

OLD-WOMAN-WHO-NEVER-DIES: A MISSISSIPPIAN SURVIVAL IN THE
HIDATSA WORLD

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OLD-WOMAN-WHO-NEVER-DIES: A MISSISSIPPIAN SURVIVAL IN THE
HIDATSA WORLD

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CHAPTER I

INTRODUCTION

The purpose of this thesis is to examine a specific category of female Mississippian statuary and link that statuary to a ceremonial tradition that belongs not only to a prehistoric Native American culture, but also to more modern cultures. In particular, the central argument is that female flint-clay statues from the central Mississippi valley are an ancestral precursor of historical ceremonies and religious practices that focus upon a traditional deity referred to as Old-Woman-Who-Never-Dies.¹

Although the subject matter of this thesis will span hundreds of years, there is an observable connection between ritual and statuary that I believe can be attributed to a deeply rooted cultural identity. The statuary under investigation originates from the Cahokian region, one of the most influential polities of the Mississippian period. This chapter will begin with a brief introduction to the archaeological settings in which the statuary originates and will be followed by an outline of

¹Old-Woman-Who-Never-Dies is specific to the Hidatsa and Mandan

the organization of subsequent chapters.

While certain flint-clay figurines have been interpreted as representing the Underworld (Emerson 1989, 1995, 1997:207), other statuettes are thought to depict the Earth-Mother (Prentice 1986). Based upon the generally available archaeological evidence, these may not be incorrect interpretations. These identifications have been commonly accepted by those who examine figural art, with few objections to, or differing interpretations, recorded in the literature. My observations are not meant as a critique of specific archaeological investigations, nor as an attempt to diminish the work of researchers. Within Mississippian archaeology, statuary is only one feature or facet of a much larger investigation. However, is it possible for archaeologists to glean more identity from statuary by incorporating additional methods? In this thesis I demonstrate that a holistic approach combined with iconographic analysis can tell us archaeologists, epigraphers, and iconographers more about figural representations and what roles these served in the lives of those who used them.

The archaeological data under scrutiny belong to a specific period within the geographical region currently referred to as the American Bottom. In fact, the Stirling

Phase (AD 1100-1200) of the Cahokian fluorescence and its accompanying artifacts are identifiable both north and south of Cahokia proper (Farnsworth and Emerson 1989). The Stirling Phase is easily recognizable based upon common motifs, architectural design, and specific art styles (Pauketat and Emerson 1997:8). One important implication of this is that the entire region was integrated as part of a centralized ideological complex—a position held by several contemporary Southeastern archaeologists (Emerson 1997; Pauketat and Emerson 1997; Hudson 1961:77). The art style under investigation was prevalent in the Cahokian region and has been identified as the Braden style (Brown 2007; Phillips and Brown 1975).

Thesis outline

Chapter two will present my theoretical background and my methodology for conducting this research. While my thesis is heavily weighted toward an analysis of particular archaeological settings within the American Bottom, I am also reliant on examining the art of these ancient peoples. This analysis will be framed around the perspective of Erwin Panofsky (1955), who is often considered the father of iconographic analysis.

In chapter three I compile a corpus of all female representations of Braden-style flint-clay statues within

the Southeastern United States and discuss the role of art in the archaeological context. I also state the attributes of flint clay as well as clarify the boundaries of the Braden style.

Chapters four, five, and six will examine each different site that contained Braden-style female statuary. These chapters present the archaeological contexts of the figurines followed by the structural analyses of each individual statue. These structural analyses are critical in identifying similarities between postures and vegetative accoutrements.

In chapter seven I discuss the social and ritual organization of Hidatsa and Mandan peoples. These cultures have long dedicated much of their attention to one specific female deity. This female deity, Old-Woman-Who-Never-Dies, is a variant of the Earth-Mother complex distinct to these two closely related protohistoric tribes of the Dakotas. These groups both venerate and contact this supernatural through community ceremony, women societies, and bundle rituals.

In chapter eight I argue that the features and aspects unique to the Old-Woman-Who-Never-Dies tradition are the identifying signatures that connect it to the female flint-clay statuary of the Cahokian region. These statuettes,

along with their archaeological contexts, represent a sense of great purpose in their final deliberate deposition. Connection to the Old-Woman-Who-Never-Dies ceremonial complex can be established by answering three basic questions that surround these figurines and their ritual significance:

1. Why are these figurines destroyed and buried in differing ceremonial contexts?
2. How are exotic goods found at each site associated with the figurines?
3. Is there a common iconographic trait shared by these figurines that binds them and their respective sites of deposition?

Chapter nine will consist of my concluding statements where I address the significance of the connections between the flint-clay statues and the Hidatsa and Mandan cultures. I will also relate how blending ethnographies with archaeological research is an advantageous practice when interpreting the Mississippian Southeast. Certainly the pursuit of this practice is of vital importance when examining Native American statuary.

CHAPTER II

METHODOLOGY

Theoretical Background

As the major focus of this study is an examination of a particular female deity, the methodology that I have chosen to employ will analyze the various figurines that I believe exemplify this deity and will establish their purpose among the larger body of ceremonial accoutrements that were uncovered at the specific sites where these sculptures were found, all of which can be said to represent the Mississippian Ceremonial Complex. Although the identification of this female supernatural has undoubtedly altered between its first visualization in the Mississippian period and its contemporary usage, there is much explicit as well as implicit evidence from both archaeological and ethnographic literature to support the hypothesis that a specific cosmic deity can indeed exist in recent ethnographic records as well as in ancient archaeological contexts.

The Panofskian Method

Use of the Panofskian method of iconographical interpretation seems especially valuable for the present study of multiple flint-clay figurines because this approach allows for in-depth interpretation of the shared symbolism incorporated into the overall form of these statues. In Meaning in the Visual Arts Erwin Panofsky (1955) outlines three levels of iconographic analysis to be pursued when examining art (Table 1). He also argues that in order to appreciate the meaning of a work of art, an individual must be aware of the cultural nuances that existed during the time of its production and that clearly helped shape its form and meaning.

The first level of interpretation relies on identifying primary subject matter such as the basic forms, colors, and natural objects that are apparent to the viewer. This level requires no information regarding the cultural identity or inner thought processes of the artisan.

The second level of interpretation examines conventional subject matter and symbolism. The intent at this stage is to identify motifs and symbols that have a meaning within the relevant culture. This level requires an appreciation of the parent culture as well as a keen eye

for artistic cues.

The third and final level of analysis is employed to penetrate and draw out the intrinsic meaning behind the artwork under investigation. This step is referred to by Panofsky as iconology because it involves the direct interpretation of symbolism and specific motifs. This third stage of interpretation is by far the most difficult as it requires a deep understanding of a culture's social, political, and often religious identity. Often this level of analysis also takes the possible perspective of the artist into consideration.

In this thesis, the first two levels of interpretation are undertaken prior to the discussion of the Hidatsa and Mandan cultures. The third level, however, will be conducted in the analysis section of this thesis. A further goal of my iconographic interpretation will be to propose specific motifs that might function as *pars pro toto* symbols of Old-Woman-Who-Never-Dies.

Identifying the Flint-clay Figurines

The intent of this research is to illuminate the purpose, use, and culturally contextual identity of several flint-clay figurines. The initial identification of these figurines and the most thorough study of them are both the work of Thomas Emerson, who has written extensively on

flint-clay figurines and their archaeological contexts (Emerson 1982, 1985, 1995, 1997; Emerson and Hughes 2000). Emerson and his colleagues have also sourced the flint clay of which these figurines are composed and have established that it comes from the Cahokia region (Emerson et al. 2003). This prior research invites further analysis of the figurines that would identify common traits aside from their medium. As stated previously, the female figurines under investigation are usually given epithets or designations such as Fertility Goddess, Corn Mother, or Earth Mother. While these identities are not fabricated out of whole cloth nor based on compromised data, such titles do not establish the full meaning and significance of their creation and use. I shall argue in this thesis that these figurines have much to offer in illuminating our knowledge of Mississippian religion, ideology, and ceremony.

To further enhance this hypothesis, I have organized a database comprised of ethnographic studies of Hidatsa and Mandan communities. One of the critical foci of this thesis is to demonstrate that these figurines exhibit unique features, which connect the figurines and their ancient rituals directly to a specific deity and ritual complex of the Hidatsa and Mandan cultures.

The Hidatsa and Mandan Cultures

Ethnographic materials relating to Old-Woman-Who-Never-Dies and ceremonies through which she is ritually observed and petitioned enrich the historic and contemporary cultural longevity surrounding these figurines. Using a compilation of ethnographic sources devoted to the Hidatsa and Mandan Indians, as well as data sets obtained from iconographic analyses of the figures, I will then identify all known attributes and distinguishing characteristics that separate Old-Woman-Who-Never-Dies from other female Native American female deities. This assemblage will allow me to identify the unique and distinctive attributes that are associated only with the Old-Woman-Who-Never-Dies deity complex of the Hidatsa and Mandan cultures.

My thesis will bridge the archaeological evidence recovered from the depositional layers of each statue's respective site with ethnographic literature regarding female deism and the ceremonial activity of two closely related Plains Indian tribes. Although upstreaming is often overlooked as a methodology within Southeastern archaeology, it can act as a catalyst for new approaches and new questions. By answering the questions posed in this chapter, I will further demonstrate how hypotheses grounded

in archaeological data can be greatly supported by
enhancing its focus through relevant ethnographic accounts.

CHAPTER III

IDENTIFYING THE CORPUS MEDIUM AND STYLE

Corpus Establishment

Prior to interpreting the flint-clay statuary under investigation, a proper introduction to the medium and style of this specific Mississippian art form is warranted. The corpus will be established by first treating the material from which these statuettes are crafted, before then examining the artistic style in which they were created. Although there are numerous representations of stone statuary from Cahokia as well as other polities in the Southeast, the works under discussion here constitute a specific subset or division of flint-clay statues that merit scrupulous attention. I will begin by describing the qualities of flint clay, confident that this description will set forth the foundational boundaries of my corpus. Following this description, there will be a section that defines the Braden style and its distinguishing characteristics. The collective attributes of the flint-clay statuary have much to offer for our understanding of

Mississippian ritual traditions.

Characteristics of Flint Clay

The flint clay selected for these statuettes² is specific to the Cahokian region and is recognizable by its reddish color. Although the material is now almost uniformly referred to as flint clay (Emerson and Hughes 2000), it has been given many names throughout history. Contrary to any allusion to be drawn from the use of the term, flint clay is actually stone, though it is not at all "flinty" and certainly not malleable like clay. This means these figurines are a form of stone statuary and not ceramic figurines. Red stone, Catlinite, and fireclay all reference material found in ethnographies, site reports, and professional papers that distinctly refer to objects sculpted of flint clay (Beckwith 1938; Bowers 1963; Emerson and Jackson 1984; Prentice 1986; Voegelin 1944). Early on, flint clay was mistaken for bauxite from Arkansas, which for many years was therefore believed to be the source of these statues (Emerson and Jackson 1984; Emerson 1997:195; Jackson, Fortier, and Williams 1992; Prentice 1986). It is best to examine the historical references to flint clay in order to establish credibility when citing ethnographies

² Statue, statuette, figurine, image, and figure are used interchangeably to avoid monotony and repetition.

later in this paper. Below is a list of terms used in place of Missouri flint clay.

- **Pipe stone**- Any stone that can be carved, shaped, or polished with a certain degree of efficiency (Emerson and Hughes 2000).
- **Red stone**- Common term used when referencing pipes and rock within a quarry used by the Crow. This quarry was a site of contention between many tribes (Catlin 1973 [1844]).
- **Catlinite**- This term was coined after the work of the American painter George Catlin. Catlin visited these famous quarries in Minnesota in 1835. The material from these quarries is strikingly similar in appearance to flint clay but not in mineral composition. (Catlin 1973 [1844]; Gundersen 1991; Woolworth 1983). In fact, Emerson and Hughes (2000) revealed that the American Bottom does not have examples of catlinite crafts until around A.D. 1400.
- **Fireclay**- Fireclays are variable claystones and can be soft or soluble. Though they can be very similar, flint clay does not have the level of variability present within fireclays (Emerson and Hughes 2000; McQueen 1943).

- **Bauxite**- Bauxite is an aluminum ore with a variation found in Arkansas that is superficially identical to Missouri flint clay. Early interpretations of these figurines led researchers to identify the source material as originating in Arkansas rather than the Cahokian region (Emerson and Hughes 2000:81, 2003; Prentice 1986). In 2003, Emerson et al. (2003), using a non-destructive Portable Infrared Mineral Analyzer (PIMA), identified the Cahokian region as the source of material for several statues. Of the statues that Emerson and his colleagues have studied, several belong to the corpus being presented in this thesis.
- **Flint clay**- stone that has clay mineral crystallites and is not subject to weathering like claystones (Keller 1968; Emerson and Hughes 2000). Specifically, the flint-clay statues being studied are typed as chlorite, boehmite and phosphate (CBP) Missouri flint clay (Emerson et al. 2003:289).

Given the thoroughness of the research conducted by Thomas Emerson, Randall Hughes, and their colleagues, all flint-clay statues in this discussion have been confirmed to originate from the Cahokia region. This allows for an interpretation that places the Braden style as a Cahokian

creation.

Art and Archaeology

Before discussing style and figural art, I must first clarify my perspective of art through the lens of archaeology. Often, modern researchers place ancient art into artificial categories that rely more on modern aesthetics and personal cultural biases than on the contexts in which these objects were originally crafted (Freeland 2001; Kristeller 1965:171; Scott 2006:628; Staniszewski 1995).

For instance, the appeal of aesthetics is a more modern conception that we adapt to fit ancient art interpretation (Scott 2006). A researcher can interpret the beauty and mastery of a finely crafted Braden statue and regard it as a work of art. However, the individual who crafted such an item could possibly view it as a highly functional visual aid for ritual or narrative purposes. Though both interpretations are correct, the contemporary researcher should acknowledge the latter perspective when attempting to interpret the artifact's meaning at the time of its manufacture.

Modern definitions of art originated during a period when the focus was on unconscious drives and inspirations (Scott 2006:630). According to this understanding,

archaeologists base their descriptions of ancient art on modern interpretations of cultural concepts like beauty and aesthetics. As long as archaeologists are aware of their own biases and make a conscious effort to acknowledge temporal differences in interpretations, then research will not be hindered.

Shedding modern biases and relying on the foundations of art reveal a more holistic view that fully encompasses what we can know about Mississippian art. The act of ethnographic interpretation of art should focus on the meaning of art to those who created it. Certainly, this approach is necessary if we seek any accurate interpretation of Mississippian art as well as an understanding of the aesthetics of the artist who produced it.

The Braden style

Style has always suffered the difficulty of definition. When examining art, style is defined as the formal qualities of a work of art that connect it to other works of art (Kent Reilly, personal communication). The flint-clay figurines from the Cahokia region belong to an art style that has been labeled as Classic Braden. Among the characteristics of this style that they have identified, Philip Phillips and James Brown state that

Braden is known for its naturalistic representations of human figures and other features that can be observed with reasonable objectivity in the material (Phillips and Brown 1978:ix). Although the particularities of Braden style may still receive fine tuning in conferences such as the annual Mississippian Iconography Workshop at Texas State University, the primary qualities of Classic Braden have remained unchanged since they were first defined by Phillips and Brown. Several of these qualities are readily visible among the flint-clay statues of the Cahokia region.

As stated previously, one of the hallmarks of Classic Braden is a naturalistic perspective of the human form. This can be identified by a lifelike treatment of the face and hair in conjunction with a rounded dimensional neck and shoulder line (Phillips and Brown 1978: vol. 2, ix). Braden also exhibits a preference for the depiction of complex components within a single piece of sculpture. Examples of this complexity would be an individual paired with an animal, commonly a snake, or an individual holding or positioned near a significant object. Individuals are also given unique treatment within Classic Braden. Among the shell cups at Spiro that are considered to be executed in the Braden style, no individual is exactly replicated (Phillips and Brown 1978: Vol. 2, x). Within the corpus of

Spiro shell cups, human figures are represented relatively small in size (Phillips and Brown 1978: Vol. 2, x). It is conceivable that this size feature is present within the flint-clay statues as many of them are less than 20 cm tall. The dominant use of the Braden style in the fashioning of these statuettes helps to establish their temporal period of creation as the Stirling phase. Considering the high level of symbolism inherent in the Braden style, the Stirling phase would likely perpetuate recognizable themes within the art. One of the major themes which I observe among Flint-clay statues is that of "Emergence."

The Theme of Emergence

For centuries, theorists and researchers ranging from Aristotle to Ursula Goodenough have discussed the topic of emergence using varying definitions. "Emergence" has undergone many variations in disciplines such as biology, philosophy, physics, and religion. Mark A. Bedau, professor of philosophy and humanities at Reed College, refers to emergence as manifestly demonstrative, conceptually and in actuality (Bedau 1997 as cited in Goldstein 1999). Emergence is active and observable to those participating.

Emergence is an expansive word that carries much weight behind it. Theories relating to emergence span

multiple research fields with varying projections. Iconographic analysis suggests that for the Mississippians, emergence would arguably relate to the supernatural, manifestation, and portal access. Symbols such as the ogee and hand-and-eye motifs already carry this level of meaning and are present on multiple genres of Mississippian art (Colvin 2011; Hall 1997; Lankford 2004, 2007; Reilly 2004; Sharp 2009).

Although Bedau's reflection was not referring to emergence in the realm of the visual art, it corresponds well with my conception of the term. I define emergence as "the Sacred" arising from the perceived natural order due to specific circumstances and requirements. These circumstances could be specific ritual actions or phenomena that occur in mythology and religious lore. Emergence can be viewed as a complex process or arrangement that culminates from simpler forms.

This mystic and mysterious attribute is what places emergence as a common theme amongst religious tradition in historical as well as pre-colonial cultures. Phil Mullins, reflecting on biologist and religious naturalist Ursula Goodenough's understanding of the power projected by emergence, argues that tales of natural emergence are far more magical than traditional miracles and fulfill the

cultural desire for supernatural miracles (Goodenough 1998:30; Mullins 2001:33). This mythical symbolism is observable among the flint-clay statues of Cahokia region.

When I refer to the symbolic nature of the statuary I am accounting for more than just the motifs and accoutrements visible on the art. A thorough examination of provenience reveals the context and association these art pieces have with other features and artifacts of the period. Applying a meaning to an artifact relies heavily on this information as it is often the closest an archaeologist can get to the experiences and actions of the people being studied. The extensive excavation reports that will be discussed shortly have already revealed a wealth of information beyond simply deposition level and have also posited how these items might have been interred (Emerson and Jackson 1984; Jackson et al. 1992).

