of the female flint-clay figurines are depicted with either plants, snakes, or tools associated with food production. Some iconographic elements, however, are open to multiple interpretations. For example, the Exchange Avenue figurine may be holding either a shell or a gourd bowl. The Keller figurine may be kneeling either on a woven mat, bundles of reeds, or some other object(s). Her hands rest atop what is probably a large basket, possibly something similar to historic Natchez *petaca*, which were special lidded baskets with hide lids that were used to store precious or sacred objects (Horton and Sabo, [2017]; Figure 4.6). The Schild figure is holding a small bag or vessel, which might hold seeds or represent Grandmother's gourd ves-



Figure 4.4. The Birger Figurine, side and back views, showing serpentine base, hoe, and squashes identified as green stripe cushaw (*C. argyrosperma* ssp. *argyrosperma*.) Images courtesy of the Illinois State Archaeological Survey, University of Illinois.

sels. Some female figurines are less strongly linked to Grandmother than others, but we include them all in Figure 4.2 to facilitate comparison. The variety of plants depicted on these figurines, as well as the specific depiction of sunflowers, snakes, and agricultural tools, all suggest an association with Grandmother rather than Corn Mother.



Figure 4.5. The Westbrook figurine. Front: stalk elements that have been mistaken for maize. Inset: Close-up of sunflower element. Photos courtesy of David Dye.

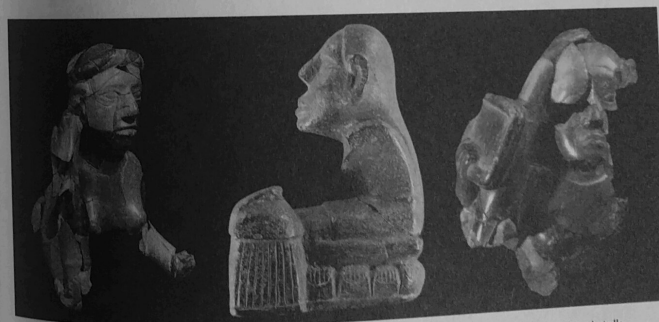


Figure 4.6. From left to right: The Sponemann figurine showing vine element around head and stalk element in right hand; the Keller figurine showing grinding stone and possible mat base that has been mistakenly identified as maize; the Willoughby figurine showing vine element on right side of head and fragmented flower element on left side of head. Images courtesy of the Illinois State Archaeological Survey, University of Illinois.

Moore et al. 2006: Figure 8). Some are painted in distinctive ways while others are burnished (Figures 4.7–4.10; Sharp et al. 2011).

The most obvious connection between the female effigy vessels and Grandmother is that many such vessels depict a hump-backed woman. The most parsimonious explanation for this feature is that it is meant to depict advanced age. Yet straight-backed examples are also common. Moreover, Sharp and colleagues (2011) have convincingly argued that both the straight-backed and hunch-backed vessels depict the same mythological figure on the basis that both are sometimes decorated with identical, patterned shawls. The fact that the same woman is being depicted as both young and old may allude to Grandmother's ability to make herself young again.

Then there is the form of the vessel to consider: all of the female effigy vessels are also hooded vessels. These vessels were inspired by gourds, which were cut in the same way historically and used as water bottles that were carried with one finger hooked into the top of the gourd through the side opening (Sobel 1989:38–40). As we have described above, Grandmother is associated specifically with magical gourd vessels in both Siouan and southeastern mythology.

Archaeological Context: Operational Aspect of Meaning

Contexts of Flint-clay Figurines

If Grandmother is the referent of these symbols, then their creators may have meant to invoke any one of her mythological attributes and abilities. Some aspects of their archaeological context may help us to understand how she was used as a symbol by Mississippian people. Five of the flint-clay statues were found ritually killed in or near ceremonial buildings at two sites in the immediate vicinity of Cahokia, BBB Motor, and Sponemann (Emerson and Jackson 1984; Jackson et al. 1992). These two sites have been interpreted by their excavators as early manifestations of Green Corn or World Renewal ceremonialism and as part of the "architecture of power" in rural Cahokia (Emerson 1997c; Jackson and Emerson 1984). Both sites date to the Stirling phase, but Sponemann is probably slightly later. They are less than 2 km apart. Romain (2015:37) has recently argued that these two sites are linked to each other and Monk's Mound by a lunar alignment and suggests that lunar alignments in general at Cahokia reference an archetypal Earth Mother.

The BBB Motor site was, prior to construction of I-255, located on a low rise beside a small lake called Robinson's Lake between the Edelhardt Meander Scar, immediately to the west, and the bluff line that bounds the American Bottom floodplain (Emerson and Jackson 1984:4). This bluff lies less than 2 km to the east, and the Grand Plaza of central Cahokia Mounds lies 3 km to the west-south-west of the site. Emerson and Jackson (1984:4–5) describe the topographic relief in the Robinson's Lake locality as very low and the soils as not optimal for agriculture due to their slow permeability and the risk of flooding. Higher, more friable and better-drained soils were available nearby, on the colluvial veneer and alluvial fan area at the foot of the bluff. Robinson's Lake itself would have been a source of fish, waterfowl, and edible plants, such as water lotus. Emerson (1997b:95) suggests that "Prehistorically, the site area may have been an 'island' surrounded by open water and marsh. The topography consists of a number of low-lying ridges surrounded by marshes, sloughs, ponds, and lakes." If this characterization is correct, the site's setting may have invoked Grandmother's island retreat, especially during spring floods.

At BBB Motor, two figurines (Keller and Birger) were recovered from the northern focus of the site: a series of Stirling phase structures, pits, and wall trenches. Structure 87 was a rectangular building with 16.5 m² of interior space and probably a central post. The head and upper torso of the Keller figurine came from a pit excavated into the floor of this structure (Emerson and Jackson 1984:209). The feature containing the figurine fragment held few artifacts and no plant remains but was adjacent to a larger (roughly 4 m²; Emerson and Jackson 1984:203) feature that contained both "exotic" material (Emerson and Jackson 1984:209) and two carbonized jimsonweed (*Datura cf. stramonium*) seeds, as well as maize, maygrass, and erect knotweed (Whalley 1984:329–30). Structure 87 also yielded two gourd effigy vessels from the same occupation surface—the only vessels of this type recovered from the site (Emerson and Jackson 1984:289). The base and right hand of the Keller figurine were found in Feature 38, 3 m to the south of Structure 87, along with "a considerable amount" of ceramic and lithic objects (Emerson and Jackson 1984:217). Archaeobotanical remains from this feature include 24 kernel fragments, 112 corn cob fragments, 2 chenopod, 1 sunflower, 41 maygrass, 1 erect knotweed, 8 black nightshade (*Solanum nigrum*), and 6 wild beans (*Strophostyles helvola*) seeds (Whalley 1984:330)—in other words, a variety of important food plants including sunflower and one potential medicine.

