

Chapter 2: Modeling the Cosmos: Rim-Effigy Bowl Iconography in the Central Mississippi Valley

Madelaine C. Azar and Vincas P. Steponaitis

The Central Mississippi Valley (CMV), extending southward along the Mississippi River from the mouth of the Ohio River to the mouth of the Arkansas River, was home to a vibrant potting tradition dating to the Late Mississippian period (AD 1350-1600), a time characterized by intense population nucleation and heightened conflict. From the mid-fourteenth century until Hernando de Soto's arrival in AD 1541, communities in northeast Arkansas, southeast Missouri, western Tennessee, and northwest Mississippi consolidated into large, palisaded towns marked by monumental earthen mounds and ceremonial plazas. It is within this milieu that artistic achievement flourished. Potters crafted a wide array of fine ceramic wares depicting diverse religious symbolism, including abstract motifs referencing the cosmos as well as representational images of powerful otherworldly beings, spirit persons, and culture heroes (Cobb and Drake 2008; D. Morse 1989, 107; P. Morse 1989; Morse and Morse 1983, 271-301; O'Brien and Dunnell 1998).

Among the variety of decorated ceramics dating to the Late Mississippian period, rim-effigy bowls are perhaps the CMV's most prevalent and ubiquitous form. In fact, Phillips, Ford, and Griffin (1951) described rim-effigy bowls as "one of the most constant features of the Middle Mississippi vessel complex" (1951, 161) in their seminal survey of the Lower Mississippi River Valley. These vessels are characterized by the presence of applique rim adornments depicting the head and tail of an animal or human. The subject matter of rim-effigy

bowls can vary greatly, making the corpus ripe for iconographic analysis. However, while many attempts have been made to identify recurring animal species or human figures represented by these vessels, their broader iconographic significance within the context of Mississippian cosmology and ritual has not been adequately explored.¹

This chapter provides one of the first systematic iconographic analyses of CMV rim-effigy bowls, combining visual analysis and ethnographic analogy to produce a model that relates vessel imagery to potential cosmological referents and ritual customs once recognized by CMV Mississippians. In particular, we first offer a more careful classification of both the stylistic and thematic elements of these vessels, rather than relying on previous studies of rim-effigy bowls that tend to classify imagery arbitrarily. To better understand the iconographic significance of rim-effigy bowls to their users, we also look to the oral traditions of American Indian communities descended from Mississippian peoples. These traditions provide insight into the legendary characters and fundamental cosmic principles that may have been reflected in this vessel form. Ultimately, this iconographic analysis not only serves to clarify the meaning of rim-effigy bowls to CMV communities, but also situates the region within larger understandings of Mississippian cosmology and ritual across the American South.

¹ **Error! Main Document Only.** It should be noted that the tradition of adorning pots with rim effigies has a deep history in the American South. The practice began in late Middle Woodland times, ca. AD 450-650, in the Weeden Island culture along the northern Gulf of Mexico, where it was associated with pots used in mound-related ceremonies (e.g., Milanich et al. 1984: Figs. 7.22, 8.9, 8.10; Pluckhahn 2003: 59-64; Sears 1953: 26-34, Pls. 8, 17-19, 1956: 57-67; Willey 1949: 406-407, Fig. 33). Such adornments, in various forms, continue to appear sporadically in Late Woodland and Emergent Mississippian times (Fortier 1996: 201-203; Milner 1984: Fig. 43). Rim-effigy bowls of the general type considered here become common in Mississippian assemblages after AD 1000, not only in the CMV, but also in Tennessee, Alabama and Florida (e.g., Lazarus and Hawkins 1976; Lewis and Kneberg 1946; Perino 1967; Steponaitis 1983; Thruston 1890).

The Corpus

Formally, rim-effigy bowls in the CMV are characterized by the presence of a modeled-clay effigy head and tail affixed to opposite sides of the vessel's rim, although bowls sometimes exhibit a second head effigy in place of a tail. The body of the vessel can occasionally exhibit incised motifs like swirl crosses or festoons. Effigy heads usually face outward, but inward facing effigy heads are also common (see D. Morse 1989, 108). Occasionally, effigy heads are hollow, containing a single ceramic rattle. Vessel x-rays indicate that this feature is intentional, not a consequence of wear or deterioration (Howell 2011). Tail effigies are either tabular, coiled, or curved. Tabular forms may feature a "tail rider," or miniature modeled figure that sits atop the tail adorno. Tail riders most often represent animals such as birds, turtles, or panthers. Viewed in totality, rim-effigy bowls constitute three-dimensional renderings of living creatures – usually serpents, birds, or humans.