CHAPTER IV

THE BBB MOTOR SITE

Overview

The BBB Motor Site (IL-Ms-595) of the FAI-270 excavation project is located 1 km west of the community of Collinsville in Madison County, Illinois (Figure 1) (Emerson and Jackson 1984: 1). The FAI-270 project was the construction of a bypass along the east side of the St. Louis metropolitan area. The BBB Motor Site is a multiphase component with figural art only recovered from the Stirling phase (Emerson and Jackson 1984). From the BBB Motor Site are two of the figurines that form a prominent part of the corpus. Though flint-clay figurines had been known previously, the excavations at BBB Motor Site were the first to excavate figurines from a secure provenience (Emerson and Hughes 2000:81). Both figurines were near what Emerson interprets as a temple (Emerson and Jackson 1984:341). These figurines are unique not only in their deposition, but also in their specific characteristics. In regards to the individual figurines, they both belong to

the northern Stirling component of the site and were interred in close proximity to one another. The structures closest to the figurines are the primary focus of the interpretation of the site not only for their proximity, but also the unusual features and items associated with their usage. These structures contain features that are not found at any other structure within the rest of the BBB Site. In fact, particular features are so unique that they have not been observed at any other recorded Mississippian site during this period. With the available data collected from the excavations of the BBB Motor Site, Emerson and Jackson acknowledge and accept the interpretation of the site as a temple/mortuary complex (Emerson and Jackson 1984:342).

The majority of my data concerning the BBB Motor Site comes from the field report compiled by these principal investigators. Fortunately, Emerson and Jackson's report is thorough and well documented. The next section will begin with a brief overview of the excavations followed by detailed descriptions of the structures associated with the flint-clay figurines.

Overall Layout

The excavation area of the BBB Motor Site is a narrow zone roughly 225 meters long and 20 meters wide in zones of

high cultural concentration. The southern section of the site comprised primarily Edelhardt-phase structures. The Edelhardt phase dates from 950 to 1000 AD and belongs to the Emerging Mississippian period (Emerson and Jackson 1984:1). Figure 2 shows three large groups of structures peppered with pits and features in the southern region. Among these groups are two trenched structures (structures 16 and 176) circled in red. These two structures are the only structures that belong to the Stirling phase in this section of the BBB Motor Site (Emerson and Jackson 1984:197). All other Stirling-phase structures are located in the northern site unit. This area is the focus of this investigation.

The Northern Stirling Unit

Although the northern Stirling-phase unit (Figure 3) does not have as many structures or ceramics to offer for interpretation, the two structures it does have are very distinctive. What the zone lacks in quantity, it more than makes up for in intrigue. The structures I am referring to are numbers 52 and 87 indicated in Figure 3. These ancient buildings are not as close in proximity nor are there many features along their exterior as compared to those in the southern unit. Even more curious are the intrinsic features and specific objects within each individual structure.

Structure 52

The northernmost structure, Structure 52, is a seven-post rectangular structure with a single hearth (Figures 4 and 5). The structure is believed to be lightweight and not load bearing due to the shallow and narrow post molds (Emerson and Jackson 1984:201). The hearth however, is a deep zone with multiple fired layers (Ibid.). These fired zones, located in Feature 67, are determined to be the principal focus of Structure 52. Emerson and Jackson suggest that the overlapping design (Figure 5) indicates a long period of use and construction (Ibid). This structure also contains over half of all instances of red ocher within the entire BBB Motor Site (Emerson and Jackson 1984:261). Red ocher is commonly considered to be a sacred item of ancient Americans and is highly revered for its red color (Emerson and Jackson 1984:340; Hudson 1976). Although this structure appears to depict a high level of involvement, only a few shell fragments, sherds, and a couple chert flakes could be associated with the floor (Emerson and Jackson 1984:201). The ancient individuals who maintained this structure might have been particularly interested in keeping it clean and orderly. Accepting the notion that this site was employed as a mortuary setting, it is understandable that this area would be a clean space

likely used for rituals and ancestral veneration.

Structure 87

The only other major construction in the northern Stirling unit of the BBB Motor Site is Structure 87 (Figure 6). It is located roughly 12 meters southwest of Structure 52 and was constructed of 12 posts around a rectangular interior area of 16.5 square meters (Emerson and Jackson 1984:201). The structure was engineered to be weight bearing (requiring a central post) and consisted of a complex inner floor layout (Emerson and Jackson 1984:209). While the southwestern partition of the inner floor was free of pits and features, the remainder of the area is a series of excavated and re-excavated pits. In the central area of the structure the pits are likely associated with the removal of a central post. There are also small pits around the inner northeastern perimeter of structure 87. The most interesting of those pits is identified as Feature 125 (Ibid.). The most significant artifact recovered from Feature 125 is the head of the Keller Figurine, which will be discussed later in this chapter. Although this alone is a critical discovery, Feature 125 still has more to offer.

Feature 125

This pit, located along the inner northeastern wall of structure 87, was identified as consisting of 9 different

prehistoric excavation zones. The crafters of this pit intentionally re-excavated certain areas over time and the pit was possibly the focus of structure 87. The final stages of feature 125 are of the most interest. These lens-shaped zones (A1 and A2), as seen in Figure 7, have a large amount of exotic material unlike anything found throughout the BBB Motor Site (Emerson and Jackson 1984:209).

Within these zones are seeds of a known hallucinogenic plant and high levels of red cedar (*Juniperus virginia*). Two burnt seeds of *Datura stramonium*, otherwise known as jimson weed, were discovered among the debris. Although two seeds may seem insignificant, or a minuscule amount upon which to base an interpretation, their carbonized state indicates they were the remnants of a larger assemblage.

Datura has toxic properties and evidence suggests that it is used as a ceremonial substance used by several Native American cultures (Emerson and Jackson 1984:333). Red cedar is also understood as having sacred qualities and is often used in ceremony and ritual (Bowers 1963:38,39,297; Emerson and Jackson 1984:335; Hudson 1976:381). Burial litters from Cahokia and Spiro were constructed of red cedar (Emerson and Jackson 1984:325). Red cedar is not found in the prior Edelhardt phase of the BBB Motor Site.

In fact, it is the only type of wood that was not

recovered from both phases (Emerson and Jackson 1984:350). Other contemporaneous neighboring sites such as Julien and Turner have trace amounts of red cedar as compared to the BBB Motor Site (Emerson and Jackson 1984:326). In addition, almost 70% of the red cedar found in the entire site was recovered from feature 125 (Emerson and Jackson 1984:324). This evidence, paired with the inclusion of the head of the Keller figurine, suggests that this structure was the primary location of ritual and ceremonial activity of the BBB Motor Site. An in depth examination of the figurines will yield further information into the understanding of these ritual activities.

The Keller Figurine

The first figurine I will investigate from the BBB Motor Site is the Keller Figurine. As stated previously, the figurine was broken in antiquity, and the surviving parts were found in two separate locations. The head and torso were found within Feature 125 of structure 52 and the lower body and base in a small pit less than 5 meters south of Structure 52. The two figurines recovered from the site are referred to as the "Stone Goddesses" because of their flint-clay composition (Emerson 1997:195).

Although this figure does not appear to have iconographic complexity comparable to the Birger Figurine,

the intriguing factors exist in what is not initially observed. Both pictures in Figure 8 show a female, wearing a short skirt, seated with her legs beneath her on rows of striated rectangles with her feet behind her. In front of her is a rectangular box that she has placed her left hand on (Emerson 1997:196).

The statuette is broken along the waist and arms, but it is apparent that the right arm is involved in a different task than the left. Closer inspection of the basket shows that the right hand is not resting atop it like the left one. Without any further context, there are no conclusive indications of the female as having supernatural qualities. However, the right side of the individual shows pieces broken off from the head and base. Given what other figurines within the corpus are depicted with; it can be argued that the right arm may have been grasping vegetation. This is further evidenced by a vinelike addition present on the right side of the head. Other female figurines also have vegetative vines resting atop their heads.

Another interpretation takes as the primary focus of the figure the significance of the rectangular form in front of her. The designs along the side of the box could indicate the type of construction used in its creation.

Interestingly, the vertical striations along the outer perimeter could also suggest a rigidly constructed form such as a wooden basket or box. Baskets with this squared form can be achieved by constructing with cane. One possibility is that this small basket-woven container is intended to represent symbolically a charnel house (Figure 9). Charnel houses served during this time period as a tomb for the dead. As visible in Figure 9, the walls of such a rectangular structure would have the dominant vertical patterning that the basket or box has. In addition, the bent-pole construction of the roof creates a half-cylindrical shape that is similar to that of the object in front of the Keller Figurine.

The possibility of a charnel house representation is also elevated due to the mortuary context in which the figurine was interred. George Milner (1984) notes the pairing of temple/charnel house complexes in Mississippian towns as being unique to the American Bottom (Emerson 1997). As noted above, the head of the statuette was found in the largest, cleanest, and most rigidly constructed structure of the site. The structure also likely had a central load-bearing post, and such a post would have been necessary to support an elevated floor for the placement of human remains. This archaeological association with the

dead could therefore suggest one possibility of the identity of the form in front of her.

Naturally, a much simpler interpretation of this box as a basket or bundle appears likely, given the figurines found at the Sponemann Site, which will be discussed in the next chapter, but one should not rule out the possibility that this female figure is intended to be seen as the spiritual guardian of the dead and that this basket of hers is indeed a symbol of her association with the house of the dead.

The Birger Figurine

The second figurine to be discussed from the BBB Motor Site is the Birger Figurine (Figure 11). This artifact has been heavily documented and researched due to its highly unusual symbolic potential and associations (Emerson and Jackson 1984; Pauketat and Emerson 1997; Prentice 1986; Reilly 2004). The overall height of the figurine is 20cm tall and represents a woman sitting within the coil of a large feline-faced and split-tailed snake (Emerson and Jackson 1984). Just like all flint-clay statues found in the Cakokian area, the figurine dates to the Stirling phase (Emerson and Jackson 1984, Pauketat and Emerson 1997:198). The Birger Figurine was found near the conceived outer boundary of the site in an area of low feature density

(Emerson and Jackson 1984:254). It had been buried in a small pit 40cm below the present soil surface (Ibid.) Due to its location of interment, there were no other artifacts nearby associated with the pit. The closest structure, Feature 52, is 8 meters directly north of the pit (Ibid.).

In regards to the condition of the Birger Figurine, the back of the head was thoroughly destroyed by the paddlewheel of heavy earth-moving equipment. Two other segments of the figurine were broken as well. The right hand and hoe were separated from the body and the head was broken from the torso at the neck (Ibid.). But these breaks have evidence suggesting that they were created in antiquity:

It is possible that the object was broken accidentally or purposely by its prehistoric users, reassembled, and placed in the ground... It can be stated for certain that neither of the two breaks was caused during FAI-270 heavy equipment operations, since neither of the broken surfaces was fresh (Emerson and Jackson 1984:258).

Whether this figurine was broken purposely or accidentally remains to be determined. However, its broken condition parallels that of all other statues in the corpus, and that fact certainly bolsters the argument for intended destruction. The Birger Figurine has been argued by many as a depiction of the Earth-Mother. This

mythological concept was widely dispersed throughout the American Bottom (Emerson and Jackson 1984; Prentice 1986:249). As seen in the Figure 10 this can be established by her dominance over the giant serpent paired with control of vegetation. She uses a hoe in her right hand to dig into the back of the serpent in the same manner used to till soil for crops. The serpent is depicted as a supernatural featuring teeth that are much closer to those of a feline than they are to those of any snake (Emerson and Jackson 1984). These motifs, along with several others, are the critical indicators to her identity (Prentice 1986:243). The face is arguably the most detailed aspect of the figurine. There is little doubt that this figure represents a variation of the Earth-Mother; however she has intrinsic details that speak more to her cultural identity.

One item of interest is the circular form located along the left side of the head of the Birger figurine. Although the cranial section has been largely destroyed, as I have noted, there are still the remains of a patterned form at what would have been her left temple (Figure 11). The pattern is a sweeping triangular design that reflects after each line intersection, similar to the teeth of a zipper. This pattern is strikingly similar to the stylized sunflower present on other flint-clay statues found outside

of the BBB Motor Site. This sunflower motif will be discussed thoroughly in later chapters.

Another key feature is observable in Figure 12, and depicts the tail of the giant snake surrounding the Birger female. The serpent encircles the female's body and stops short of its own tail, creating a nearly complete circle that one scholar has suggested is similar in shape to an ogee (Reilly 2004:134). It then bifurcates into vines that extend up the back of the woman. Along these vines are fruits that closely resemble bottle gourds. Between the vines and the individual's spine is a sack connected to a tumpline.

Her direct association with the serpent is also a telling indicator of her identity. Several cultural variations of the Earth-Mother are partners with serpents (Prentice 1986). While many of the flint-clay statues within the corpus have representations of snakes, the serpent of the Birger acts as a multi-faceted symbol. It is a provider as demonstrated by the gourds emerging from the tail. Essentially, it is the earth shown being tilled. It can also be interpreted as an access point to the sacred, visible by the ogee motif it has created with its body (Reilly 2004:134). This supernatural serpent appears to be

just as important to her identity as the story being told by this statue.

Closing

As detailed as these figurines are, there still remain the questions why these statues were ritually destroyed and how they are connected to other artifacts found at the site. In the next chapter, I will examine a contrasting ceremonial center at the Sponemann site which focuses upon busk ritual rather than mortuary contexts.

CHAPTER V

The Sponemann Site

Overview of the Sponemann Site

The BBB Motor Site was not the only significant Mississippian site recorded during the FAI-270 project. Another archaeological site, the Sponemann Site, was already known and the highway project was expected to impact over 24% of this locale (Jackson et al. 1992; Linder et al. 1978). Spanning the summers of 1984 and 1985, the Sponemann Site excavation, conducted by the Archaeological Mitigation Project of the University of Illinois at Urbana-Champaign, contained more features than any other site in the FAI-270 project (Jackson et al. 1992). The site rests 4km northeast of the center of Cahokia and roughly 3.5 km east of Horseshoe Lake (Figure 13). The proximity of the site leaves little doubt that the inhabitants were closely tied to Cahokia and the site is likely a northern neighborhood of the Cahokia center. As interest in this site is similar to that of the BBB Motor site, I will be examining the site's Stirling phase (AD

1050-1150) component.

During the Stirling phase, the Sponemann Site consisted of two separate complexes along an east/west axis (Figure 14). To the north is a typical residential complex consisting of 4 structures and numerous external pits. The southern portion of the site is a large ceremonial complex (Figure 15) containing 8 structures and 23 external pits (Jackson et al. 1992:51). This region is considered a ceremonial complex based upon the limited number of household wares as compared to the high levels of artifacts commonly associated with ritual and religious practices of historical and modern tribes (Jackson et al. 1994:340). Within the ceremonial complex, six of the eight structures are wall trenched and two are simple post construction. Several of these structures contain red cedar hearths, which indicate a ritual connection that will be discussed in a later chapter. One structure in particular, Feature 282, will be the primary focus of this investigation. This structure is identified as a household temple within the ceremonial complex of the site (Jackson et al. 1994:339), and it has unique aspects pertinent to this thesis.

Feature 282

A rectilinear wall trenched structure in the northern section, Feature 282 (Figure 16) has three separate floor

levels with most of the artifacts and figurine fragments associated with the third and final floor (Jackson et al. 1992:55). Within the third floor and fill of the structure are high amounts of figurine fragments, a red cedar hearth, cane, pottery, a quartz crystal, maize, and sunflowers (Jackson et al. 1992:52-67). This elaborate assemblage led the excavators to implement a piece-plotting procedure of the fill and floor of the structure (Jackson et al. 1992:52). Unfortunately, all the flint-clay statues were broken and the locations of individual pieces were not documented (Jackson et al. 1994:280). But the map within the site report confirms each deposit of flint-clay fragments (Figure 17). The fragments are focused primarily in Feature 282 with a small amount discovered in Feature 183. Fragments are not found farther south than Feature 144. All are in close proximity and are related to features with evidence of ceremonial significance.

Before examining the flint-clay fragments it is important to examine the artifact assemblage with which they are associated. Multiple features, along with post molds, penetrate the floor and flint-clay distribution of the structure. Feature 327 appears to be the most unusual, bearing a wide assortment of artifacts.

Feature 327 is a shallow, oval, red cedar hearth with

a depth of 25 cm. The contents of this hearth bear the most striking evidence to support the notion that this portion of the overall site was reserved for ceremonial activities (Jackson et al. 1992:68). Along with red cedar and fragments of flint clay, Feature 327 contains maize, sunflower, wild bean, maygrass, and chenopod³. The final floor of Feature 282 also contained tobacco (*nicotiana rustica*), black nightshade seeds (*Solanum americanum*), cane (*Arundinaria gigantea*), and a quartz crystal (Jackson et al. 1992:68-69). While this assortment could appear as a simple busk offering, specific details regarding some of these inclusions tell more to the specificity of this particular ceremony compared to the general conceptions of a busk ceremony. I will examine each element closely and discuss critical details regarding their inclusion.

Sunflower seeds are intriguing in the sense that they are not as common in ceremonial contexts of the Mississippian Period as are other plant types such as maize or squash. However, sunflower seeds represent a high percentage of the seeds recovered from Feature 282 (Ibid.). The only other reference to sunflowers at the Sponemann site is on the Sponemann figurine itself. In addition to sunflowers being a food source, the heads of sunflowers can

³Chenopod - plant of the goosefoot family, which includes spinach and beets

also be boiled to create a diarrheic drug (King 1984:86, Jackson et al. 1992:68). In addition to sunflowers, tobacco and nightshade also act as drugs possibly used by the Mississippians. Tobacco is a commonly used medicine of many contemporary Native communities. Nightshade can cause vomiting and profuse sweating (Jackson et al. 1994:69). Another interesting facet of the ceremonial complex is the existence of cane. Although cane is regularly used for utilitarian purposes such as basketry and mats, the cane discovered at the Sponemann Site is often associated with red cedar (Jackson et al. 1994:69-70). This connection could indicate that the cane served a ritual function instead of a domestic one. The context in which the cane was used is unknown; however, Jackson et al. suggest one possibility for its use. According to records from Du Pratz, these temples generally contained cane baskets which held special objects, stone figurines, and ancestral bones (Jackson et al. 1992:69). This basket would be easily identified as a sacred bundle. This is reminiscent of the "basket" in front of the Keller figurine and its mortuary context. The presence of cane, therefore, further alludes to the uniqueness of this ceremony.

Another feature, a pit roughly 12 meters southeast of the southeast corner of Feature 282, contains a similar

artifact makeup with the addition to five Ramey Incised vessels and an exorbitant amount of corn cobs (Jackson et al. 1992:94). In fact, this pit had 90% of all recovered cob remains at the site.

Feature 282, along with feature 183, contains the majority of the fragments of several flint-clay statues within my corpus (Jackson et al. 1992). All figures are fire damaged and are associated with a fire that destroyed Feature 282. Although fire is likely a cause in the high level of fragmentation, analysis of the mineral make up shows that the fragments were burned after breakage as well (Jackson et al. 1994:65).