The Birger figurine is the most famous and well published of the corpus. While it is certainly an extraordinary artifact, its context is relatively unremarkable. It was recovered from a shallow pit 8 m distant from the nearest structure, a mere 40 cm below the surface. No other artifacts or plant remains were recovered from this context. Although the Birger figurine was damaged by earth moving equipment during excavations, two additional breaks showed signs of weathering. Either they were made by earlier plowing or this figurine, too, was ritually killed before being deposited (Emerson and Jackson 1984:258).

The BBB Motor site has been interpreted as an early manifestation of the Green Corn ceremony or busk (Emerson 1997a:177), an important summer festival associated with world renewal and absolution among many groups who historically lived in the East. We will return to this interpretation below, but here it will suffice to say that if ceremonies at BBB Motor were focused on renewal and growth, aspects of these rituals also dealt with death. A minimum of nine individuals were recovered from an area of burial pits closely associated with the northern focus of the site, where the figurines were deposited (Emerson and Jackson 1984:208–217). All of the human remains were fragmentary: they were probably dismembered, defleshed, then bundled and buried. One feature was interpreted as a possible “grave house”—BBB Motor was not just a burial ground but also a site of ongoing mortuary ritual. Interestingly, an infant and an adolescent were identified among the highly fragmented remains in these mortuary features (Milner 1983:395). The association of the figurine with the internment of children is a detail of operational meaning that links the two flint stone figurines found at BBB Motor to the Kneeling Woman vessels from later and further south, as we will discuss below.

The Sponemann site is located just south of Schoolhouse Branch and east of Cahokia Creek on a well-drained natural levee of the Edelhardt meander channel. It is 1 km north of BBB Motor and 4 km northeast of central Cahokia's Monks Mound. Sponemann is a much larger site than BBB Motor (15.5 ha as compared to 0.5 ha), and most of it was not within the right-of-way of I-255/270. Therefore, it was not fully excavated as part of the FAI-270 project, and much of it still exists in farmland. Fortier (Jackson et al. 1992:17) describes the numerous advantages of Sponemann's location as follows: “Proximity to aquatic resources, easily worked and fertile floodplain soils, relatively high ground, available supplies of fresh water from Schoolhouse Branch, as well as a meandering Cahokia Creek within the old channel scar, and easy ac-

cess to the nearby uplands were no doubt key factors in the selection of this important locality for long-term settlement.” Kin groups who lived there in early Mississippian times may well have acquired or increased their social prominence in part as a result of successful agricultural and other pursuits.

At the Sponemann site, excavators found a precinct that was interpreted as a ceremonial complex consisting of 8 structures and 23 exterior pit features (Jackson et al. 1992). Most of the more than 500 flint-clay figurine fragments recovered from this site came from the third and final floor level of Structure 282, the “ceremonial and symbolic focal point” of the site, according to its excavators (Jackson et al. 1992:70). Structure 282 was destroyed by fire. The final floor of this structure yielded a number of unusual finds apart from the hundreds of figurine fragments recovered. These included the only fragment of a hooded human effigy bottle recovered from the site (only its head was recovered, so its sex is unknown), a number of other unique ceramic forms, a quartz crystal, and a cache of Mill Creek hoes (Jackson et al. 1992:55). Diverse plant remains were also recovered, including foods (maize, sunflower, chenopod, maygrass, and wild beans) and ritual plants (red cedar and tobacco). The majority of the sunflower achenes recovered from the site come from Structure 282 ($n=35$) (Parker 1992:315). A number of other features also contained fragments of figurines, including a large exterior pit 12 m southeast of this structure—Feature 183—which contained two flint-clay figurine fragments, and like Structure 282 yielded red cedar charcoal. The density of maize kernel and cob fragments was extremely high in the 30 liters of floated fill analyzed from Feature 183, hence the interpretation as “a possible communal busk pit” (Jackson et al. 1992:97).

The Exchange Avenue figurine was recovered from a shallow pit filled with red ochre inside of a large wall trench structure. The structure, Feature 181, is located on the “northern fringe of the [East St. Louis] mound center's residential zone adjacent to the Cahokia Creek channel” (Emerson and Boles 2010:479). This structure is interpreted as a temple that was ritually destroyed by burning: it was partially constructed of red cedar and full of unusual items including powdered red ochre, cane mats or baskets, and a Ramey incised jar. The presence of debitage, abraders, possible pressure flakers, and numerous projectile points suggest that flint knapping occurred within the structure (Emerson and Boles 2010:480–481). Raw materials for potting and weaving (lumps of Kaolin clay and masses of split cane) as well as Mill Creek hoes were

also recovered, suggesting that types of crafting historically associated with women either took place in Feature 181 or were being referenced as part of its ritual destruction.

Outside of the American Bottom, female flint-clay figurines are very rare. There are three exceptions: the Westbrook figurine, the Schild figurine, and the newly discovered New Madrid figurine.² The Westbrook figurine was recovered from a burial in a mound, reinforcing the relevance of burials to the operational meaning of these symbols. It was found nearly 600 km south of Cahokia, in southeastern Arkansas. This figurine was dug up by nonprofessionals in the 1960s during an episode described by Colvin (2012:49) as "looting." An interview was conducted in April 2006 by Dr. John House of the Arkansas Archeological Survey with one of the collectors who was present during the episode. Information recorded during the interview sheds some light on its context. Apparently the Westbrook figurine came from a burial at the bottom of a deep (1.91 m) shaft at the center of a mound at a site in Desha County alternatively known as the Opossum Fork Bayou Mound, Richland Mound, or DeSoto Mound. The collector remembered two curious things about the skeleton: it was "small and fine-boned" and lacking a head, instead having a conch shell above the shoulders (Colvin 2012:48–50). In this fragmentary description, the themes of postmortem processing and, possibly, the burial of children or adolescents surface again.

The Schild figurine accompanied the burial of an adult man at a large Mississippian cemetery in the lower Illinois valley. The Schild figurine is sculpted in less detail than all of the other female figurines, so the fact that it lacks clearly modeled breasts may or may not be significant (Perino 1971:117–118). It also differs from the other members of the corpus in that it is a platform pipe. While executed in a different style and for a different purpose, the Schild figurine also depicts a kneeling figure entwined by a snake. Although it was not broken, it was burned before being deposited in the burial along with the fragmentary remains of an infant (Perino 1971:25).