The Sponemann Figurine

The first figurine I examine is the Sponemann figurine (Figure 18). It is the most complete statuette recovered from the Sponemann Site. The figurine is identified as a female by her breasts and their highly defined nipples. The surviving statuette is 15cm tall from the waist and has vegetative stalks emerging vertically from the hands. Although the left hand is unrecovered, a fragment very similar to the stalk in her right hand was found in the same level. The area below the waist is unrecovered, leaving no evidence to suggest whether the image was in a sitting or kneeling position; therefore, the original

height is unknown (Jackson et al. 1994:282). Similar to both the Birger and Keller figurines, the Sponemann is crafted in a definitively naturalistic fashion. When examining the Sponemann figurine, Jackson et al. note the vagueness of the vegetation in her hands. It is unclear if the stalks represent cane, maize, sunflowers, or another distinct type of flora (Jackson et al. 282). The only indicator to the type of vegetation lies on the head of the figurine. As indicated in Figure 19, there is a sunflower pod on the back of the head of the Sponemann figurine. Although it is highly stylized with the absence of seeds in the pod, it is easily identifiable as a sunflower head. The analysis of the Sponemann figurine can be taken further with the second level of interpretation. First of all, the absence of clothing is a good indicator of the identity of this figurine. A nude representation of a person can be an indication that the individual is a deity or of divine nature (Brown: Personal Communication; Reilly: Personal Communication). In addition, her posture is set in a way that she appears to be presenting the vegetation. Her arms are extended and her palms are up. Closer inspection of the right hand in Figure 20 indicates the lack of root structure. In fact, the stalks appear to be emerging from her hands, a fact that may suggest her divine nature, or

her likely supernatural association. The Sponemann figure has both arms at the same angle with stalks growing out of their palms as though her hands were conduits to another realm.

Another interesting aspect of this figurine is the connecting pieces along her back. As stated previously, we are unable to know what was below the waist. However, these pieces would indicate that her body was up against another object. This information will become important in the next chapters.

The Willoughby Figurine

The next flint-clay statue I address from the Sponemann site is the Willoughby Figurine. The image represents a topless female holding a flat rectangular object to the right side of her head (Jackson et al. 1994:287). Unfortunately, this figurine suffered more damage than the Sponemann, leaving the researchers with two major fragment sections of the same statuette. One section is the head and right hand and the other is the skirt and base. The relative height of the figurine is at least 20 cm tall (Jackson et al. 1994:287). An examination of the head section reveals a vine extending over the top of her head behind the plate (Figure 21). There is an object on the left side her head that appears to be in the shape of a

flower blossom. The female's left hand also holds a plate object very similar to the right, though the exact placement of the left hand is unknown. The lower section of the figurine indicates the female was kneeling on top of a base or basket with a short skirt covering her legs. The basket features horizontal striations instead of the vertical striations present on the Keller figurine. The left and right sides of the base however do have large vertical striations possibly indicating the intended structure or framework of the object.

Although much of the iconography of the figurine is unidentifiable as of yet, it was still directly involved in the same ceremony as the Sponemann figurine. All flint-clay fragments were interspersed amongst each other.

The West Figurine

The final flint-clay figurine to be analyzed from the Sponemann site is the West Figurine. Similar to the Willoughby, poor condition of the West Figurine severely limits the capacity for adequate reconstruction. At first glance this amalgamation of flint-clay fragments leaves little information to be gleaned (Figure 22). Though only partially reconstructed, it is approximately 10 cm. tall and consists of three separately constructed segments (Jackson et al. 1994:292). Of the segments recovered,

researchers were able to identify a minimum of two serpents positioned on and about a female character (Jackson et al. 1994:292). The later iconographic analysis will illuminate on the unique features of the image. However, a few key elements stand out which merit further iconographic interpretation.

The first point of discussion is the presence of serpents among the statuette. One of the segments shows the figurine holding the head of a serpent with her arm (Jackson et al. 1994:292). It would appear that the female is either restraining the serpent or controlling its movement. This conceptualized dominance is similar to the juxtaposition of the Birger Figurine from the BBB Motor Site. She is also holding or restricting the head of a serpent (Figure 23). It does not appear that she is killing or injuring the snake, rather she is controlling it. This intimacy with serpents is likely specific to the entity being depicted or a story within the culture of the individuals who crafted this figurine. This serpent imagery is further demonstrated elsewhere on the West Figurine, as her turban also has iconography that is likened to serpents. The turban is coiled and has patterning similar to that of a snake (Jackson et al. 1994).

Another indication of the focus of this piece is the

attention to the red color. As stated several times in this thesis, there appears to be a focus on the color red when examining the flint-clay statues and artifacts associated. This figurine is no exception. In fact, the figurine has little of the red coloration that is common among the flint-clay statues within the corpus. This was evidently an issue with the individuals who used this piece. Whoever used this figure required it to have a more reddish tone and purposefully painted it in order to achieve the proper coloration (Ibid.). Interestingly, the West Figurine had the least natural red coloration of all the figurines recovered and is the only statuette which has evidence of being slipped with a red paint.

Closing

The site report of the Sponemann Site offers a highly detailed account of the results of this excavation. With such a highly complex ceremonial center it is no wonder that the figurines are still open to interpretation. However, the next site to be discussed does not benefit from having such a robust field report. The analysis will come directly from an interview with an individual who was present during the "excavation," combined with my personal viewing of the figurine in question.

CHAPTER VI

DISCOVERY AND ANALYSIS OF THE WESTBROOK FIGURINE

The Westbrook Figurine and Identification

The Westbrook Figurine is particularly different from the other Braden-style flint-clay statuary by the very fact that it was discovered at a site distant from the Cahokian polity. In addition to being the only image within the corpus that was not recovered from the Cahokian region, the Westbrook Figurine is the only Braden-style statuette that was recovered from a burial context. The flint-clay statue was found hundreds of miles from the Cahokian region in southeast Arkansas in or near the town of McGehee in Desha County. Although the Westbrook is the most complete of all figurines within the corpus, it was not recovered by archaeological methods. Unfortunately, this statue was discovered by a looter, thus, diminishing the integrity and provenience associated with a controlled archaeological excavation. Nevertheless, other scholars have held that this figurine should not be dismissed from consideration of its cultural and iconographical value as the style of the

piece fits too well with other flint-clay statuary.

Thomas Emerson and Randal Hughes (2003) took it upon themselves to analyze the piece and discover a possible origin of the material. If the figurine were shown to be crafted from the same material as other flint-clay statuary found during controlled excavations, certainly the credibility and perhaps even the authenticity of the piece could be established. Using a Portable Infrared Mineral Analyzer, the researchers were able to identify the source material as originating from a deposit near Cahokia. Emerson and his colleagues (Emerson et al. 2002, 2003) have shown that the same deposit was used to craft the Braden-style flint-clay figurines from the BBB Motor site and the Sponemann Site. Although this figurine was recovered from the looting of a burial discovered in the late 1960s, provenance has been established by means of an interview with one of the individuals who unearthed the figurine. The following is a summary of an interview with an individual who witnessed the uncovering of the burial (House 2006).

Interview with Leon Tucker

On April 6, 2006, John H. House met with the collector, Leon Tucker, to discuss his excavations of the Opossum Fork Bayou Mound (also known as Richland Mound or the DeSoto Mound, 3DE24) some forty years ago. One of

House's motives was to get Tucker's account of how the figurine was recovered as well as its provenience in the burial. Throughout the interview the figurine in question is referred to as the "Corn Goddess" by Mr. Tucker. The iconographic interpretation that follows this section will address this notion.

Through the years of 1966 and 1967, Tucker worked for the Soil Conservation Service and assisted local farmers as a land-leveling specialist. Given his line of work, Tucker became aware of potential site destruction and would ask land owners for permission to dig on their property prior to the leveling. Tucker was friends with the land owner of the Opossum Fork Bayou Mound, O. O. Kemp, and he received permission for himself and his friends to dig on Kemp's property under the condition that Tucker himself was present. Tucker dug at this site multiple times, and he recounted to John House as much as he could remember, albeit nearly forty years after the event.

According to Tucker, a friend, Harvey McGehee, personally excavated the burial containing the "Corn Goddess" while Tucker supervised. The burial was at the bottom of a 6'3" shaft in the center of the mound and contained the "Corn Goddess" among other artifacts. Tucker noted the skeleton was small and fine-boned, leading him to

believe that it was possibly a female. The skeleton had no skull and instead had a conch shell above the shoulders. Charred remains were found throughout the grave and were identified as the remnants of a wooden covering over the burial. The Corn Goddess was found on one of the shoulders and was broken or "killed" prior to the closing of the burial. Among the other objects found in the grave were a shell cup and a woven cane mat. Although the mat was not recovered, its presence in the grave is substantiated by the impression it left on the interior of the shell cup. A large chunk of Galena, weighing approximately 30-40 pounds, was also found in the burial. It has rounded abraded facets on one end, and McGehee postulated that it was used to "kill" the Corn Goddess. Other artifacts were recovered from the burial such as bowls and jars. Unfortunately it is unknown what flora remains were within the burial because the looters were focused solely on the artifacts to be recovered, and unprepared and ill-equipped for any such investigation.

First Level of Iconographic Analysis

The image itself represents a kneeling woman in a relaxed posture, leaning slightly forward (Figure 24). She is identified as a woman principally due to her visible breasts and a hairstyle that is commonly depicted on women.

She is sitting in front of a rectangular form that is similar in style to an object in front of the Keller Figurine as well as to similar "baskets" or basketlike forms that accompany the Sponemann, Willoughby, and West figurines (Jackson et al. 1992:292-298) (Figure 25). The top rounded section of this "basket" aligns flush with the sides contrary to the Keller's which overlaps slightly like dough in a pan. The Westbrook figurine's arms are outstretched in front of her with the palms up just like those of the Sponemann figurine. This is indicated by the thumbs facing outward away from her body. Vegetative stalks emerge from her hands once again in a form similar to that of the Sponemann Figurine. The tops of these plants fall on her back and vines lay on top of her head (Figure 26).

This figurine has also been crafted into a pipe with holes carved into the back and top section of the basket (Figure 27). I would argue that the alteration of this figurine was likely done after this piece was crafted and was not originally intended to be a pipe. The bowl and pipe opening are crafted into an existing design present on the basket (Figure 27). The vertical striations along the sides and the horizontal line indicating the bottom lid of the basket lid do not terminate prior to intersecting the holes. All incising would have continued into the areas

destroyed by the creation of the holes. A valley through the center of the basket lid is also cut through as shown in Figure 27.

While the figurine does not appear to have been burned (Hughes and Emerson 2003:3-7), the inside of the drilled areas exhibit a different coloration, or patina, present on the surface of the figurine.

I would argue that the intrusion to an existing design, combined with the dissimilar coloration, could indicate that the pipe bowl and stem-hole were created after the figurine was originally crafted. However, any indication as to the time between these crafting episodes is difficult to determine.

Although the figurines recovered from the Sponemann site could have been crafted into pipes, their extreme state of fragmentation severely limits any confirmation. As of now, the Westbrook Figurine is the only confirmed Braden-style female flint-clay statue that has been conically bored to serve as a pipe.

Second Level of Iconographic Analysis

One of the most notable features of the Westbrook Figurine is the attention to detail regarding the sunflowers resting on her back. The artist took great pains and showed serious consideration when choosing the

treatment of the inside of the pod. As shown in Figure 28, the inside of the sunflowers have patterned incising that appear to be radiating swirls. Rather than depicting the seeds inside of the pod, the artist decided to show the pattern the seeds make as a whole. This demonstrates that the artist paid great attention to the depiction of the sunflowers, making them a significant focal point of this figurine.

The posture of the Westbrook Figurine, in conjunction with the basket behind her, is also of particular interest. Upon close inspection one can observe that there is a large section of her back and waist that appear to be "within" the basket (see Figures 25 and 29). Without the basket having a visible opening, it can be argued that she is actually emerging from the basket. The theme of emergence is common among the statues within the corpus and the Westbrook Figurine is no exception. Even her hands promote this theme as the stalks sprout from her palms without any indication of a root structure (Colvin 2011). This theme endorses the identification of this figurine as a supernatural deity capable of accessing the Sacred.

Closing

Fortunately this figurine happens to be in the best condition of all figurines within my corpus. The next

chapter will move away from the Mississippian period and introduce the Hidatsa and Mandan cultures. This section will present the significant ceremonial complexes of these related cultures.

CHAPTER VII

HIDATSA AND MANDAN SOCIETY AND RITUAL

Hidatsa Origins and Early History

Before I begin addressing the major questions surrounding the flint-clay figurines and their depositional contexts, it is of great importance to examine the history and ritual practices of the Hidatsa and Mandan peoples. As I have stated throughout this thesis, these cultures practice the ceremonial veneration of deities that is keenly parallel to ceremonial activities observable at specific sites dating to the Stirling phase of the Mississippian period. I begin by stating the origins of the Hidatsa culture and their connection to the Mandan community. I introduce the deity known as Old-Woman-Who-Never-Dies as well as describe practices and rituals of the Goose Society.

One of the names of the Hidatsa, as given by the Mandan, is the Minnetarees. Minnetaree means "to cross water" and possibly refers to their first interaction with the Mandan culture (Matthews 1887:34). Matthews recounts

the tale that references the Minitarees lack of a definitive history:

When the wandering Minnetarees reached the Missouri and stood on the bank opposite to one the villages of the Mandans the latter cried out, "Who are you?" The strangers, not understanding what was said, supposing that the Mandans (who were provided with boats) asked them what they wanted, shouted in return, "Minitari!" *to cross the water* or "Minitari mihats!" *we will cross the water*. The Mandans supposed that in this reply the visitors gave their name, and called them Minitari ever after (Matthews 1887:34).

The common acceptance of the Hidatsa name is in reference to the village that Meriwether Lewis and William Clark identified as Minitaree proper. It is theorized that after the epidemic of 1837 survivors from several communities came to Hidatsa and took on the Hidatsa name (Matthews 1887:35). Their recorded history is interspersed with periods of alliance and amalgamation due to political, environmental, and social pressures. This is what makes the Hidatsa culture unique. The Hidatsa identity has facets that are the remnants of prior cultural groups. This is the focus of their involvement within this thesis.

What is intriguing about the Hidatsa culture is the assortment of mythology and ceremony involving destruction, mystical women, and accessing the sacred. Although many cultures during the prehistoric period of America have a

similar collection of mythologies, the specificity in detail and intrinsic values of the lore offer much insight into character identity. While the Hidatsa follow closely to Mandan social order, detailed accounts from Alfred Bowers and Washington Matthews talk specifically about the fascinating Hidatsa deity referred to as Old-Woman-Who-Never-Dies.

Story of Old-Woman-Who-Never-Dies

A common focal point within many of the rituals conducted by the Hidatsa and Mandan is their reverence for the deity Old-Woman-Who-Never-Dies. Select cults, such as the Goose Society, often held the rights to Old-Woman-Who-Never-Dies bundles. The Hidatsa and Mandan are the only cultures recorded to reference the specific deity Old-Woman-Who-Never-Dies (Bowers 1963:201). The Hidatsa in particular have the most detailed stories and ceremonies associated with her (Bowers 1963).

This deity has many characteristics that fit within the Earth-Mother concept proposed by Guy Prentice. Prentice identifies the Earth-Mother concept as the core values inherent among multiple Native American tribes of the Eastern Woodlands when describing their mythical mother (Prentice 1986). She is identified as the mother of all life and vegetation and represents the cycle of life

(Prentice 1986:249). Although Old-Woman-Who-Never-Dies fits into this typology, what separates her from other Earth-Mother deities is what is compelling about this Hidatsa manifestation. I will examine the lore of the Hidatsa pertaining to Old-Woman-Who-Never-Dies to illustrate the unique attributes that place her as a Hidatsa and Mandan concept but likely much older than the cultures themselves. Bowers went so far as to suggest that the view of Old-Woman-Who-Never-Dies as a "goddess" of vegetation was a much earlier belief that likely existed prior to agriculture (Bowers 1963:338).

Only the Hidatsa and Mandan cultures speak of this specific deity and have ceremonies dedicated to her supernatural aspects. The identity of Old-Woman-Who-Never-Dies has been described extensively over many decades and has been carefully discussed by Alfred Bowers in his research of Mandan and Hidatsa ceremonial organization (Beckwith 1932, 1938; Bowers 1950, 1963 Matthews 1887). Although both the Hidatsa and Mandan reference Old-Woman-Who-Never-Dies, the Hidatsa appear to be more forthcoming with information and offer the most detailed accounts (Bowers 1963). The Hidatsa and Mandan share many of the same cultural institutions, but the Hidatsa ceremonies and stories are thorough while maintaining much commonality

between informants (Bowers 1963:346).

The best approach to identify Old-Woman-Who-Never-Dies' characteristics is to delineate the origin of the information and distinguish those traits that belong specifically to her. As a whole, I refer to the Old-Woman-Who-Never-Dies tradition as a complex. There are a multitude of rites, ceremonies, societies, and stories associated with her, and together these various cultural practices constitute what I am identifying as a complex. One primary source of information stems from stories and origin tales, specifically the Sacred Arrow Myth (Beckwith 1938; Bowers 1963). Other data sets come in the form of ceremonies conducted in reverence and bundles that encompass her essence.

I will begin the introduction of Old-Woman-Who-Never-Dies by examining the Sacred Arrow Myth. This myth details Old-Woman-Who-Never-Dies in addition to introducing the purpose of the ceremony conducted in her honor. Her name originates from a section of the Sacred Arrow Myth in which she is seen repeatedly bathing herself in a river, appearing younger each time she rises up from the water (Bowers 1963; Peters 1995:33). Old-Woman-Who-Never-Dies is identified as the caretaker of all vegetation, similar to other variants of the Earth-Mother complex (Bowers 1950,

1963; Peters 1995). What does separate Old-Woman-Who-Never-Dies from the other analogous deities lies in this story. The following abbreviated version of the myth, as presented by Bowers (1963:333-338) elaborates further on her origins.

The Sacred Arrow Myth

The story begins when Moon and Sun, both male deities, decide to marry girls from below. The girls come back with Moon and Sun to enjoy a meal with old mother. Moon is so annoyed by the behavior of Sun's wife that he repeatedly throws her in the fire, only to discover that the fire cannot harm her (Beckwith 1938:119). Sometime later, Moon's wife bares a son and instructs him that he must stay in the above world. Unknown to Moon, his wife is upset by this and digs the ground in the above world to find a hole which opens to the sky. She crafts a rope made of buffalo sinew but, when she descends from above by means of it, she finds that it is too short and only reaches the tree tops. Moon discovers her trying to escape with their son and is greatly angered. In his rage he takes a large stone and commands it to kill his wife without harming his son. He casts the stone down striking his wife in the head⁴. She falls to the earth dead and lands squarely in the garden of

⁴ The location of Old-Woman-Who-Never-Dies' house is marked by a large stone

Old-Woman-Who-Never-Dies. The son travels to the garden and mourns his mother's death and stays around her body. Old-Woman-Who-Never-Dies can tell someone is walking around her lodge and garden because the boy leaves behind his footprints. She allows the boy to stay and acts as his caretaker. At this point, Moon's son is now referred to as grandson because he is now under the care of Old-Woman-Who-Never-Dies. The boy is troublesome and disobeys Old-Woman-Who-Never-Dies whenever she prohibits an activity. Grandson also kills many snakes, even the Old-Woman-Who-Never-Dies' husband who is the Great Snake.⁵ In time, she commands grandson to aid her in dispatching two men attempting to marry her. Grandson is successful in besting the men, but Old-Woman-Who-Never-Dies is still angry and blows her sacred sunflower whistle to drive off the animals. This spoils the men's hunting and causes them to starve. The men promise to give a medicine feast if Old-Woman-Who-Never-Dies stops blowing the sunflower whistle. This marks the creation of the first Old-Woman-Who-Never-Dies sacred bundle. Both Old-Woman and Grandson continued their life upstream of the Short Missouri river and are still called upon for her holy intervention (Beckwith 1938; Bowers 1950, 1963:333-336).