Contexts of Kneeling Woman Hooded Effigy Vessels

The Kneeling Woman hooded effigy vessel was a common motif for potters in the villages of southeastern Missouri, northeastern Arkansas, and the Cumberland and Tennessee river valleys, as well as the Ohio River valley up to its confluence with the Wabash River, beginning ca.

1200 A.D. and continuing into the Protohistoric period in some sub-areas (Figure 4.3) (Morse 1990; Morse and Morse 1983; Sharp et al. 2011). This same area shared broader ceramic traditions and materials during the Mississippian period. For example, Smith (1990:136) refers to roughly the same area just described as "an oversized unit . . . the Cairo Lowland tradition."

Human effigies were created by Mississippian potters throughout the Midwest and the Southeast, so that determining the spatial extent of a particular form is complicated because researchers have used different features to classify them. Phillips et al. offer an exhaustive list of Mississippian human effigies that were known in 1950 from museum collections and early excavations (1951:183–190). Of 169 examples, 161 were recovered from the four state area pictured in Figure 4.3. The exceptions come from Alabama, Louisiana, Florida, and Oklahoma, do not depict females explicitly, and are not hooded vessels (Phillips et al. 1951:198–190). Those that Phillips and colleagues definitely identify as female or as hooded were disproportionately recovered from sites in three specific regions, represented in Figure 4.3 by the Sandy Woods site, near the confluence of the Ohio and Mississippi rivers, the Nodena site, between the St. Francis and Mississippi rivers, and the Averbuch cemetery site in the vicinity of Nashville, on the Cumberland River (Figure 4.3). Of course, this early list may reflect sampling bias more than true distribution. If a more recent comprehensive survey existed, it might turn up other concentrations. Unfortunately, because so many interesting and beautiful ceramic forms were crafted by Middle and Late Mississippian people in these areas, including head pots, rim-effigy bowls, and compound forms, pot hunters have targeted this region for over a century. Many Kneeling Woman female effigy vessels have been looted or haphazardly excavated.

It is possible that the flint-clay figurines of the American Bottom inspired the later effigy vessels. By ca. 1100 A.D., inhabitants of sites in the Cairo Lowlands were clearly in contact with the American Bottom; Varney ceramics, a style characteristic of southeastern Missouri and northeastern Arkansas, have been recovered both from Cahokia proper and from peripheral sites dating to this period (Pauketat 2003:54). At the same time, Varney style hooded gourd effigies, though not yet human effigies, were already being produced at sites like Zeebree, AR, a Mississippian village located on prime agricultural land on the shores of a backwater lake. Researchers have proposed that these hooded bottles

may have been trade items and/or seed containers (Morse and Morse 1983:219–220).

Over the next two centuries, the population density of the Central Mississippi valley increased and large, palisaded villages with multiple mounds sprang up (Morse and Morse 1983:236). Hooded vessels (and ceramics in general) became increasingly elaborate and figurative. The earliest members of the corpus of Kneeling Woman effigies probably date to this period (ca. 1200–1350 A.D.) and come from sites like Sandy Woods, a 22 ha fortified village with nine mounds situated on a ridge amid a series of meander belts (Potter 1880). Evidence that farmers were intensifying food production during this period include the placement of sites on prime agricultural soils, the increasing ubiquity of maize, and possibly the domestication of one member of the Eastern Agricultural Complex, knotweed (*Polygonum erectum*). At the same time, during the Thurston phase (ca. 1250–1450 A.D.) in the Cumberland River valley, settlements were also growing in size and were often bounded by palisades (Moore et al. 2006:91). All of the Kneeling Woman effigy vessels identified by Sharp and colleagues from this area date to this period, so the form may be somewhat later here than in the lowlands of southeastern Missouri and northeastern Arkansas (Sharp et al. 2011:180). Perhaps we are seeing the spread of a symbol which began in the Cahokia area into a much wider area to the south of Cahokia. If so, its spread was coincident with agricultural intensification and the continued successes on the part of women to breed desired characteristics into local and foreign plants.

Kneeling Woman effigy vessels continued to be produced in the Central Valley up until and perhaps after contact with Europeans. For example, a Kneeling Woman effigy vessel was recovered from the Upper Nodena site and probably dates to ca. 1400 A.D. Also recovered from this site were polishing pebbles and a pottery anvil in association with a female burial, lending some material support to the notion that women were potters during this period (Morse and Morse 1983:90–91). In the only analysis to focus specifically on the burial contexts of Kneeling Women effigies, Sharp and colleagues identified two dozen examples of Kneeling Woman effigies interred in stone lined burials. All with known proveniences came from the burials of children or sub-adults (Sharp et al. 2011:180), a choice which may link these objects to the burials associated with some of the flint-clay figurines.

Previous Interpretations

Maize Goddesses and Green Corn: A Rebuttal

Most archaeologists can agree that figures of women with plants or agricultural tools represent deities or ancestors responsible for ensuring plant fertility and enhancing productivity. Some have made the further inference that they must be associated with maize agriculture. The terms “Earth Goddess,” “Earth Mother,” “Corn Mother,” and “Corn Maiden” have been applied to these figures, and plants or plant-like parts carved on four of the statues have been suggested to depict or directly reference corn (Emerson 1982, 1997; Fortier 1992; Reilly 2004). “Green Corn ceremonialism” is a term that has been used to describe the events at BBB Motor and Sponemann. This interpretation is based on the presence of large pit features containing the remains of both crop plants and psychotropic, medicinal, or ritual plants such as jimson weed, black nightshade, and red cedar, concentrations of fancy artifacts, such as Ramey Incised ceramics and crystals, and on the interpretation of the flint-clay figurines as Corn Mother fertility figures.

At Green Corn ceremonies of the recent past and present, the kindling of the New Fire, offering plant material by burning, and ingesting various medicines (though not hallucinogens) all play central roles in the proceedings. The example of large-scale burning most pertinent to remains at BBB Motor and Sponemann comes from Bartram’s 1777 description of an Atassi Busk in Alabama: “They collect all their worn out cloathes [*sic*] and other despicable things, sweep and cleanse their house, squares, and the whole town, of their filth, *with all the remaining grain and other old provisions*, they cast together into one heap and consume it with fire” (quoted in Grantham 2002:77, emphasis added). Notice that in this relatively early account, all remaining foods from the previous season are offered, not just corn—a detail which is in line with the diverse plant remains recovered from both sites. Adair recounts a “first fruits” ceremony among the Creeks, in which “a beloved old woman” brings a basket full of newly ripened fruits to offer to the New Fire (Grantham 2002:79). These accounts hark back to what Grantham refers to as a more ancient “first fruits” rite. As we have argued above, corn is not depicted on any of the flint-clay figurines, while other plants explicitly are, and a variety of burned plant remains were recovered from nearby features, including hundreds of maygrass seeds and lesser amounts of other EAC crops.

If the flint-clay figurines were part of a precursor to a ceremony similar to Green Corn, they may reflect this older tradition. We are not alone in suggesting the pre-maize origins of plant fertility ceremonialism. Emerson (1982:10) wrote that "the Birger Figurine is a representation of a very old mythological concept in the Eastern Woodlands that precedes the introduction and widespread acceptance of maize in Late Woodland/Mississippian times." Reilly (2004:137) likewise acknowledges the "Woodland-period matrix" from which the symbolism of what he calls the Mississippian Art and Ceremonial Complex (including the Cahokia-style flint-clay figurines) was derived. If the prominence of maize in historic first fruits ceremonies is a reflection of its economic importance to historic southeastern people, then we might expect maize to have played a smaller part at Cahokia than in Colonial period ceremonies since maize in the American Bottom was one component of a diverse and balanced, multicropping system that included native EAC grains (Fritz and Lopinot 2007; Simon and Parker 2006).

However, we find it difficult to link the contexts of the flint-clay figurines securely to Green Corn ceremonialism as it was practiced historically. In all of the descriptions of Green Corn, there is no mention of destroying dozens of beautifully crafted art objects, much less effigies of the Corn Mother herself. Nor is the Green Corn ceremony associated with Corn Mother, despite its name. Instead, the patron of the ceremony is a celestial/solar being associated with breath (Swanton 1931:85). Green Corn ceremonies take place outdoors in a carefully swept square where the New Fire is kindled. While the layout of the structures at BBB Motor and Sponemann do not preclude such a central square, they do not strongly suggest it either. Token amounts of maize and tobacco were sometimes burned in the New Fire as offerings, but the mass burning of last year's plant material described by Bartram would have taken place outside of this purified space. At Sponemann, the largest feature containing plant materials was located within what would have been the central courtyard while at BBB Motor the largest feature was inside of a small structure and contains other special items that are not easy to characterize as "detritus." At both BBB Motor and Sponemann, parts of the "killed" figurines were recovered from inside structures with a floor area of 16 m² or so. This corresponds to the kind of exclusivity or restricted access posited by Emerson, but it is antithetical to Green Corn ceremonies, which are intensely public and involve the entire community, albeit rigidly separated by gender.

The Female Statues as Tools of an Elite-Centered Priesthood

In addition to their emphasis on the busk, the discussions of "red goddesses" by Thomas Emerson and colleagues, as laid out in Emerson (1997a, b, c) and elsewhere, include arguments that the ritual precincts at BBB Motor and Sponemann manifest the institutionalization of a priestly cult that served Cahokia's elite. This "chiefly warrior cult," or "cult of the nobility" (Emerson 1997b:216) is cast in opposition to "the communally based fertility cult." The chiefly warrior cult is seen as effectively neutralizing the communally based fertility cult as a base of power. In this scenario, the structures and associated hearths and pits in which the flint-clay statues and other ritual objects were deposited were temples, residences of priests, and surrounding features: "I think there can be little doubt that Sponemann was staffed by religious specialists who were part of a permanent priesthood" (Emerson 1997b:225). One concern of these priests was to aid elite leaders in domination of the commoners, which included appropriation of the fertility cult and its symbols:

That expropriation of the fertility cult as part of the dominant ideology by the Cahokian elite during the Lohmann-Stirling phase transition was a major ideological tool in creating and sanctifying elite sacredness and consolidating elite *power over*. The manipulation of fertility cosmology through a system of 'rites of intensification' and associated symbols of authority served to naturalize the inherent social inequality that was a major hallmark of Stirling life. (Emerson 1997b:228)

Other archaeologists have accepted at least some elements of the power play theme. Reilly (2004:137), for example, places emphasis on emerging elites who used these exquisite images to convey "to their people the supernatural power and prestige inherent in the cosmos itself, which they purported to control." Although we did not find explicit references to the gender or genders of these Stirling phase priests, it seems unlikely that any of the authors who favor an elite usurpation of fertility symbolism and ceremonialism would suggest that Mississippian women in general assumed more control *after* the fertility cult was expropriated. Recently, this conception of power at Cahokia has been changing. The recognition of pervasive lunar alignments, coupled with the fact that many of the most striking pieces of representational art recovered from the American Bottom are female flint-clay figurines,

has led Emerson (2015:59) to suggest that the Earth Mother cult and its priests and priestesses may have been central to Cahokian religion.

The Statues as Beings Central to Women's Age-Grade Societies

Recently, Matthew Colvin (2012) has made a strong case for the connection between Cahokia-style flint-clay statues and postcontact rituals involving Old Woman Who Never Dies as documented by ethnographers visiting the Hidatsa and Mandan villages during the nineteenth century and early twentieth century. He discusses the importance of Old Woman in rituals performed by members of Plains Indian village female age-grade societies, specifically the Goose Society, and the centrality of bundles containing objects that seem to be depicted on the Missouri flint-clay fertility figures or found in nearby archaeological contexts:

This ceremony is conducted to retell the story of Old-Woman and prepare for her arrival during the planting season. . . . The bearer of the Old Woman bundle would also place an image of Old Woman outside their residence, indicating the location of the ceremony. The interpretation can be made that the flint-clay statues could be reminiscent of this practice. (Colvin 2012:82)

We obviously appreciate Colvin's emphasis on women as primary actors and his meticulous reading of both the ethnographies and the contextual complexities of the BBB Motor and Sponemann site structures and associated artifacts and ecofacts, especially the plant remains. His thesis inspired us considerably and serves as a foundation for key parts of our discussion. Like us, Colvin stresses the significance of sunflower symbolism, and he sees no depictions of maize.

The Structures at BBB Motor and Sponemann as Menstrual Houses

Galloway (1997) offers an intriguing alternative interpretation of the BBB Motor and Sponemann ritual structures, suggesting that some may have been menstrual huts or women's houses. She points to the presence of red ochre, a singular quartz crystal with a red impurity, the presence of *Datura stramonium* (which she suggests may have been used for childbirth or abortions), and the spatial segregation of these buildings from the rest of the village at BBB Motor. She goes on to suggest that Ramey ceramics may have been special vessels created by women

for exclusive use during menstruation and after childbirth. She cites Emerson's characterization of Ramey decorations as simple and visible at a distance to argue that such designs might have been intended to "warn of pollution" (1997:60), noting that historically and up to the present, menstruating women in many Native American communities have used separate sets of eating utensils and vessels and observed various other taboos. If Mississippian women spent several days of each month in menstrual seclusion with other adult females of their kin-group, how did they spend their leisure time?