⁵ The Great Snake is a common pairing to the Earth-Mother concept.

The mythology surrounding Old-Woman-Who-Never-Dies is the most widely distributed of all Hidatsa and Mandan tales (Bowers 1950, 1963:340). She is a common focus of sacred ceremonies for the purpose of a plentiful harvest. Ceremonies involving Old-Woman-Who-Never-Dies also range from simple household cleansing rites to official bundle transfer ceremonies (Bowers 1963:343-344). These types of ceremonies were often lead by the Goose Society (Bowers 1963:326-344).

The Goose Society

Individuals belonging to the Goose Society were in charge of possessing bundles and conducting specific sacred ceremonies such as rainmaking (Bowers 1963:203). Fortunately, a few scholars were privileged to record in detail these cultural practices (Beckwith 1938; Bowers 1950, 1963; Matthews 1877; Maximilian 1906). Female members of the Goose Society were usually between the ages of 30 and 40 (Bowers 1963:201). Some members of the society were honored with lifelong membership after experiencing supernatural events. Such events would be having "corn spirits" emerge from mouths during a large public event or even having an ear of corn appear in their throat (Bowers 1963:202-204). Supernatural experiences such as these were not rare occurrences as the Goose society had a major role

in accessing the Sacred. Some members of this society also took part in the Holy Women ceremony, which enacted a form of prognostication.

A major aspect of the ceremony involves the Holy Women destroying a figure in order to gain divine wisdom:

"The Holy Women placed the image in the sweat lodge pit, put the hot stones on it, poured in the water, heard the image burst, and then announced that the young man had conquered his enemies. With this assurance, the young man led a war party toward Mouse River and built two mounds as Holy Women directed." (Bowers 1963:329)

Although it does not definitively state these "images" were female figurines, the use of the word "image" is accepted when denoting a stone representation. In her book Martha Beckwith refers to the Old-Woman-Who-Never-Dies stone as an image (Beckwith 1938).

Another common ritual of the Goose Society is conducted after harvest in order to attract buffalo. The ritual took the form of a dance where women would each hold an entire corn stalk in their hand to symbolize the fruit of the earth (Peters 1995:122). The dance was conducted as prayer to Old-Woman-Who-Never-Dies asking her to not send the winter and to have the birds return (Ibid).

Accessing the Sacred Bundles

The high level of veneration of Old-Woman-Who-Never-Dies is further evidenced by the increased number of

bundles in the Hidatsa communities associated with her as compared to those of other deities. These bundles are used in Old-Woman-Who-Never-Dies ceremonies as well as in others that play a key role in Hidatsa society. These sacred bundles embody the Old-Woman-Who-Never-Dies and her supernatural attributes (Bowers 1963:335-338; Peters 1995). Her bundles act as identifiers of high status individuals as well as conduits to Old-Woman-Who-Never-Dies' supernatural powers.

The initial bundle construction is very conservative and does not deviate among communities (Bowers 1963:345). It is a rectangular cane basket with an antelope hide (hair removed) as a cover (Bowers 1963:336-345). The cane basket represents Old-Woman-Who-Never-Dies and the antelope hide represents the Chief-of-the-Antelopes who was killed by order of Old-Woman-Who-Never-Dies. This construction deviates from a common bundle depiction of a simple bound hide without basketry. The individuals who owned the Old-Woman-Who-Never-Dies bundles acted as protectors not only of the bundle, but also of the Southern direction and supernatural protection of the village (Bowers 1963:38). Even more intriguing is that individuals with bundles associated with Old-Woman-Who-Never-Dies were also those who create pottery (Bowers 1963:120).

Virginia Peters created an accessible content listing of the items found within an Old-Woman-Who-Never-Dies sacred bundle (Figure 30). The listing originates from the objects observed in a Hidatsa Old-Woman-Who-Never-Dies bundle (Bowers 1963:345-346). The Goose Society would use the bundle to reenact the Old-Woman-Who-Never-Dies myth (Peters 1995:113). While these items appear typical of what one might find inside a sacred bundle dedicated to a deity associated with fertility, a few articles such as the bird heads, sunflowers, and a sunflower whistle speak to the unique attributes of Old-Woman-Who-Never-Dies.

Birds, specifically blackbirds and water fowl, are messengers of the Old-Woman-Who-Never-Dies (Bowers 1963:346). It was believed that when the birds migrated during the fall, they would bring with them the spirits of the crops to give to Old-Woman-Who-Never-Dies during the winter months (Bowers 1963:204).

Sunflowers were a viable food source for the Hidatsa peoples. Along with being a simple crop to maintain, sunflower seeds were sustainable and advantageous for long term caching. Hidatsa women often constructed underground storage pits which were shaped like bottles (Figure 31). They would then fill the caches with sunflower seeds, corn, and squash, foodstuffs that would last for an indefinite

period of time (Peters 1995:121; Will and Hyde 1917)

As previously stated, the sunflower whistle is used to call the birds back from winter in order to have a plentiful harvest. Old-Woman-Who-Never-Dies cares for the birds and can call on them for aid. Within the context of the bundle, the whistle is used in the same way that Grandson did in the Sacred Arrow Myth.

CHAPTER VIII

ANALYSIS OF FEMALE FIGURINES

Analysis and Interpretation

As previously discussed, I propose that aspects of the Stirling-phase ceremonial centers at the BBB Motor Site and the Sponemann Site, as well as the burial at Opossum Fork Bayou, can be explained by examining the Old-Woman-Who-Never-Dies deity complex of the Hidatsa and Mandan Indians. Understandably there is a level of diffusion between these two time periods. However, I believe the unique manner of deposition paired with accompanying artifacts is directly connected with the identity or associated rites of each Braden female figurine. These archaeological contexts have great similarities to ceremonies and stories of the Hidatsa and Mandan. I will proceed with this interpretation by answering the three research questions presented in the beginning of this thesis:

1. Why are these female figurines destroyed and buried in differing ceremonial contexts?
2. How are exotic goods found at each site associated with the female figurine?

3. Is there a common iconographic, other than style, trait among these Braden female figurines that bind their respective sites of deposition?

This section will focus on answering these questions by combining the archaeological evidence present at each site with the ethnographic data collected in the previous chapter. The BBB Motor Site is argued as having a more mortuary concentration whereas the Sponemann Site is focused upon ritual pertaining to busk and harvest (Jackson et al. 1992:303). However, both of these sites contain Braden-style female flint-clay statues, red cedar pits, and ritualized destruction of the figurines.

If the purpose behind each site's ceremonial construction is so dissimilar, then why is there such attention upon these flint-clay figurines at each site? The answer lies in their ritual identity and ceremonial purpose. I will add to the current interpretation of these ceremonial depositions by focusing on the treatment of the flint-clay statuary in conjunction with the ceremonies of the Goose Society as well as the Old-Woman-Who-Never-Dies specifically.

Why are these figurines broken and buried?

When vessels or figurines are destroyed in ritual contexts such as the ones under investigation, they can be

interpreted as votive offerings or ritually killings during a renewal ceremony (Pauketat and Emerson 1997:177). While this interpretation is a fair assessment of other Mississippian contexts, there are still lingering details surrounding these female figurines that speak otherwise.

The BBB Motor and Sponemann sites both have religious complexes that were deliberately burned and contained female flint-clay figurines (Emerson and Jackson 1984; Emerson 1997; Emerson and Boles 2010; Jackson et al. 1992). However, the concept of ritual killing surrounding these figurines is more complex than originally conceived. Figurines such as the Birger, Sponemann, and Westbrook appear to have several points of impact alluding to multiple destruction events (Emerson and Jackson 1984; Emerson and Boles 2010:481; Fortier 1992; Pafford 2012;).

The Westbrook in particular has an area of high polishing on the upper back as shown in Figure 32 (Pafford 2012). This area would only have been exposed after the sunflowers were broken off of the sculpture, and the "retouching" or repolishing demonstrates that even after this figurine was broken it was still being handled and used by ancient peoples. The figurine was then broken again sometime later in its final area of deposition, whether directly in the grave or not. This would explain why all

fragments were recovered other than the remaining pieces of the sunflowers.

Multiple episodes of destruction can be explained by viewing these statuettes as visual aids in ritual and ceremony. These items were likely used for performances in order to convey a particular message or reenact events from stories. These female statues were not crafted in order to be looked upon as art pieces; they were tools for communicating a message or as an aid for accessing the sacred.

The Sacred Arrow myth explicitly references the killing of a woman by striking her on the head with a stone from the heavens. This single event leads to the introduction of Old-Woman-Who-Never-Dies and the major ceremony conducted in her reverence. This method of "ritual death" is readily observed in the distribution of the broken pieces of the Keller Figurine at the BBB Motor Site, as well as in the deliberate smashing of the Westbrook Figurine in Arkansas.

This same myth also details a woman repeatedly being thrown in a fire only to proudly claim that she cannot be killed in that manner. Another intriguing method of destruction as chronicled among the Hidatsa was discussed in the previous chapter: the Holy Women would place an

image (i.e., a statuette or figurine) in a hot stone bath in order for it to burst into multiple pieces. Due to the high water content of flint clay, heat exposure drastically alters the composition, and often causes the sculpture to explode when it is exposed to high temperature levels (Emerson and Boles 2010:481). This severe exposure to fire is exactly what is represented by the Sponemann Site figurines (Ibid., Fortier 1992). In fact, Emerson and Boles state that the vast majority of the flint-clay figurines were in close contact with fire during some point of their lives (Emerson and Boles 2010).

This complexity in the usage of these figurines parallels with the treatment of bundles by the Hidatsa and Mandan. As Virginia Peters states, "The items in this bundle were used to tell again and again the story of Old-Woman-Who-Never-Dies and to invoke her blessings on the fields and harvests." (Peters 1995:112)

This statement of the Hidatsa treatment of bundles and rites could be very similar to what has been unearthed at sites like BBB Motor and Sponemann. The flint-clay figurines are being employed during the Stirling phase to tell the story of the Mississippian variant of Old-Woman-Who-Never-Dies. While she is accepted as a Mandan and Hidatsa variant of the Earth Mother complex, she is likely

a much older concept (Bowers 1963:338).

How Are The Exotic Goods Associated With the Figurines?

The exotic goods in question differ slightly among the respective sites. Exotic minerals such as galena and quartz crystal were recovered from each site. Other exotic items such as datura, nicotine *arustica*, and sunflower heads were found at the BBB Motor and Sponemann sites. Although not exactly an exotic flora, the excessive amounts of sunflower heads found in the ceremonial center of the Sponemann Site does spark interest.

Exotic Minerals

As stated previously, each figurine has undergone some form of destruction prior to interment. Ritual killing of ceramics and figural art is not uncommon during the Mississippian period and is often a way to demonstrate the cycle of life and death in nature. For figurines representing the Earth Mother complex it makes perfect sense to depict this concept.

The connection to the Hidatsa specifically is observable in how the ancient people chose to conduct this ritualized killing. In the BBB Motor Site and the Westbrook burial the figurines were struck in the head with a blunt instrument before being intentionally buried. The item used to strike the Westbrook figurine is arguably the large mass

of galena that was found with the statue. At the BBB Motor Site there were five quartz crystals found near the structures associated with the figurines. One of these crystals was a large complete crystal (Figure 33) with natural red impurities in one end and had damage and abrasion marks suggesting it was used to strike an object (Emerson and Jackson 1984:261).

From personal experience I know that quartz is not a quality hammer stone for flintknapping. The crystal has a glassy sleek surface which does achieve the friction necessary to properly remove flakes. It is a much more likely scenario that an item often associated with ritual (Hudson 1976:168) would be used to ritually kill a stone figurine.

What makes their choice of destruction interesting is the association with the Hidatsa Sacred Arrow Myth. In the beginning of the story, Moon's wife flees the above realm and out of anger Moon casts a stone atop her head and kills her. A stone matching this description later becomes the marker or shrine for Old Woman's lodge (Figure 34). In the story, this single event leads to the introduction of Old Woman and her time with grandson.

Galena and quartz crystal both have properties not found in other minerals. Some Native American cultures use

crystals for divining purposes and many have been found at Spiro and other Mississippian sites (Hudson 1976:168).

Galena is a soft shiny exotic mineral that can be pulverized to produce white pigment.

Quartz crystal has a fascinating property called triboluminescence. This chemical property produces light energy when the crystal is struck, rubbed, or scratched (Wolfram). Quartz crystals contain small amounts of energy that can produce a flash of light when struck or scraped against another hard surface. Thus, by hitting or grazing an object like a flint-clay statue with a quartz crystal, one can generate a vibrant flash or glow. Both minerals would make a worthy choice to represent a stone from the above world.

Is There a Common Trait That Binds These Archaeological Sites?

Probably the most intriguing feature that fuses these archaeological sites was revealed through structural analysis. I have discovered that sunflowers are present at all sites; each site has a flint-clay figurine that is paired with sunflowers and has a major focus upon this vegetation. The significance of this plant comes from its association with Old-Woman-Who-Never-Dies.

As I have discussed in chapter seven, Old-Woman-Who-

Never-Dies is the only Earth Mother variant who is closely tied with sunflowers and not specifically concerned with just maize. Old-Woman-Who-Never-Dies brings forth sunflowers and maize for harvest and also has a sacred sunflower whistle that is the key to the ceremony; the whistle is used to ensure that winter does not continue indefinitely and calling for the birds to return. This sunflower whistle is an integral item and an identifier for the sacred bundle of the Old-Woman-Who-Never-Dies.

In order to demonstrate the focus of sunflowers among the flint-clay statuary, I will compare all representations to prove the attention to detail as well as the existence of a common sunflower motif.

Figure 35 shows the well represented sunflowers on the back of the Westbrook Figurine. As stated in chapter 6, the inside of the pod is stylized to represent the Fibonacci sequence, which is observable on blooming sunflowers (Figure 36). Along the perimeter of the pods on the Westbrook Figurine are contrasting angled lines expressing the staggered petals of the flower (Figure 37a); this stylized representation is present on the Sponemann Figurine as well.

Although badly damaged, the pod of the sunflower remains fairly intact, with the perimeter depicting the identical

pattern observed on the Westbrook sunflower (Figure 37b). Jackson et al. identified this motif as a sunflower while the Westbrook figurine remained in private hands with little circulation. (1992:285).

This leads to the final identification of the Birger figurine sunflower motif. With little of the head section remaining, the identification is made based upon the perimeter elements of the sunflower. Upon close examination of Figure 37c, the identical angled lines are shown to encircle what would have been a sunflower pod. Prior to this discovery it was accepted that the flowering item is likely a gourd blossom associated with the gourds along her back. However, gourd blossoms (male and female) are quite small and look very different when compared to sunflowers (compare Figs. 38a and b). I would argue that this flower matches the flowers of the Sponemann and Westbrook figurines.

All three images together illustrate that the crafters of these artifacts had great intent to depict this type of sunflower. All flowers are depicted as the same size and all have a perimeter element depicting petals. All are located either on the head or upper back suggesting they are a major focal point of the statue.

I believe that the sunflower is the key locative of

Old-Woman-Who-Never-Dies. The sunflower motif acts as *pars pro toto* (a Latin phrase meaning, literally, part for the whole) for her likeness. No other Earth Mother variant is so closely tied with sunflowers as the Old-Woman-Who-Never-Dies.

Closing

The Hidatsa variant of the Earth Mother concept is the closest representation to the Mississippian fertility goddess observable on these statues. I will concede that not all of these figurines represent the likeness of Old-Woman-Who-Never-Dies but all are connected to a common ceremonial complex that is echoed by the religious practices of the Hidatsa and Mandan. It would appear that a there exists an oral tradition that has survived beyond the Mississippian period.

The last remaining Mississippian culture also had mythology parallels to the Hidatsa. In their story about Old Woman she tells grandson that in order for her to provide for him, he must kill her and burn down her house. She also gives grandson a whistle to summon the birds (Swanton 1995 [1929]:231). A variable tale of death, fire, and rebirth in addition to the use of a whistle to communicate with birds could speak to some level of mythological connectivity. I would argue that although the

Natchez are often thought to represent the finale of the Mississippian peoples, a part of the Mississippian identity is still carried by the Hidatsa and Mandan.

CHAPTER IX

CONCLUSION

Final Thoughts

The research I have presented in this thesis reveals that the depositional context of known Braden style female figurines relates them to an ethnohistorical tradition expressed through the Old-Woman-Who-Never-Dies deity complex of the Hidatsa and Mandan cultures. The methodology used to produce this conclusion includes an archaeological examination of the deposition of each figurine followed by the first two levels of iconographic analysis as developed by Erwin Panofsky (1955). The data from archaeological and iconographic analyses were then compared and contrasted to existing Hidatsa and Mandan ceremonial traditions that allowed for the final iconological interpretations. Combined with established connections to ethnohistorical accounts of the Hidatsa and Mandan, my hypothesis validates the incorporation and use of upstreaming when examining the depositional layers and artifact assemblage of these specific Mississippian archaeological sites. An analysis of

the flint clay from which these figurines were crafted revealed that six Braden-style flint-clay figurines: the Birger, Keller, West, Willoughby, Sponemann, and Westbrook, were all created in the Cahokian area. Not only were they created within ritual contexts in the Cahokian area, but the archaeological contexts also link them to historic societal ceremonies and specific ideological episodes visible today in ethnohistorical records. This collection of evidence demonstrates that the Hidatsa deity complex of Old-Woman-Who-Never-Dies has roots that date as early as the Mississippian period.

The connections discovered using this methodology also indicate that more information is yet to be discovered in respect to Mississippian ceremonial practices and deity identifications. The connections made between artifact assemblages at each site under discussion paralleled with Hidatsa cult traditions and mythologies demonstrate this conclusion. As I have previously stated, the inaugural investigations identified these figurines as representations of a "fertility goddess," but this interpretation will be further examined as additional resources and data become available. This research provides a template for a more holistic understanding of Mississippian period ceremonies and ceremonial locations

that create and utilize flint-clay figurines.

This specific thesis research began by highlighting the unique layout and features of the sites in which the flint-clay figurines were interred. The first site to be examined was the BBB Motor Site, in particular, the mortuary context of the northern Stirling unit.

Undoubtedly, this investigation is best summarized by the analysis of the contents of Feature 125 and the initial interpretation of the ceremonial setting. Feature 125 is a multizoned pit with numerous excavations conducted in antiquity. Within the pit, the excavators were confronted with high levels of red cedar, datura (*Datura stramonium*) seeds, and the upper torso and head of the Keller Figurine. These inclusions establish a definitive connection between depositional ritual, the use of hallucinogenic datura, and the flint-clay figurines. This information, combined with the interpretation of the site as a temple-mortuary complex, emphasizes this ceremony as having deep ancestral or funerary significance.

The approach emphasized by the archaeologists at the BBB Motor Site was subsequently used to investigate the Sponemann Site. Although these sites differ in layout and design, the analysis of the depositional levels of the figurines indicated a similar ceremonial connection.