Galloway suggests that women may have spent their time crafting elaborate objects or special wares, such as Ramey Incised pottery, that could only be used by menstruating women. The woman-gourd effigies may also have served as special vessels reserved for women during menstruation or after childbirth. Menstrual seclusion by historic southeastern people was predicated on a belief that menstruating women were dangerous to the ongoing fertility of both plants and people: menstruating women were not to touch or go near men for fear of reducing their virility, nor did they work in or walk near their gardens (Galloway 1997:55). Given this cultural anxiety, women may have invoked the patroness of regeneration to ensure that their own fertility would survive the menstrual or post-birth period. Might they also have crafted the intricate flint-clay figurines during these periods for the same reason?

Galloway also suggests that women may have spent some of their time in seclusion gambling (1997:57). DeBoer (2001) provides an overview of dice gambling throughout North America and amply demonstrates that it was an activity dominated by women. The stakes in women's games were often small but valuable objects, such as exotic shells, jewelry, pots, and objects of personal adornment (DeBoer 2001:227–228). The life histories of both figurines and effigy vessels could include episodes as stakes in women's dice games. Claassen, in Chapter 1, found evidence of several other activities engaged in by women when in menstrual retreat. Based on the perishables found in Newt Kash and several other rock shelters in Kentucky, Tennessee, and the Ozarks, it appears that women might have engaged in basket stave making, cordage production, and nut oil rendering utilizing flakes, burins, mortars, pestles, fire, etc. Whatever specific activities occupied their time, if Mississippian women practiced menstrual seclusion it seems certain that they would have shared food and knowledge with each other during these times. At Cahokia in

particular, menstrual seclusion may have been an important institution for the diffusion of goods, techniques, and symbols between groups.

Object Life Histories: Gendered Symbols on a Changing Landscape

The fact that all of the flint-clay figurines that have been recovered seem to have been intentionally broken before deposition is an important operational aspect of their meaning. While ritually killed artifacts are common in the archaeological record of North America, the intentional breaking of artifacts is not a part of many of the ceremonies described in ethnographic or historical accounts reviewed for this paper. Perhaps this is because the ritual killing of objects marked a singular, rather than cyclical, event—a burial, closure, or rupture. This type of event would have been less commonly witnessed or shared with historical informants than annual public ceremonies, such as Green Corn.

Although we lack specific ethnographic analogues, the referent of resurrection or regeneration is suggested by another operational aspect of some of these artifacts: they were ultimately deployed in or near burials. The association of many of these effigies with burials is incomprehensible if we consider fertility and growth to be in opposition to death. But if we instead foreground the special abilities of Grandmother to enable regeneration, or even resurrection, this association seems natural. These words imply a cycle, the process by which something that has spent all of its creative energy can be made fertile again. Recall that in the Siouan myth, Grandmother is able to become young again by bathing in the river, and she has special vessels that magically refill with food or water when they are empty. In the southeastern myths, Grandmother has the same magically refilling vessels, and she is even able to put the souls of the dead into these special gourds and return them to the land of the living. In connection to these stories, the fact that the kneeling woman effigies double as gourd effigies seems telling. Their placement in burials, especially those of children, may reference Grandmother's role as a guide or caregiver to a lost child. Alternatively, these vessels may invoke the resurrection theme more literally, as a rite to ensure that future births would balance the loss of a child. At BBB Motor and Sponemann, the closure of one ritual space may have necessitated special rites to perpetuate the community elsewhere. This interpretation is in line with what Martin Byers has called "mortuary-mediated" world

renewal ceremonies, in which each part of the mortuary cycle seeks to restore balance through regeneration or release (Byers 2013).

It is unlikely that either the figurines or the vessels were finally deployed in a cyclical ceremony, such as Green Corn. The ritual killing of figurines at BBB Motor and Sponemann and subsequent abandonment of these sites suggest a singular event while the deposition of the Westbrook figurine and the effigy vessels must have been associated with mortuary ceremonies. However, it is important to consider that these figurines probably had roles to play before they were finally broken, burned, and buried.

The figurines and effigies we have considered here may have been created for and/or deployed in a range of gendered activities—menstrual seclusion, annual activities of women's age-grade societies, or gambling. Any of these, because of their potential to facilitate exchange among women, may have had important economic outcomes for a society in the midst of an agricultural and symbolic transition. Ethnographically, Grandmother is associated with exchange, specifically of seeds. As noted by Colvin (2012), the richest exegetic record of Grandmother-related ceremonialism comes from the Siouan Mandan and Hidatsa Goose Society, an all-woman age-grade organization responsible for maintaining the Old Woman Who Never Dies bundle. The Goose society was made up of married women of child-bearing age. Its primary ceremony took place in the spring and involved the distribution of seed for planting (Bowers 1992:202–203).

Ceremonial exchange of seed in early spring was important to Mandan and Hidatsa farmers because it helped them to maintain special varieties and diversify their seed stock. For Mississippian residents of a multi-ethnic community at Cahokia, seed exchange ceremonies may also have facilitated the transfer of novel crops or landraces, from communities who had already been growing them for several generations to others who were still unfamiliar with the new varieties. In myth, Grandmother is several times associated with introducing new seeds to travelers or instructing people in methods of cultivation, and in ritual she is associated with the exchange of seed. Institutions associated with such a cult, if they were already in place by the Woodland-Mississippian transition, might have facilitated the introduction of tropical crops to eastern North America.

Another important juncture of ideological and functional gendered behavior involves allocation of field plots. Through his interviews with

Maxidiwac (Buffalo Bird Woman), Gilbert Wilson (1987) recorded the conventions and sanctions used by late nineteenth-century Hidatsa women to lay out their plots and resolve disputes that sometimes occurred between farmers of adjacent gardens. All agricultural activities were spiritually imbued, necessitating balance, harmony, and reverence, and Grandmother was, as we have seen, the presiding supernatural presence.

If women's age-grade societies developed in the Mississippi River valley during Stirling phase times or earlier, they may have played a role in the distribution of agricultural land by forming social groups that cross-cut kinship ties and accommodated families that had disparate geographical roots. We argue that the lack of archaeobotanical evidence for an agricultural revolution in terms of new and different proportions of crops produced between 950 and 1100 A.D. (Simon and Parker 2006) indicates continuity in infrastructure, an essentially smooth economic transition underlying the dramatic changes otherwise manifested by Cahokia's Big Bang. This is not to deny the importance of status differences such as: (1) hierarchical ranking of clans; (2) importance of wealth, age, or prestige in gaining admission to a particular age-grade society; or (3) exclusivity of rights and leadership responsibilities in terms of bundle ownership and other ceremonial legacies. Still, it places women in charge of decision making where farming was concerned rather than transferring prerogatives to an abstract, "elite" sector of admittedly, very complex Cahokian society.

Finally, we address the issue of who made the effigy vessels and female flint-clay figures. Because women are acknowledged to have been the primary potters in the eastern Woodlands at, and probably long preceding, European contact, it seems obvious to us that the Kneeling Woman Effigy vessels were made by women. We think it is at least as likely that the flint-clay figurines were made by women as by men, given their iconographic content and potential symbolic uses. It is possible that these objects were not created for formal ceremonies at all. Grandmother is associated not just with plants but with women's work and skills. She was solicited by women as they worked in their homes and gardens. It is worth quoting Bowers at length on this subject:

Probably no Mandan or Hidatsa myth is as widely related and discussed as that of Old Woman Who Never Dies. . . . Likewise, the varieties of ritual forms within one village were greater than for any of the other ceremonies. The simplest and most universal rites were performed by women as individuals or households of women and consisted primarily of simple offerings. . . . This was done without the benefit of public gatherings or payments to bundle holders. On other occasions a woman . . . set up

within her garden a high post on which a newly composed personal sacred bundle was hung as a "protector" of the garden. (Bowers 1992:340)

Even if they were finally deployed in public or semi-public ceremonies, they may have served many private ritual functions first. Before they were broken and interred, might these figurines have served as miniature protectors of gardens and homes or as elements in individualistic personal bundles? Certainly each one is unique, both in style and iconographic content.

Conclusions

The impacts of women on the landscape were extensive in Late Woodland and Mississippian times. They created and managed the fields and groves where food was produced and harvested, thus changing the ecology of the land and the rivers. We have argued that for women primarily, the institutions and ritual practices associated with Grandmother structured women's work and thus their transformation of the landscape. Grandmother is a figure commemorated in stories, places, and things from North Dakota to the Gulf Coast. Women's marks of adoration and supplication can be seen in caves, rock shelters, and rock art sites (see Chapter 3 as well as in the expert crafting of effigy vessels and the ceremonial deposition of these vessels. The residues of women's participation in Mississippian ceremonialism can be detected both inside burial mounds and within ritual precincts of densely settled habitation zones, including areas that were intricately connected to Cahokia and other important centers.

It is important to recognize multiple female characters in mythology because each of these enriches our understanding of both the possible referents of women as symbols and the preoccupations of women in the societies we study. Grandmother is not only (or even primarily) a symbol of fertility. She is a polysemous symbol with a fan of related concepts and associated symbols that are fairly constant across thousands of miles and between speakers of languages from at least four different families. In some contexts, she seems to have been an accessible force solicited for the most pragmatic reasons. She represents the life's work of women, to cultivate their gardens and to guide and teach their children, which is why she was honored by women in small personal ways, within their homes and gardens. But she is also a symbol of the immortal or eternal, a regenerative force that makes death a creative event.

Recognizing a major female supernatural personage—a prominent figure in precontact iconography and postcontact ethnology—makes the lives of Mississippian women potentially less murky and more interesting. We can never know definitively how these symbols were operationalized by their creators and owners. Given their iconographic richness and aesthetic appeal, we are confident that other researchers will continue to reinterpret their import for years to come. Our goal here has been to show how gendered symbolism can be used as a window on gendered institutions that structured the social and physical landscape during a transformational period. Thinking about institutions associated with Grandmother has led us to consider forces that may have maintained stability or facilitated the integration of communities via mutually comprehensible institutions. Women's age-grade societies could have structured the exchange of seed and agricultural knowledge and the distribution of plots for gardens. Menstrual seclusion may have allowed women to share stories and materials and learn each other's symbolic vocabulary. The ritual killing or burial of Grandmother symbols may have linked the continuity of communities and families to an ideology of regeneration with ancient roots. Gendered institutions and beliefs, and the artifacts that give us limited access to them, are an important element of the Mississippian story, characterized as it is by the spread and local adaptation of novel crops, social relations, and symbol systems.

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NOTES

1. Fox (2004) makes a strong argument that the Late Archaic Frontenac Island mortuary was believed by Middle Woodland peoples of the Lake Ontario region to be the place where Sky Woman landed and birthed her daughter.
2. A female flint-clay figurine with plant imagery was recently discovered from the New Madrid area. The details on this figurine's provenience and iconography are forthcoming (Boles 2014).

REFERENCES CITED

- Boles, Steven L.
2014 Supernaturals in the Confluence Region. Paper presented at the Southeastern Archaeological Conference, Greenville, SC.
- Bowers, Alfred W.
1992 *Hidatsa Social and Ceremonial Organization*. University of Nebraska Press, [1963] Lincoln and London.
- Braun, David P.
1983 Pots as Tools. In *Archaeological Hammers and Theories*, J. A. Moore and A. S. Keene, editors, pp. 107–134. Academic Press, New York.
- Buikstra, Jane E., Lyle W. Konigsberg, and Jill Bullington
1986 Fertility and the Development of Agriculture in the Prehistoric Midwest. *American Antiquity* 51(3):528–546.
- Byers, Martin A.
2013 *From Cahokia to Larson to Moundville: Death, World Renewal, and the Sacred in the Mississippian Social World of the Late Prehistoric*. Newfound Press: The University of Tennessee Libraries, Knoxville.
- Claassen, Cheryl
2011 Rock Shelters as Women's Retreats: Understanding Newt Kash. *American Antiquity* 76(4):628–641.
- Colvin, Matthew H.
2012 Old-Woman-Who-Never-Dies: A Mississippian Survival in the Hidatsa World. Master's thesis, Anthropology Department, Texas State University, San Marcos, TX.
- Cornplanter, Jesse J.
1963 *Legends of the Longhouse*. Empire State Historical Publication XXIV. Ira J. Friedman, Inc., Port Washington, NY.
- DeBoer, Warren R.
2001 Of Dice and Women: Gambling and Exchange in Native North America. *Journal of Archaeological Method and Theory* 8(3):215–268.
- Dellinger, S. C., and S. D. Dickinson
1940 Possible Antecedents of the Middle Mississippian Ceramic Complex in Northeastern Arkansas. *American Antiquity* 6(2):133–147.