However, the level of ritual intensification during the Stirling phase of the Sponemann Site inspired further interpretation. Arguably the most sacrosanct elements were recovered within the ceremonial center in the site's southern region. Once again, this region within the site contains an excess of vegetation associated with the Old-Woman ceremony of the Hidatsa. Abnormally high amounts of corn cobs, sunflowers, and cane—all of which are connected to the Old-Woman-Who-Never-Dies—were interred surrounding a red cedar fire pit. The specificity of the flora remains, in conjunction with the elaborate destruction prior to deposition, are otherwise absent at other Mississippian period sites. Interestingly, this verifies the presence of an explicit ritual episode within the ceremonial area of the Sponemann Site, which has a striking similarity to the Old-Woman-Who-Never-Dies bundle ceremony of the Hidatsa. This ceremony is conducted to retell the story of Old-Woman and prepare for her arrival during the planting season. The contents of the bundle match archaeological remains recovered from the site. The bearer of the Old-Woman bundle would also place an image of the 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.

Unlike all other flint-clay figurines within this corpus, the Westbrook Figurine was found in a burial setting located in Arkansas, hundreds of miles to the south of Cahokia. Nonetheless, identical themes exist within the statue's iconography and the contexts of its final resting place. The burial contexts of the Westbrook Figurine echo similar themes of destruction, vegetation, and emergence, common among the other flint-clay statuettes. The figurine was broken into several fragments and that act of destruction is postulated to have been purposefully conducted with the large chunk of galena also recovered from the burial. The thematic connection is further evidenced by her presentation of the vegetative stalks that seem to grow from her hands, while she herself simultaneously emerges from a basket. In this light, the Westbrook Figurine also bears a striking resemblance in form and presentation to the Sponemann Figurine. I argue this linkage validates my methodology and connects this archaeological data to a large body of ethnohistorical research. The methodology applied in this thesis allows for the recovery of specific ancient traditions and projects a conclusion that provides modern Native and Euro-Americans with a window to the American ancestral past. The product of this research supports the theory that a

multidisciplinary approach is fundamental for recovering the identities of Mississippian peoples. Although the site of the discovery of the Westbrook Figurine is some distance from Cahokia, all other figurines were found in the immediate Cahokia region. Therefore, it is reasonable to assume these flint-clay figurines possessed deep intrinsic meaning, ultimately representing the culture.

Other art styles originating in Cahokia have already been identified as projecting prestige and elite status within the Cahokian sphere. Specifically, vessels, such as Ramey pots, are discovered in many other sites believed to have had contact with Cahokia. Undoubtedly at these sites, the vessels were revered for the prestige and power they projected. As Pauketat and Emerson state in their popular report,

The pots were imbued with the symbolism of order, hierarchy, and religiosity and were thus an active medium for this discourse. In the context of rites of intensification, like the Green Corn ceremony, the Ramey Incised jar would have been a vehicle not only for the "redistribution" of comestibles, but also for the diffusion of elite ideas (Pauketat and Emerson 1991:935).

Without question, these ceramic vessels acted as a medium for exhibiting ceremonial and political power (Pauketat and Emerson 1991).

The argument is clearly made that as the BBB Motor

Site and Sponeemann Site are in the periphery of Cahokia, they display the same dominant cultural conceptions for the Cahokian polity. Given the fact that Cahokia produces numerous prestige goods, it is no surprise that many other flint-clay statues (all male) crafted in the Cahokian area have been discovered in distant corners of the Southeast. If material objects associated with Cahokia were highly sought outside their geographical region, their mythology and lore could be equally far reaching. Since the symbolism and ideology surrounding these figurines is prominent within the Cahokian region, it is reasonable to surmise that cultures would make a conscious effort to maintain sacred knowledge represented by the flint-clay statues. A culture would need no ancestral link in order to adopt or adapt Cahokian ideology into local traditions. The Hidatsa and Mandan are an example of this process. Though disjunction is always an issue that must be taken into consideration, the ethnohistorical data clearly demonstrates that the presence of an "Earth Mother" cult throughout much of Central and Eastern North America would have made the symbolism of the Cahokian flint-clay figurines easily adoptable for non-Cahokian peoples.

These flint-clay statues are far more connected to cultural development and identity than initially conceived.

The results of this thesis demonstrate that ceremonial traditions and origin stories recovered from Hidatsa ethnohistory reflect the archaeological tradition represented in the artifacts recovered from the Sponemann and BBB Motor sites. Certainly the multidisciplinary approach supports the statement by Bears Arm, the man who shared his cultural identity with the first European researchers:

For these stories are like branches of a tree. All go back to a main trunk. The old Indians who know the stories, if we relate a branch, can tell where it belongs in the tree and what becomes before and what after (Beckwith 1932).

These artifacts act as snapshots of the past and a holistic approach with a multidisciplinary methodology supports the hypothesis presented in this thesis. The label of "Earth Goddess" is a vague catch-all that does not encompass the significance of the construction, use, and "death" of these Mississippian female figurines. Researchers must acknowledge that artifacts such as these can transcend an over-simplified typological label.

TABLES

Table 1: The three Levels of Iconographic interpretation

OBJECT OF INTERPRETATION	ACT OF INTERPRETATION
<p>I <i>Primary or natural</i> subject matter—(A) factual, (B) expressional—constituting the world of artistic motifs.</p>	<p><i>Pre-iconographical description</i> (and pseudo-formal analysis).</p>
<p>II <i>Secondary or conventional</i> subject matter, constituting the world of <i>images, stories</i> and <i>allegories</i>.</p>	<p><i>Iconographical analysis.</i></p>
<p>III <i>Intrinsic meaning or content</i>, constituting the world of "<i>symbolical</i>" values.</p>	<p><i>Iconological interpretation.</i></p>

IMAGES

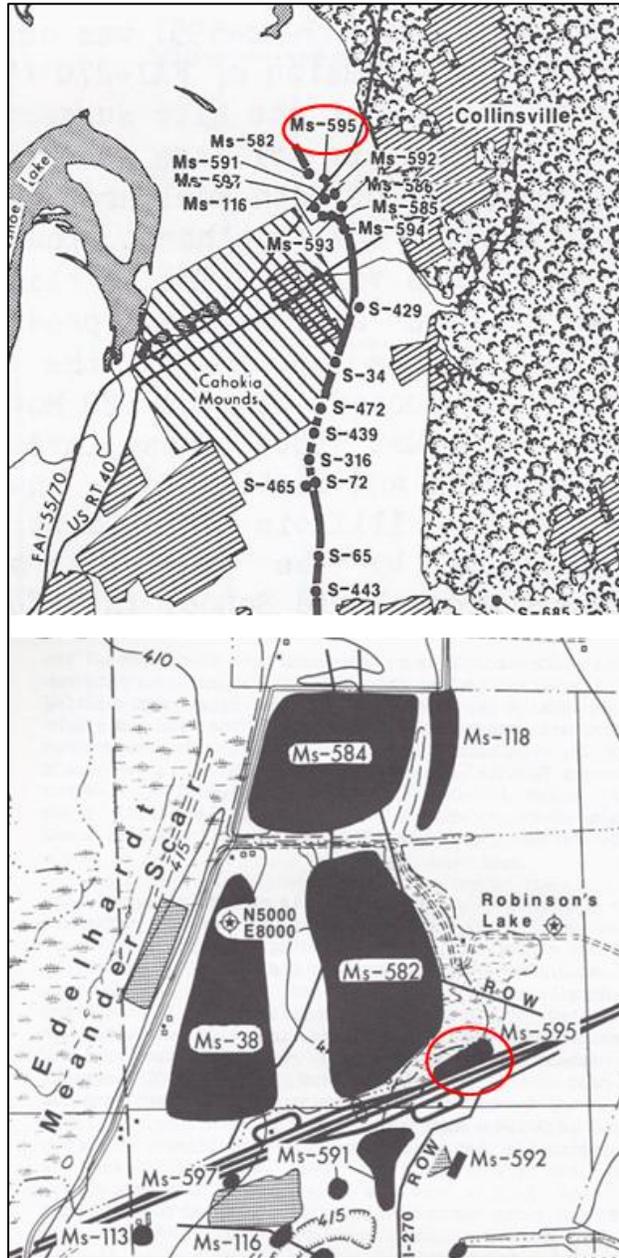
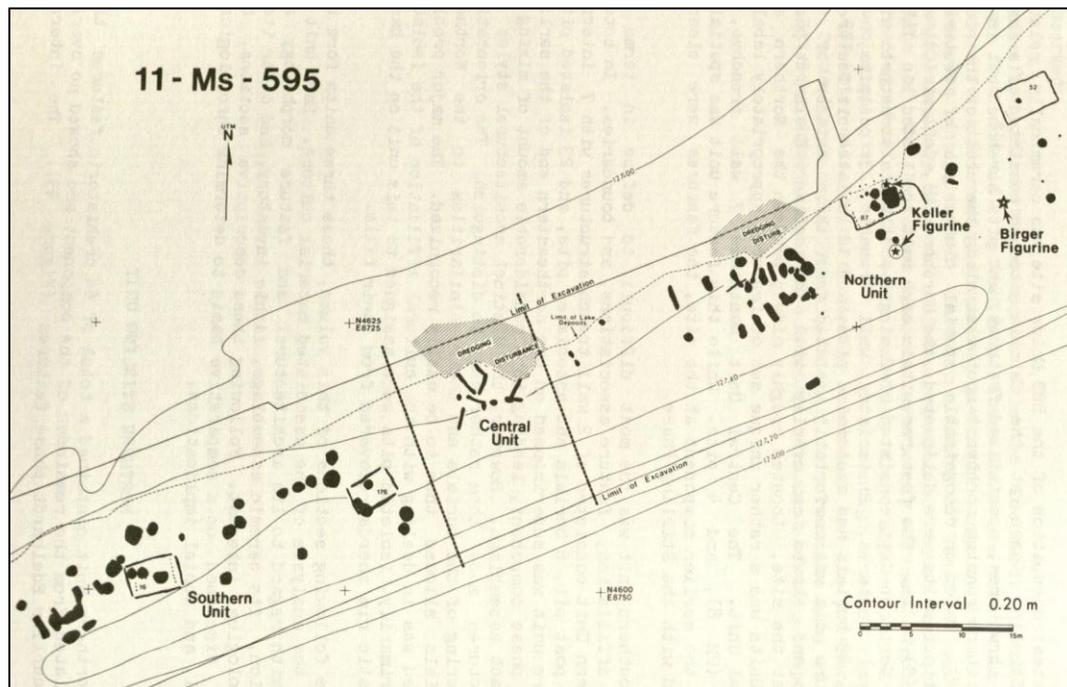


Figure 1. Area Map and Detail Map of the BBB Motor Site, Shown in Proximity to Cahokia (Emerson and Jackson 1984)



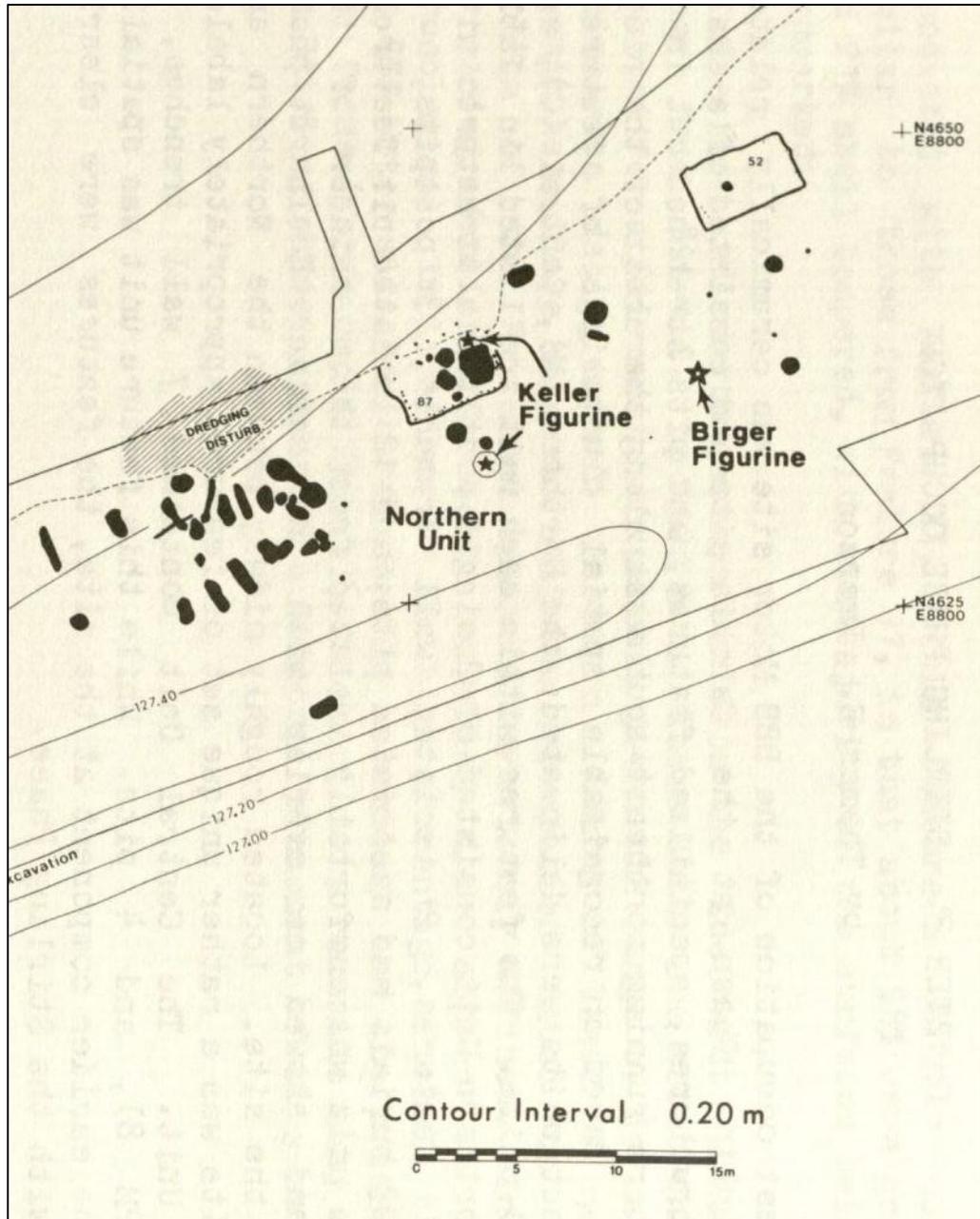


Figure 3. Map of Northern Unit (Emerson and Jackson 1984)

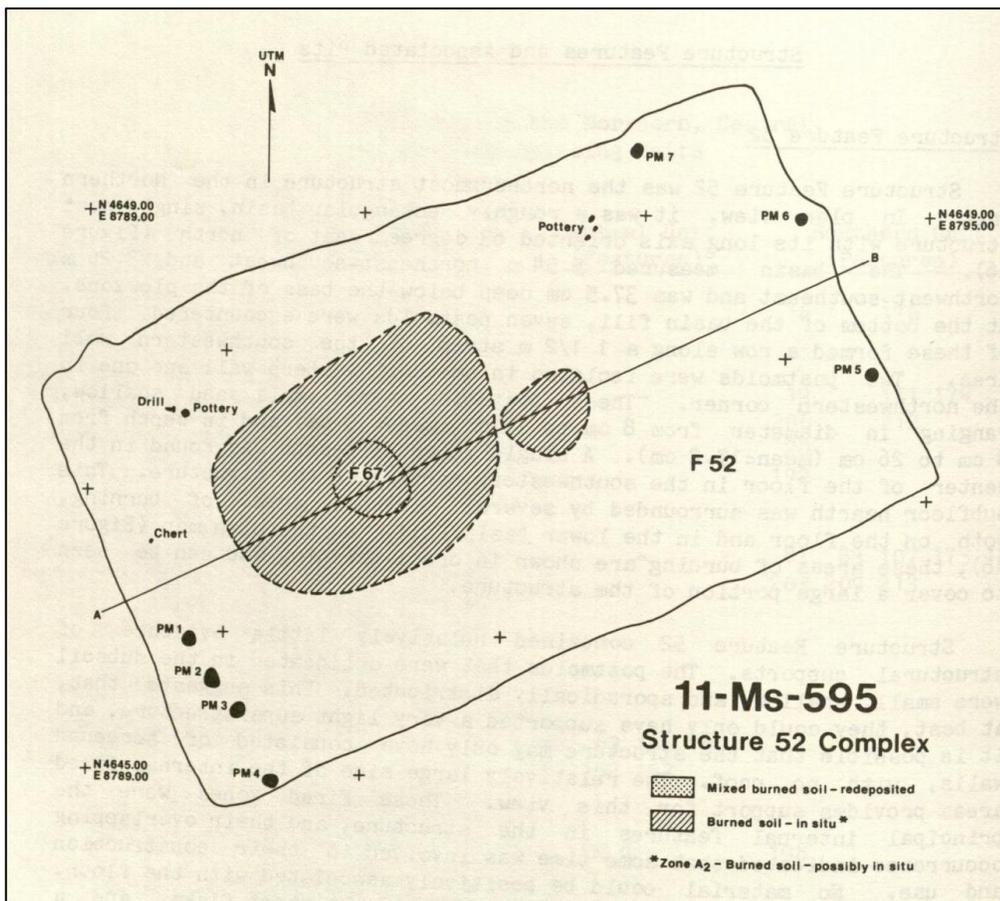


Figure 4. Structure 52, BBB Motor Site (Emerson and Jackson 1984)

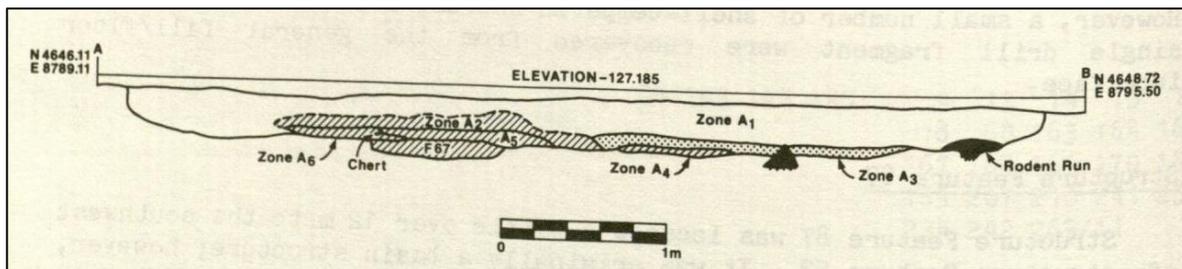


Figure 5. Profile of Structure 52 Floor, BBB Motor Site (Emerson and Jackson 1984)