- Doolittle, William E.
1992 Agriculture in North America on the Eve of Contact: A Reassessment. *Annals of the Association of American Geographers* 82(3):386-401.
- Duncan, James R., and Carol Diaz-Granados
2004 Empowering SECC: The "Old Woman" and Oral Tradition. In *The Rock Art of Eastern North America: Capturing Images and Insight*, Carol Diaz-Granados and James R. Duncan, editors, pp. 190-218. University of Alabama Press, Tuscaloosa.
- Emerson, Thomas E.
1982 *Mississippian Stone Images in Illinois*. Circular No. 6. Illinois Archaeological Survey, Urbana.
1997a *Cahokia and the Archaeology of Power*. University of Alabama Press, Tuscaloosa.
1997b Cahokian Elite Ideology and the Mississippian Cosmos. In *Cahokia: Domination and Ideology in the Mississippian World*, Timothy R. Pauketat and Thomas E. Emerson, editors, pp. 190-228. University of Nebraska Press, Lincoln and London.
1997c Reflections from the Countryside on Cahokian Hegemony. In *Cahokia: Domination and Ideology in the Mississippian World*, Timothy R. Pauketat and Thomas E. Emerson, editors, pp. 167-189. University of Nebraska Press, Lincoln and London.
2015 The Earth Goddess Cult at Cahokia. In *Medieval Mississippians: The Cahokian World*, Timothy R. Pauketat and Susan M. Alt, editors, pp. 55-60. Schools of Advanced Research, Santa Fe, NM. Press.
- Emerson, Thomas E. and Steven L. Boles
2010 Contextualizing Flint Clay Cahokia Figures at the East St. Louis Mound Center. *Illinois Archaeology: Journal of the Illinois Archaeology Survey* 22(2): pp. 473-490.
- Emerson, Thomas E. and Randall E. Hughes
2000 Figurines, Flint Clay Sourcing, the Ozark Highlands, and Cahokian Acquisition. *American Antiquity* 65(1):79-101.
- Emerson, Thomas E., Randall E. Hughes, Mary R. Hynes and Sarah U. Wiseman
2003 The Sourcing and Interpretation of Cahokia-Style Figures in the Trans-Mississippi South and Southeast. *American Antiquity* 68(2):287-314.
- Emerson, Thomas E. and Douglas K. Jackson
1984 *The BBB Motor Site*. American Bottom Archaeology: FAI-270 Site Reports. Illinois Archaeological Survey, Springfield.
- Emerson, Thomas E., Brad Koldehoff, and Timothy R. Pauketat
2000 Serpents, Female Deities, and Fertility Symbolism in the Early Cahokia Countryside. In *Mounds, Mound, and Mesoamerica: Papers in Honor of Melvin L. Fowler*, Steve R. Ahler, editor, pp. 511-522. Scientific Papers, Vol. XXVII. Illinois State Museum, Springfield.
- Fortier, Andrew C.
1992 Figurines. In *The Sponemann Site 2 (11-M5-517): The Mississippian and Oneota Occupations*, Andrew C. Fortier, Douglas K. Jackson, and Joyce A. Williams, editors, pp. 227-303. University of Illinois Press, Urbana.

- Fox, William
2004 Islands of Creation, Islands of Rebirth. *The Bulletin: Journal of the New York State Archaeological Association* 120:47-57.
- Fritz, Gayle J.
1994 Precolumbian *Cucurbita argyrosperma* ssp. *argyrosperma* (Cucurbitaceae) in the Eastern Woodlands of North America. *Economic Botany* 48(3):280-292.
1999 Gender and the Early Cultivation of Gourds in Eastern North America. *American Antiquity* 64(3):417-429.
2000 Levels of Biodiversity in Eastern North America. In *Biodiversity and Native America*, Paul E. Minnis and Wayne J. Elisens, editors, pp. 223-247. University of Oklahoma Press, Norman.
- Galloway, Patricia
1997 Where Have All the Menstrual Huts Gone? The Invisibility of Menstrual Seclusion in the Late Prehistoric Southeast. In *Women in Prehistory: North America and Mesoamerica*, Cheryl Claassen and Rosemary Joyce, editors, pp. 47-64. University of Pennsylvania Press, Philadelphia.
- Grantham, Bill
2002 *Creation Myths and Legends of the Creek Indians*. University Press of Florida, Gainesville.
- Hammet, Julia E.
2000 Ethnohistory of Aboriginal Landscapes in the Southeastern United States. In *Biodiversity and Native America*, Paul E. Minnis and Wayne J. Elisens, editors, pp. 248-299.
- Hart, John P., and William A. Lovis
2013 Reevaluating What We Know About the Histories of Maize in Northeastern North America: A Review of Current Evidence. *Journal of Archaeological Research* 21(2):175-216.
- Hatchcock, Roy
1976 *Ancient Indian Pottery of the Mississippi Valley*. Hurley Press, Inc., Camden, Ar.
- Holmes, William Henry
1886 *Ancient pottery of the Mississippi Valley*. US Government Printing Office.
- Horton, Elizabeth T., and George Sabo III
2017 Baskets for the Ancestors: Sacred Bundles in the Great Mortuary at the Spiro Ceremonial Center. In *Sacred Bundles*, F. Kent Reilly III, editor. University of Texas Press, Austin.
- Jackson, Douglas K., Andrew C. Fortier, and Joyce A. Williams
1992 *The Sponemann Site 2: The Mississippian and Oneota Occupations*. American Bottom Archaeology: FAI-270 Site Reports. Illinois Archaeological Survey, Springfield.
- Kelly, John E.
1990 The Emergence of Mississippian Culture in the American Bottom Region. In *The Mississippian Emergence*, Bruce D. Smith, editor, pp. 113-152. Smithsonian Institution Press, Washington, DC.
- La Flesche, Francis
1932 *A Dictionary of the Osage Language*. Bureau of American Ethnology Bulletin No. 109. Smithsonian Institution, Washington, DC.

- Lankford, George E.
2011 *Native American Legends of the Southeast: Tales from the Natchez, Caddo, Biloxi, Chickasaw, and Other Nations*. University of Alabama Press, Tuscaloosa.
- Lynott, Mark J., Thomas W. Boutton, James E. Price, and Dwight E. Nelson
1986 Stable Carbon Isotopic Evidence for Maize Agriculture in Southeast Missouri and Northeast Arkansas. *American Antiquity* 51(1):51-65.
- Milner, George R.
1984 Human Skeletal Remains from the BBB Motor Site. In *The BBB Motor Site*, Thomas E. Emerson and Douglas K. Jackson, editors, pp. 395-398. American Bottom Archaeology: FAI-270 Site Reports. Illinois Archaeological Survey, Springfield.
- Moore, Michael C., Emanuel Breitburg, Kevin E. Smith, and Mary Beth Trubitt
2006 One Hundred Years of Archaeology at Gordontown: A Fortified Mississippian Town in Middle Tennessee. *Southeastern Archaeology* 25(1):89-109.
- Morse, Dan F.
1990 The Nodena Phase. In *Towns and Temples along the Mississippi*, David H. Dye and Cheryl Anne Cox, editors, pp. 69-97. University of Alabama Press, Tuscaloosa.
- Morse, Dan F., and Phyllis A. Moore
1983 *Archaeology of the Central Mississippi Valley*. Academic Press, New York.
- Mueller, Natalie G.
2013 *Mound Centers and Seed Security: A Comparative Analysis of Botanical Assemblages from Middle Woodland Sites in the Lower Illinois Valley*. Springer, New York.
- Parker, Kathryn E.
1992 Archaeobotany. In *The Sponemann Site 2: The Mississippian and Oneota Occupations*, Douglas K. Jackson, Andrew C. Fortier, and Joyce A. Williams, editors, pp. 305-324. American Bottom Archaeology: FAI-270 Site Reports. Illinois Archaeological Survey, Springfield.
- Pauketat, Timothy R.
2003 Resettled Farmers and the Making of a Mississippian Polity. *American Antiquity* 68(1):39-66.
2009 *Cahokia: Ancient America's Great City on the Mississippi*. Penguin, New York.
- 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(2):257-279.
- Perino, Gregory H.
1971 The Mississippian Component at the Schild Site (No. 4), Greene County, Illinois. In *Mississippian Site Archaeology in Illinois*, Vol. 1, pp. 1-148. Illinois Archaeological Survey Bulletin No. 8, Springfield.
- Phillips, Phillip, James A. Ford, and James B. Griffin
1951 *Archaeological Survey in the Lower Mississippi Alluvial Valley, 1940-1947*. Peabody Museum of American Archaeology and Ethnology, Cambridge, MA.

- Potter, William B.
1880 Archaeological Remains in Southeastern Missouri. In *Contributions to the Archaeology of Missouri by the Archaeological Section of the St. Louis Academy of Science: Part I*. Pottery, George A. Bates, editor. Naturalists' Bureau, Salem, MA.
- Prentice, Guy
1986 An Analysis of the Symbolism Expressed by the Birger Figurine. *American Antiquity* 51(2):239-266.
- Reilly, F. Kent, III
2004 People of Earth, People of Sky: Visualizing the Sacred in Native American Art of the Mississippian Period. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, Richard Townsend and Robert Sharp, editors, pp. 125-138. Art Institute of Chicago, Chicago.
- Romain, William F.
2015 Moonwatchers of Cahokia. In *Medieval Mississippians: The Cahokian World*, Timothy R. Pauketat and Susan M. Alt, editors, pp. 33-41. Schools of Advanced Research Press, Santa Fe, NM.
- Scarry, C. Margaret, and John F. Scarry
2005 Native American "Garden Agriculture" in Southeastern North America. *World Archaeology* 37(2):259-274.
- Sharp, Robert V., Vernon J. Knight, and George E. Lankford
2011 Woman in the Patterned Shawl: Female Effigy Vessels and Figurines from the Middle Cumberland River Basin. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, James F. Garber, F. Kent Reilly III, and George E. Lankford, editors, pp. 177-200. University of Texas Press, Austin.
- Simon, Mary L., and Kathryn E. Parker
2006 Prehistoric Plant Use in the American Bottom: New Thoughts and Interpretations. *Southeastern Archaeology* 25(2):212-257.
- Slater, Philip A., Kristin M. Hedman, and Thomas E. Emerson
2014 Immigrants at the Mississippian Polity of Cahokia: Strontium Isotope Evidence for Population Movement. *Journal of Archaeological Science* 44:117-127.
- Smith, Bruce D.
1993 Reconciling the Gender-Credit Critique and the Floodplain Weed Theory of Plant Domestication. In *Archaeology of Eastern North America: Papers in Honor of Stephen Williams*, J. B. Stoltman, editor, pp. 111-125. Archaeological Report No. 25. Mississippi Department of Archives and History, Jackson.
- Smith, Bruce D., and Wesley C. Cowan
2003 Domesticated Crop Plants and the Evolution of Food Production Economies in Eastern North America. In *People and Plants in Ancient Eastern North America*, Paul E. Minnis, editor, pp. 105-125. Smithsonian Books, Washington, DC.
- Smith, Gerald P.
1990 The Walls Phase and its Neighbors. In *Towns and Temples along the Mississippi*, David H. Dye and Cheryl Anne Cox, editors, pp. 135-169. University of Alabama Press, Tuscaloosa.

Sobel, Elizabeth

- 1989 An Archaeological Study of Hooded Bottles from the Sandy Woods Site. Master's thesis, Anthropology Department, Yale University, New Haven, CT.

Swanton, John R.

- 1929 *Myths and Tales of the Southeastern Indians*. Bureau of American Ethnology Bulletin No. 88. Smithsonian Institution, Washington, DC.
- 1931 *Modern Square Grounds of the Creek Indians, with Five Plates*. Miscellaneous Collections Vol. 85, No. 8. Smithsonian Institution, Washington, DC.

Turner, Victor

- 1967 *The Forest of Symbols: Aspects of Ndembu Ritual*. Cornell University Press, Ithaca, NY.

Wagner, Gail E.

- 2003 Eastern Woodlands Anthropogenic Ecology. In *People and Plants in Ancient Eastern North America*, Paul E. Minnis, editor, pp. 126-171. Smithsonian Books, Washington, DC.

Watson, Patty Jo, and Mary C. Kennedy

- 1991 The Development of Horticulture in the Eastern Woodlands of North America. In *Engendering Archaeology*, Joan Gero and Margaret W. Conkey, editors, pp. 225-275. Basil-Blackwell, Oxford.

Whalley, Lucy A.

- 1984 Plant Remains from the Stirling Phase. In *The BBB Motor Site*, Thomas E. Emerson and Douglas K. Jackson, editors, pp. 321-335. Illinois Department of Transportation, Springfield.

Wilson, Gilbert L.

- 1987 *Buffalo Bird Woman's Garden*. Minnesota Historical Society Press, St. Paul.

Witthoft, John

- 1949 *Green Corn Ceremonialism in the Eastern Woodlands*. University of Michigan Press, Ann Arbor.