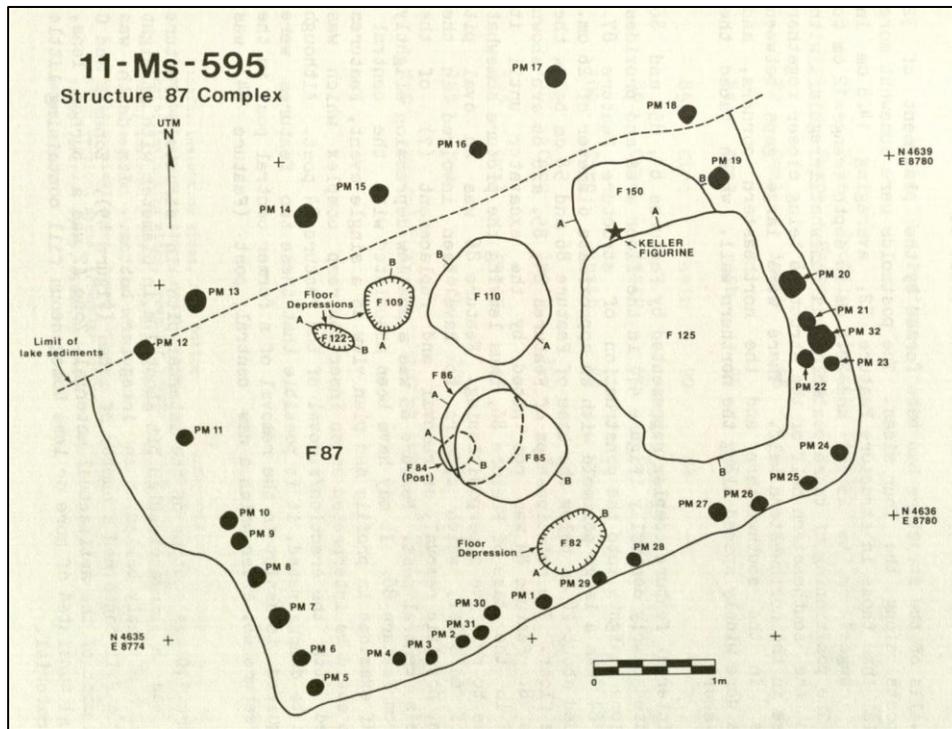


Figure 6. Structure 87, BBB Motor Site (Emerson and Jackson 1984)

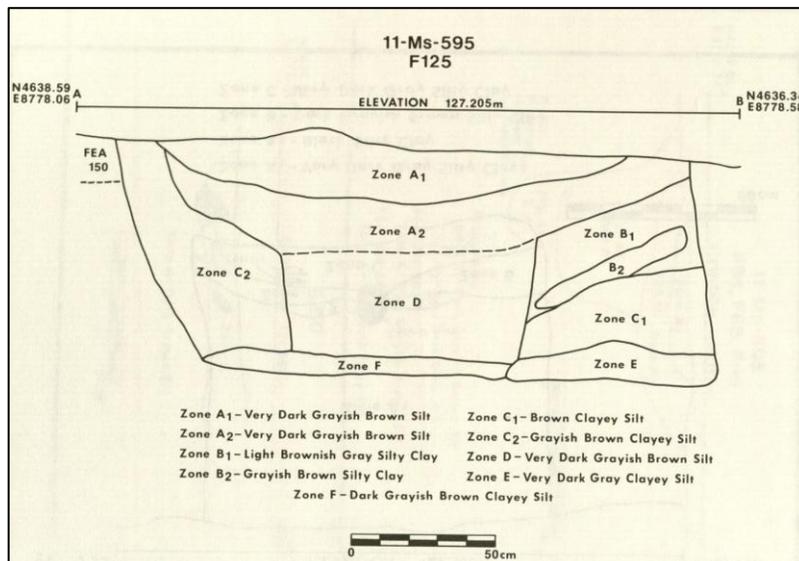


Figure 7. Profile of Feature 125, BBB Motor Site (Emerson and Jackson 1984)

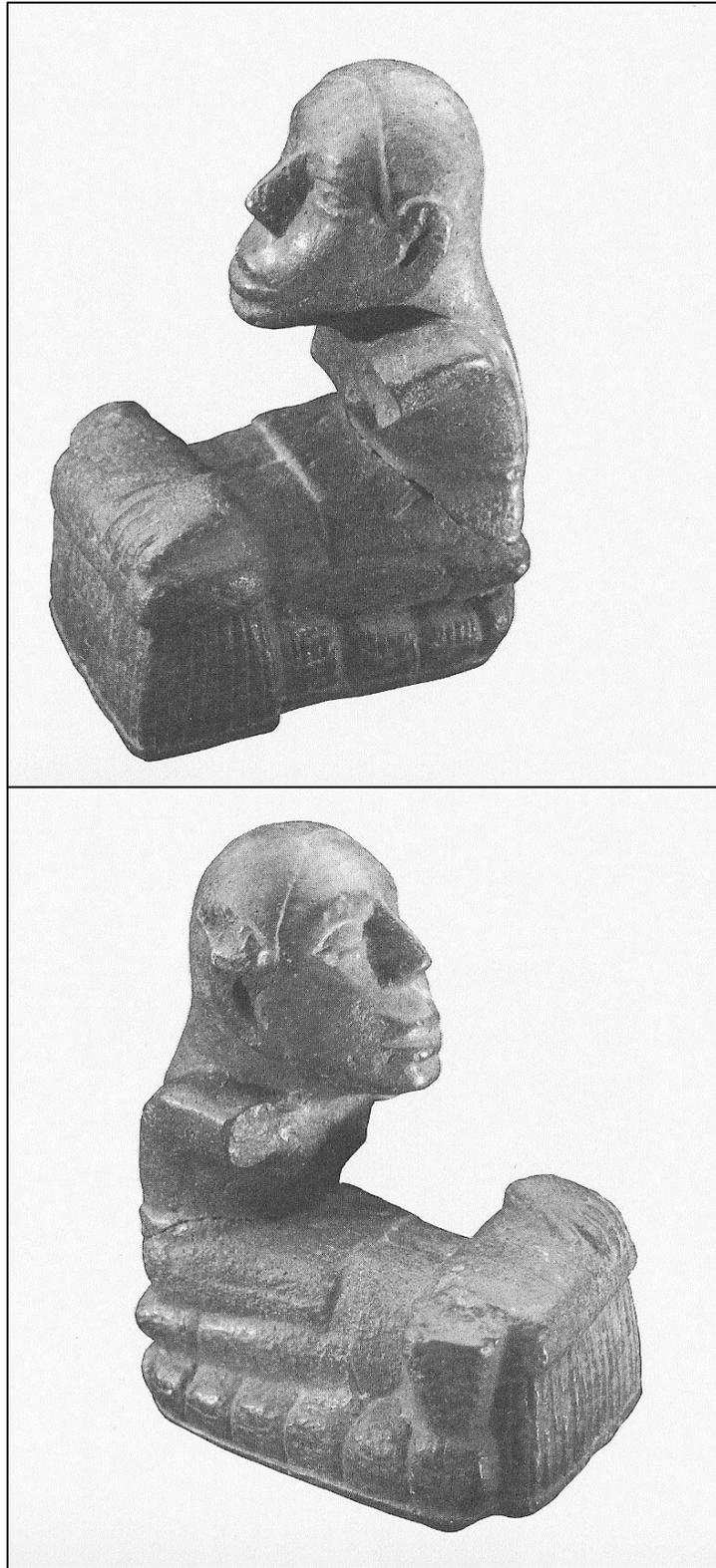


Figure 8. Two Views of the Keller Figurine (Emerson and Jackson 1984)

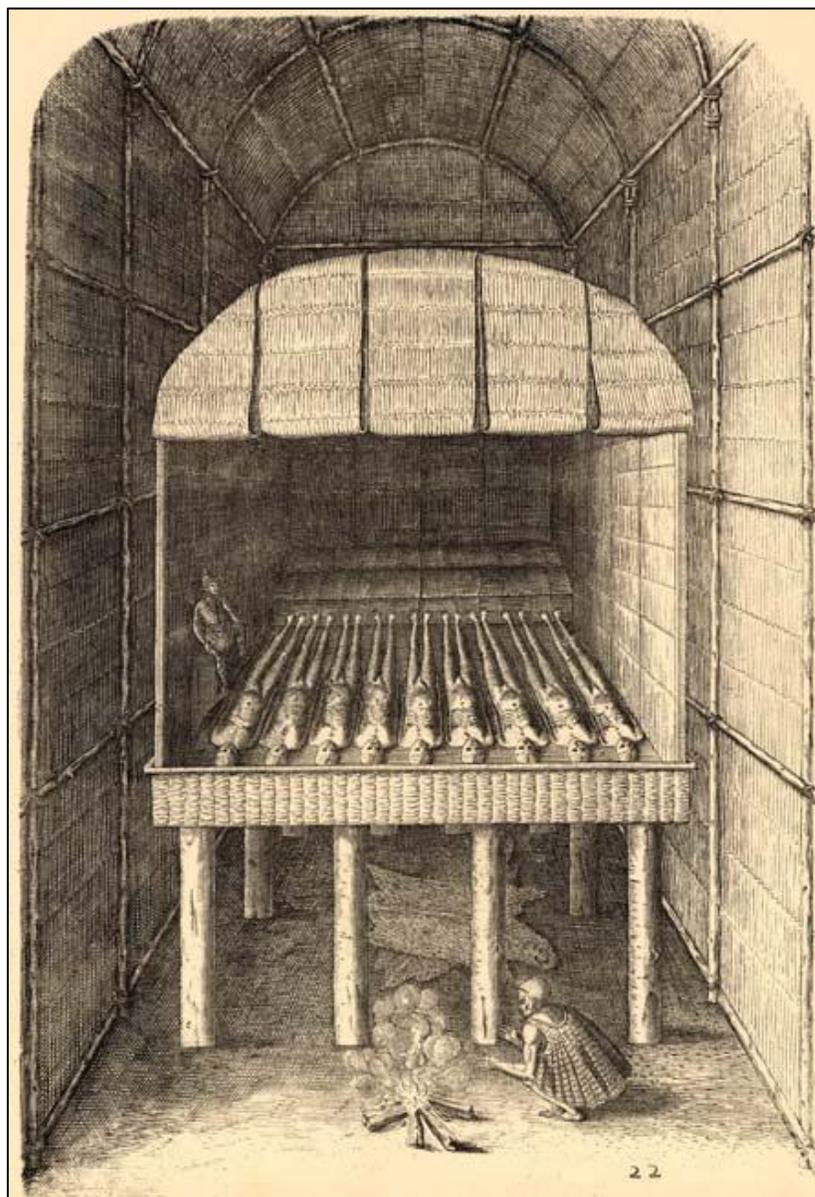


Figure 9. Interior View of a Charnal House, Based upon an Original Drawing by John White, 1585-86, Engraved by Theodor de Bry (Photo courtesy F. Kent Reilly III)



Figure 10. The Birger Figurine (Photo courtesy F. Kent Reilly III)



Figure 11. Face of the Birger Figurine (Photo courtesy F. Kent Reilly III)



Figure 12. Birger Figurine profile and Back (Photo courtesy John Kelly)

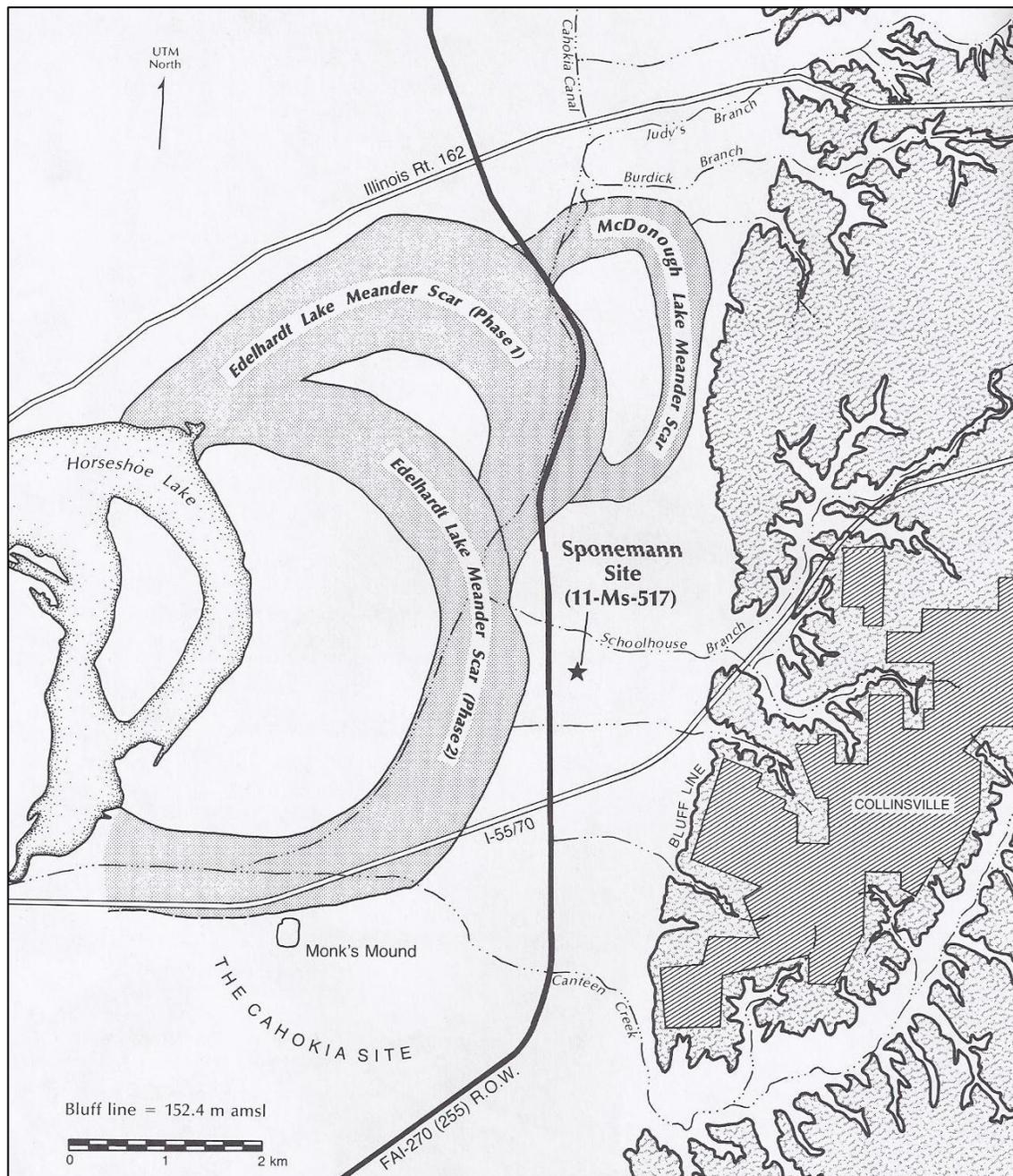


Figure 13. Map of the Sponemann Site Region (Jackson et al. 1992)

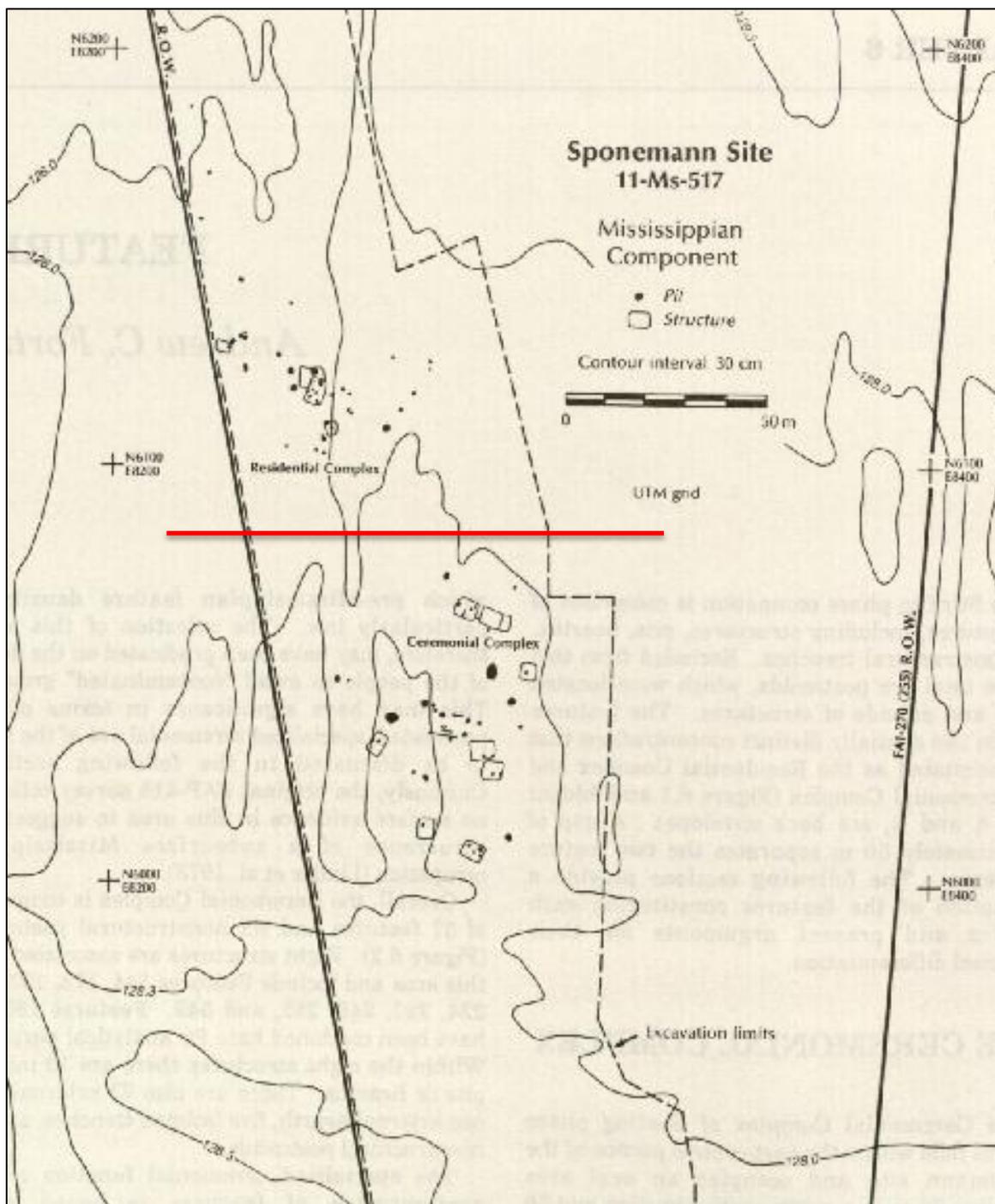


Figure 14. Site Layout (Jackson et al. 1992)

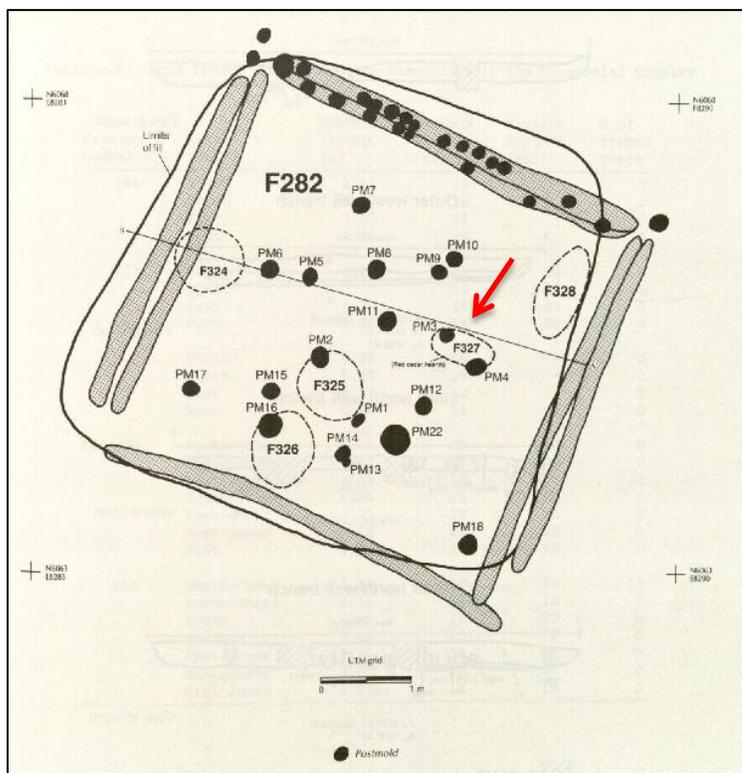


Figure 16. Feature 282, Sponemann Site (Jackson et al. 1992)

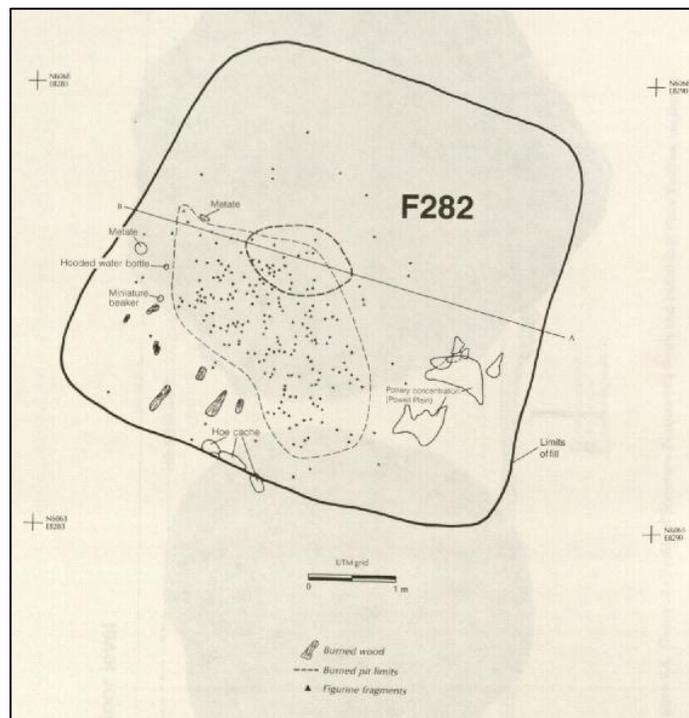


Figure 17. Distribution of Flint-clay Figurine Fragments (Jackson et al. 1992)



Figure 18. The Sponemann Figurine (Jackson et al. 1992)

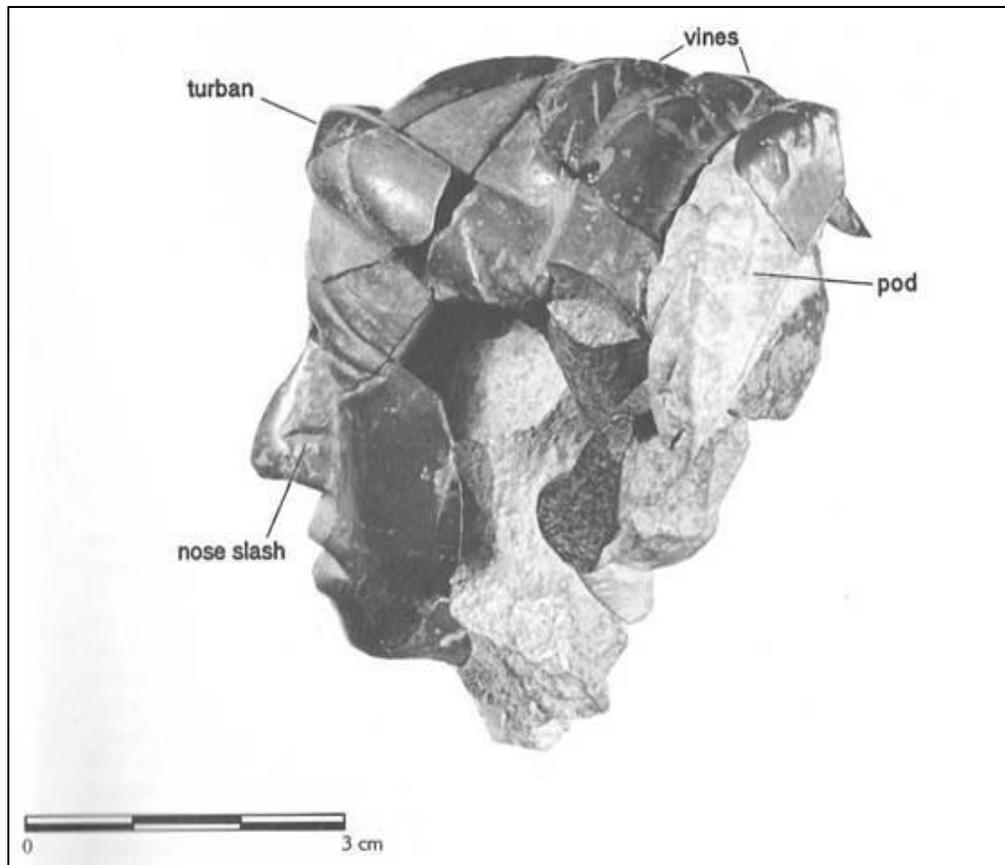


Figure 19. Head of the Sponemann Figurine (Jackson et al. 1992)

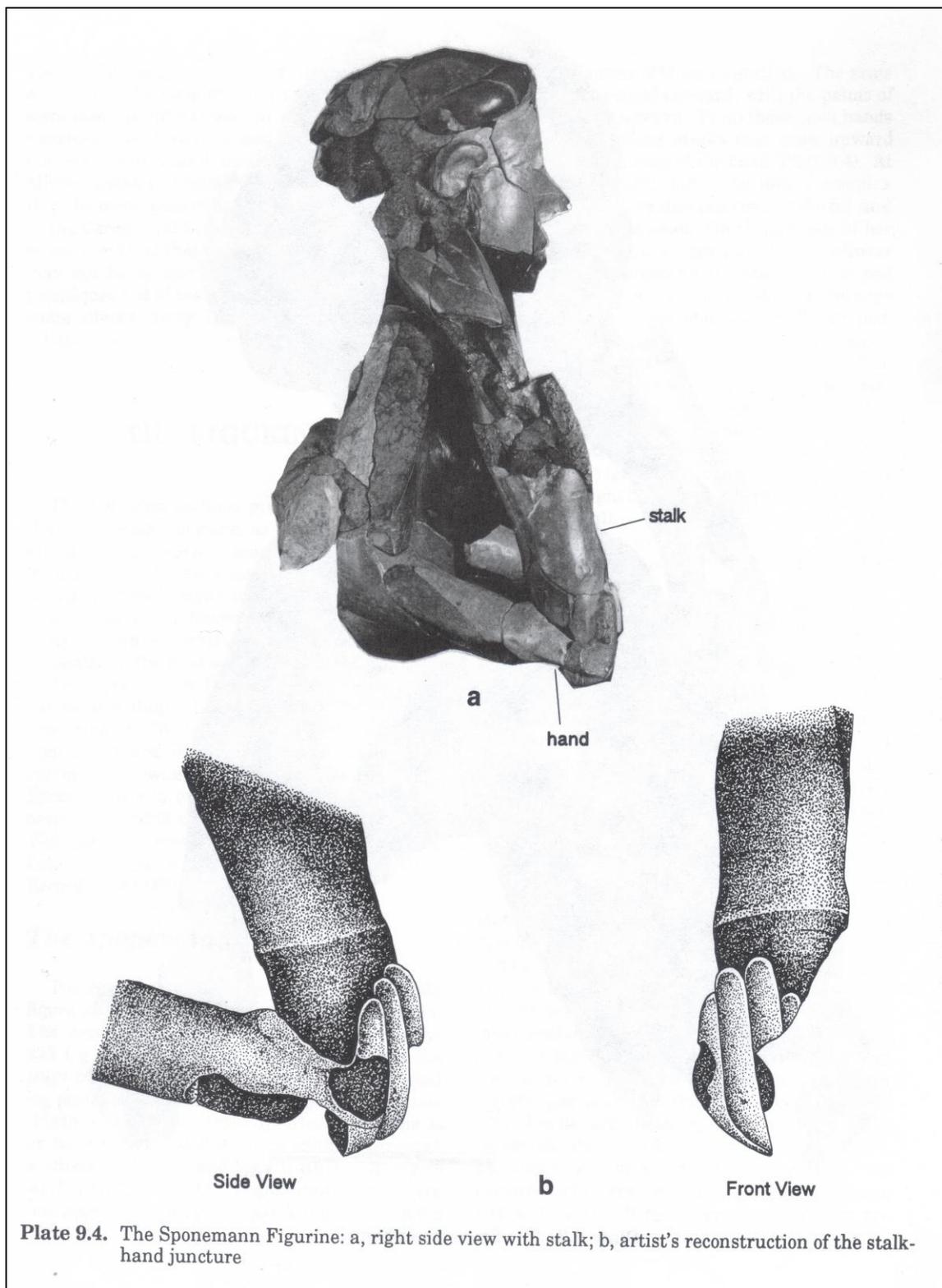


Figure 20. Reconstructed Hand of the Sponemann figurine (Jackson et al. 1992)



Figure 21. The Willoughby figurine (Jackson et al. 1992)

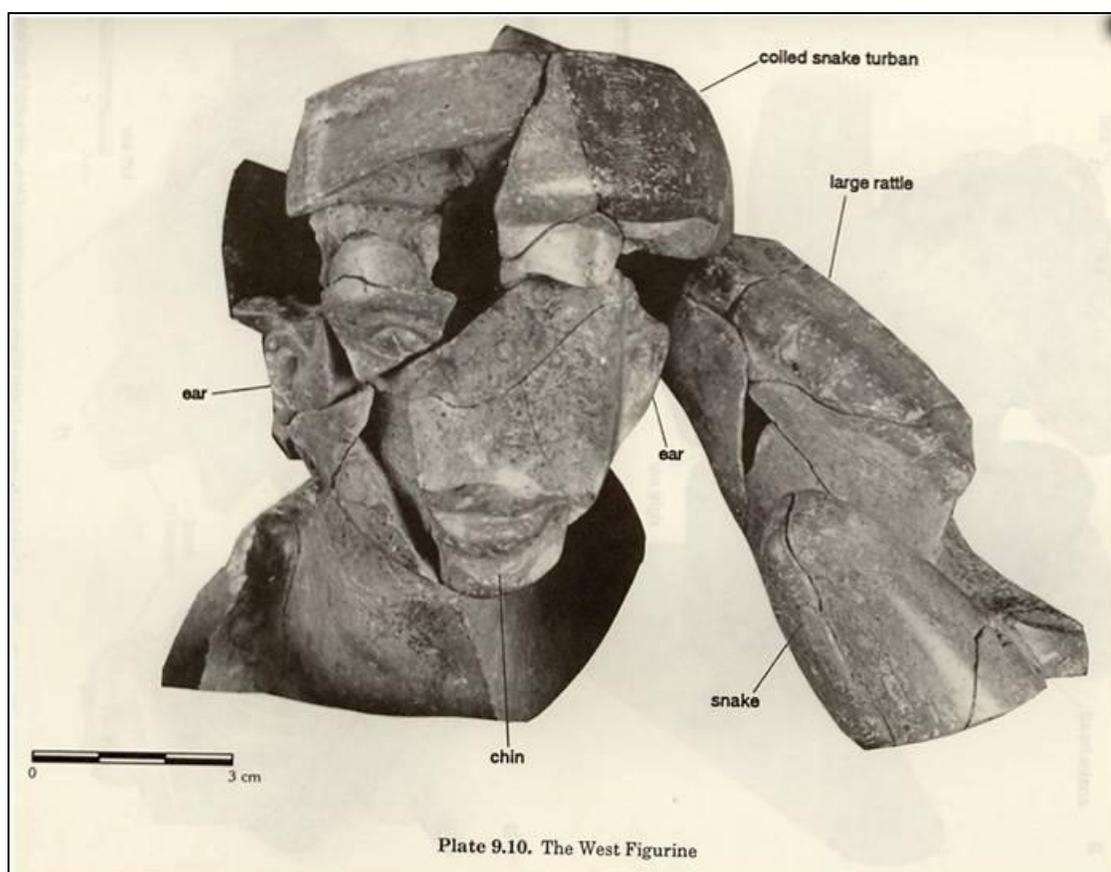


Figure 22. The West figurine (Jackson et al. 1992)

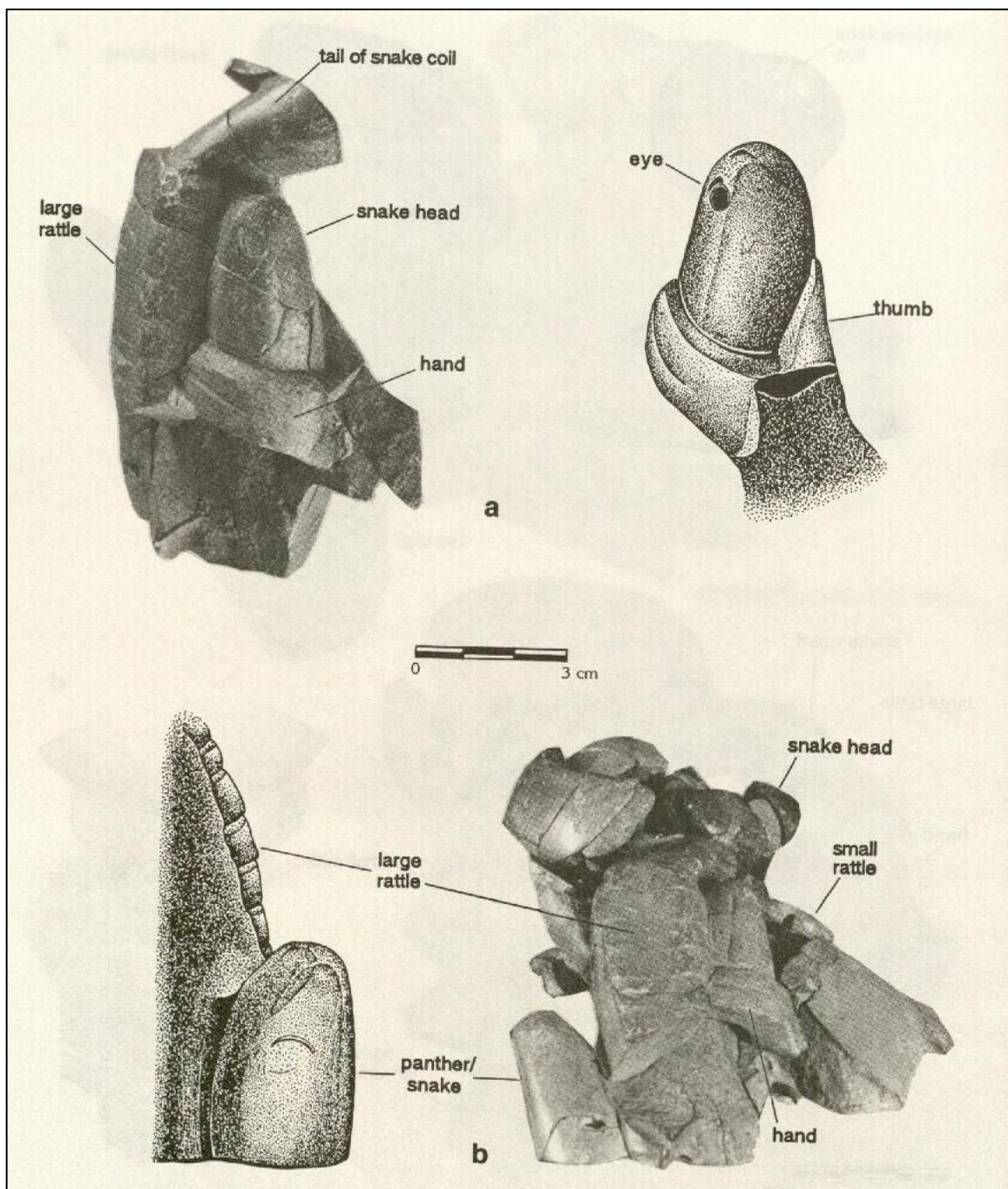


Figure 23. Details of the Hand and Serpent of West figurine (Jackson et al. 1992)



Figure 24. The Westbrook figurine (Photo courtesy David Dye)



Figure 25. Profile View of the Right Side of the Westbrook figurine (Photo courtesy David Dye)



Figure 26. Close-up View of the Right Hand and Vegetation of the Westbrook Figurine (Photo courtesy F. Kent Reilly III)



Figure 27. View of the Back and Bundle Basket of the Westbrooke figurine (Photo courtesy David Dye)



Figure 28. Close-up View of the Sunflower on the Back of the Westbrook Figurine (Photo courtesy David Dye)



Figure 29. Profile View of the Left Side of the Westbrook figurine (Photo courtesy David Dye)

- A corn basket covered with a tanned antelope hide from which the hair had been removed (the basket represented Old Woman Who Never Dies and the antelope hide stood for Chief of the Antelopes whom she had ordered Grandson to kill)
- Sacred arrows, which were a reference to the arrows two men gave Grandson to “walk” with the Old Woman
- A human scalp
- A wooden pipe with a goosehead on the stem to stand for the beginning and end of the growing season
- Two clay pots to represent sacred pots that were once placed on the shore and used to feed visitors
- A headdress of foxskin, representing the fox who acted as messenger for Grandson when he imprisoned the animals in Dog Dens
- White sage used to cleanse people
- A gourd rattle, representing a garden plant
- A piece of elkskin, because the elk helped the Old Woman in her garden
- Deer horns and skull, because the deer were also her helpers
- A piece of bearskin, because Grandson had tamed a bear to work for the Old Woman instead of dogs
- Blackbird heads, because blackbirds were her helpers in the garden
- A circular drum decorated with goose tracks
- Corn, beans, pumpkins, and sunflowers, and a whistle made of the stalk of the sunflower to represent the one the Old Woman had used to bring the blizzard to punish the two men who had kept Grandson in a tree for four days. Such a whistle brought rain in time of drouth.²¹

Figure 30. Content listing of Old-Woman-Who-Never-Dies sacred bundle (Peters 1995)

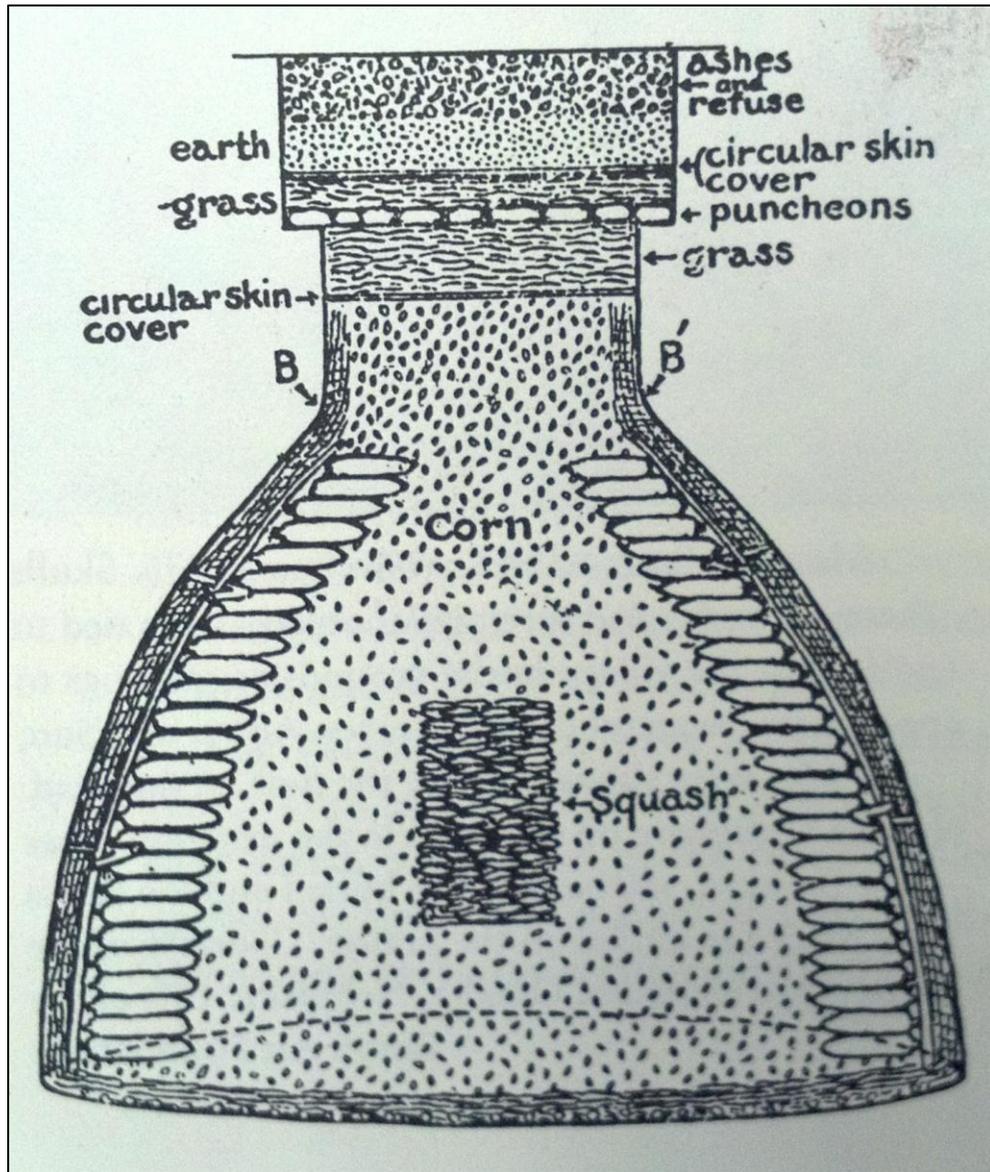


Figure 31. Underground cache pit (Peters 1995)



Figure 32. Three-quarter View of the Back and Bundle Basket of the Westbrook figurine (Photo courtesy David Dye)

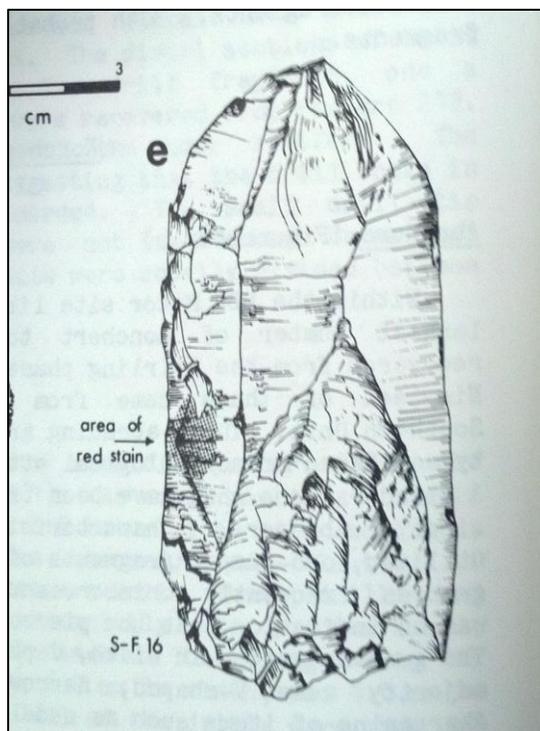


Figure 33. Large quartz crystal from the BBB Motor site (Emerson and Jackson 1984)

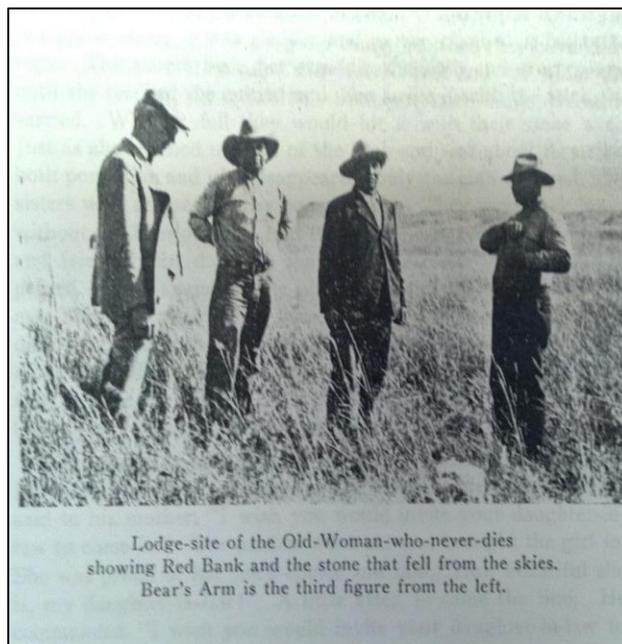


Figure 34. Site of the Lodge of Old-Woman-Who-Never-Dies (Beckwith 1938)



Figure 35. Close-up View of Sunflower on the Westbrook Figurine



Figure 36. Pattern Created in the Pod of Sunflower Depicting the Fibonacci Sequence

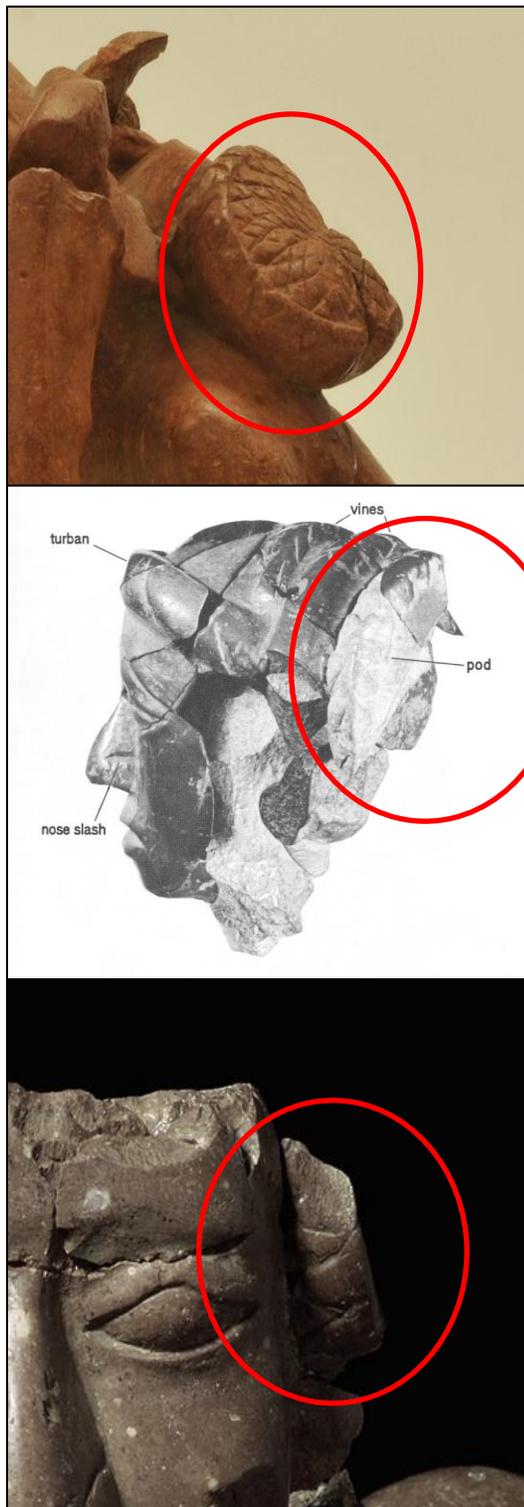


Figure 37. Views of Sunflower Representations on Three Flint-clay Figurines: Westbrook, Sponeman, and Birger



Figure 38. Comparison of Gourdblossoms and Sunflowers

REFERENCES

- Beckwith, Martha Warren
1932 *Myths and Ceremonies of the Mandan and Hidatsa*.
Vol. 2. Vassar College, New York.
- 1938 *Mandan-Hidatsa Myths and Ceremonies*. The American
Folk-Lore Society. J. J. Augustin, New York.
- Bedau, Mark A.
1997 *Weak Emergence*. <http://academic.reed.edu/philosophy/faculty/bedau/pdf/emergence.pdf>.
- Bowers, Alfred W.
1950 *Mandan Social and Ceremonial Organization*. The
University of Chicago Press.
- 1963 *Hidatsa Social and Ceremonial Organization*.
Bulletin 194. Bureau of American Ethnology,
Washington, D.C.
- Bossu, Jean-Bernard
1777 *Nouveaux Voyages Dans L'Amerique Septentrionale*.
Chez Changuion, Amsterdam. 1962 *Travels in the
Interior of North America 1751-1762*. Translated and
edited by Seymour Feiler. University of Oklahoma
Press, Norman.
- Brinton, Daniel G.
1896 *The Myths of the New World: A Treatise on the
Symbolism and Mythology of the Red Race of America*.
3rd ed., revised. David McKay, Philadelphia.
- Catlin, George
1973 [1844] *Manners, Customs, and Conditions of the
North American Indians*, Vol. 1. Courier Dover
Publications.
- Chamberlain, Von Del
1982 *When Stars Came Down to Earth: Cosmology of the
Skidi Pawnee Indians of North America*. Ballena Press,
Los Altos, California.

Colvin, Matthew H.

2011 *Further Dimensions: Variations of the Hand and Eye motif in the art of the Mississippian Period*. Mid-South Archaeological Conference, Memphis, Tennessee.

Dorsey, George A.

1904a *The Mythology of the Wichita*. Carnegie Institution of Washington, Washington, D.C.

1904b *The Traditions of the Arikara*. Carnegie Institution of Washington, Washington, D.C.

1904c *Traditions of the Skidi Pawnee*. Memoirs of the American Folk-Lore Society, Vol.8. Houghton, Mifflin and Company, Boston.

1906 *The Pawnee Mythology, part 1*. Carnegie Institution of Washington, Washington, D.C.

Douglas, Frederick H., and Rene d'Harnoncourt

1941 *Indian Art of the United States*. The Museum of Modern Art, New York.

Emerson, Thomas E.

1982 *Mississippian Stone Images in Illinois*. Urbana: Illinois Archaeological Survey Circular 6.

1989 *Water, Serpents, and the Underworld: An Exploration into Cahokia Symbolism*. In *The Southeastern Ceremonial Complex: Artifacts and Analysis*. P. Galloway, ed. Pp. 45-92. Lincoln: University of Nebraska Press.

1997 *Cahokia and the Archaeology of Power*. University of Alabama Press, Tuscaloosa.

Emerson, Thomas E., and Steven L. Boles

2010 Contextualizing Flint Clay Cahokia Figures at the East St. Louis Mound Center. Illinois Archaeological Survey 22(2):473-490.

Emerson, Thomas E., and Randall E. Hughes

2000 Figurines, Flint Clay Sourcing, the Ozark Highlands, and Cahokian Acquisition. *American Antiquity* 65:79-101.

- Emerson, Thomas E., and Douglas K. Jackson
1984 *The BBB Motor Site*. Urbana: University of Illinois Press.
- Emerson, Thomas E., Randall E. Hughes, Mary R. Hynes, and Sarah U. Wisseman
2002 Implications of Sourcing Cahokia-Style Flint Clay Figures in the American Bottom and the Upper Mississippi River Valley. *Midcontinental Journal of Archaeology* 27(2):309-338.
- 2003 The Sourcing and Interpretation of Cahokia-Style Figurines in the Trans-Mississippi South and Southeast. *American Antiquity* 68(2):287-313.
- Farnsworth, Kenneth B., and Thomas E. Emerson
1989 The Macoupin Creek Figure Pipe and its Archaeological Context: Evidence for Late Woodland-Mississippian Interaction Beyond the Northern Border of Cahokian Settlement. *Midcontinental Journal of Archaeology* 14:18-37.
- Fortier, Andrew C.
1992 Figurines. In *The Sponemann Site 2 (11-Ms-517): The Mississippian and Oneota Occupations*, by Douglas K. Jackson, Andrew C. Fortier, and Joyce A. Williams, University of Illinois Press, Urbana.
- Freeland, Cynthia A.
2001. *But Is It Art? An Introduction to Art Theory*. Oxford University Press, New York.
- Goldstein, Jeffrey
1999 "Emergence as a Construct: History and Issues", *Emergence: Complexity and Organization* 1(1):49-72.
- Goodenough, Ursula
1998 *The Sacred Depths of Nature*. Oxford University Press, New York.
- Gundersen, James N.
1991 *The Mineralogical Characterization of Catlinite from its Sole Provenance*, Pipestone National Monument, Minnesota. Research/Resource Management Report MWR 17. National Park Service, Midwest Region, Lincoln, Nebraska.

- Hall, Robert L.
1997 *An Archaeology of the Soul: North American Indian Belief and Ritual*. University of Illinois, Urbana.
- House, John H.
2006 *Notes on Interview with Leon Tucker at his home in Des Arc, 6 April 2006*.
- Hudson, Charles
1976 *The Southeastern Indians*. The University of Tennessee Press, Knoxville.
- Hughes, Randall E. and Thomas E. Emerson
2003 PIMA and Hunter Color Analyses on the Westbrook Cahokia Figurine and Bound Warrior Pipe. *Midcontinental Archaeometry Working Group, Analysis Report No. 1*. University of Illinois-Urbana-Champaign.
- Jackson, Douglas K., Fortier, Andrew C., and Williams, Joyce A.
1992 *The Sponemann Site 2: The Mississippian and Oneota Occupations*. Urbana: University of Illinois Press.
- King, Frances B.
1984 *Plants, People, and Paleoecology*. Illinois State Museum, Scientific Papers 20. Springfield.
- Keller, W.D.
1968 Flint Clay and a Flint-Clay Facies *Clays and Clay Minerals*, 1968, Vol. 16, pp. 113-128. Pergamon Press.
- Kristeller, Paul Oskar
1965 *Renaissance Thought II: Papers on Humanism and the Arts*. Harper and Row.
- Lankford, George E.
2004 World on a String: Some Cosmological Components of the Southeastern Ceremonial Complex. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, edited by R. F. Townsend and R. V. Sharp, pp. 207- 217. Art Institute of Chicago and Yale University Press, New Haven.

- Linder, Jean R., Theresa J. Cartmell, and John E. Kelly
1978 Preliminary archaeological reconnaissance of the segments under study for FAP-413 in Madison County, Illinois. Submitted to Illinois Department of Transportation, District 8, Fairview Heights.
- Matthews, Washington
1887 Ethnography and philology of the Hidatsa Indians. United States Geological and Geographical Survey. Washington.
- McQueen, Henry S.
1943 Geology of the Fire Clay Districts of East Central Missouri. Missouri Geological Survey and Water Resources, Second Series, Vol. 28. Rolla, Missouri.
- Milner, George R.
1984 Social and Temporal Implications of Variation among American Bottom Mississippian Cemeteries. *American Antiquity* 49:468-488.
- Mooney, James
1891 *The Sacred Formulas of the Cherokees*. Seventh Annual Report of the Bureau of Ethnology, pp. 301-409. Smithsonian Institution, Washington, D.C.

1900 *Myths of the Cherokee*. Nineteenth Annual Report of the Bureau of Ethnology, Part 1. Smithsonian Institution, Washington, D.C.
- Mullins, Phil
2001 *The Sacred Depths of Nature and Ursula Goodenough's Religious Naturalism*. Tradition & Discovery: The Polanyi Society Periodical. Vol. XXVIII. pp. 22-40. Montana State University, Billings.
- Panofsky, Erwin
1955 *Meaning in the Visual Arts*. The University of Chicago Press.
- Pauketat, Timothy R., and Thomas E. Emerson
1991 The Ideology of Authority and the Power of the Pot. *American Anthropologist* 93(4):919-941.

1997 *Cahokia Domination and Ideology in the Mississippian World*. University of Nebraska Press, Lincoln.

Peters, Virginia Bergman

1995 *Women of the Earth Lodges: Tribal Life on the Plain*. Shoestring Press, North Haven, Connecticut.

Phillips, Philip, and James A. Brown

1978 Pre-Columbian Shell Engravings from the Craig Mound at Spiro, Oklahoma, Part 1. Peabody Museum Press, Cambridge, Massachusetts.

Prentice, Guy

1986 An Analysis of the Symbolism Expressed by the Birger Figurine. *American Antiquity* 45(2):239-266.

Radin, Paul

1945 *The Road of Life and Death: A Ritual Drama of the American Indians*. Bollingen Series, no. 5. Pantheon Books, New York.

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*, edited by R. F. Townsend and R. V. Sharp, pp. 125-137. Art Institute of Chicago and Yale University Press, New Haven.

Reilly, F. Kent, III, and James F. Garber

2007 *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*. Austin: University of Texas Press.

Scott, Sarah

2006 Art and the Archaeologist. *World Archaeology* 38 (4):628-643.

Sharp, Robert V.

2009 Clothed in the Serpent Robe: Mississippian Female Effigies and the Lords of the Beneath World. Paper presented at Texas State University, San Marcos.

Sharp, Robert V., Vernon James Knight, Jr., 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*, edited by George E. Lankford, F. Kent Reilly III, and James F. Garber. University of Texas Press, Austin.

Squier, Ephraim G.

1851 *The Serpent Symbol, and the Worship of the Reciprocal Principles of Nature in America*. G. P. Putnam, New York.

Staniszewski, Mary Anne.

1995. *Believing is Seeing: Creating the Culture of Art*. Penguin, New York.

Swanton, John R.

1929 [1995] *Myths and Tales of the Southeastern Indians*. *Bureau of American Ethnology*, Bulletin 88. Smithsonian Institution, Washington, D.C.

Townsend, Richard F., and Robert V. Sharp

2004 *Hero, Hawk, and Open Hand: American Indian Art of The Art Institute of Chicago and Yale University Press*, New Haven.

Voegelin, C. F., and E. W. Voegelin

1944 *The Shawnee Female Deity in Historical Perspective*. *American Anthropologist*, New Series 46(3):370-375.

Weisstein, Eric W.

1996 *World of Physics*. *Wolfram Research*.
<http://scienceworld.wolfram.com/physics/Triboluminescence.html>.

Will, George F., and George E. Hyde

1917. Reprint 1964. *Corn Among the Indians of the Upper Missouri*. University of Nebraska Press, Lincoln.

Woolworth, AR

1983 *The Red Pipestone Quarry of Minnesota: Archaeological and Historical Reports*. *Minnesota Archaeologist* 42:1-137.