Within the scope of scholarship on Mississippian art and iconography, including discussions of the Southeastern Ceremonial Complex (SECC), the CMV's rim-effigy bowl corpus has been largely overlooked. Despite their omnipresence throughout the region and the fact that Antonio Waring and Preston Holder (1945, 30) posited a Middle Mississippi Valley origin for the SECC, CMV rim-effigy bowls rarely factor into broader discussions of Mississippian ritual art found across the American South. This is unfortunate because, while the CMV rim-effigy bowl corpus dates to a later period than most other SECC material, many of the motifs and images that appear across vessels are clearly related to canonical SECC iconography (Dye 2014, 2017a, 2018; Rands 1956).

Fortunately, more recent discussions of these vessels are now beginning to explore the possibility that rim-effigy bowl imagery may reference transcendental beings, culture heroes, and

otherworldly realms that were integral to the Mississippian cosmivision (Azar 2020; Bomar 2011; Lankford and Dye 2014). This insight is consistent with the placement of these vessels in burials (House 2003), and indicates that they held symbolic significance. However, as we have mentioned, the iconography of the corpus has been neither subjected to a comprehensive visual analysis nor interpreted within the context of American Indian belief and ritual.

Methodology

To begin our visual analysis, we assembled a sample of whole rim-effigy bowls from published photographs (Bogg and Bogg 2016; Brown 2005; Gannon 1999; Hathcock 1983, 1988; House 2005; Lankford and Dye 2014; Meltzer and Dunnell 1992; D. Morse 1989; P. Morse 1981; Phillips 1939; Perino 1967; O'Brien 1994). The bowls derive from the CMV's four best-defined Late Mississippian ceramic phases: Nodena, Parkin, Kent, and Walls (Figure 2.1) (Mainfort 2003, 2005; Morse and Morse 1983, 271-302). In total, we reviewed 245 rim-effigy bowls from 38 sites and localities across the region (Azar 2020).

<Figure 2.1 here>

We sought out a methodology that would allow us to systematically analyze the imagery within our sample. We ultimately turned to the work of Knight (2013), who offers a stepwise approach to iconographic analysis in pre-contact New World art corpora. Broadly, this methodology includes (1) assembling a sample of the corpus in question, (2) identifying styles of execution, (3) defining subject matter themes within these styles, and (4) connecting imagery to referents through ethnographic analogy. These lines of inquiry should lead to an iconographic model, which Knight defines as a description of representational imagery according to emic perceptions of meaning (2013, 165).

Visual Analysis: Style and Theme

Following Knight's approach, we divided our visual analysis into two parts. We first performed a stylistic analysis and then a thematic analysis of the sample. This order of operations allows style and theme to be reviewed as separate elements, where style reflects aesthetic rules of vessel execution and theme refers to the subject matter of bowl and its effigies. Stylistic analysis is an essential preliminary step in this process because it limits conjecture and provides a degree of control over the process (Knight 2013, 23). Specifically, the identification of different visual styles within an art corpus can expose the range of variation in the appearance of particular subject-matter themes, preventing the misclassification of themes based on their stylistic execution.

With this in mind, we ultimately defined 10 rim-effigy bowl styles based on bowl form, effigy size and shape, and aspects of decoration (Azar 2020). Because we treated theme and style as independent analytical entities, a single style could, and often did, include multiple effigy themes. In particular, we identified four major recurring themes that were distributed widely across the Nodena, Parkin, Kent, and Walls phases in the CMV within the 10 designated styles. These themes included (1) crested birds resembling woodpeckers or wood ducks, (2) serpents, (3) raptors, and (4) humans with cone-shaped head adornments, called "coneheads" for short (Figure 2.2). Other non-recurring bowl themes were present, mostly consisting of humans with a variety of different head coverings and hairstyles. However, more than 85% of the sample consisted of the four themes discussed here (Table 2.1).

<Figure 2.2 here>

<Table 2.1 here>

Ethnographic Analogy: From Themes to Referents

To explore the broader significance of rim-effigy bowls and approximate their emic meaning, we relied on ethnographic analogies derived from reports and observations of historic American Indian groups of the Great Plains and South, as a contemporaneous written record does not accompany the corpus. A number of American Indian groups from these regions have been linked, either culturally or historically, to Late Mississippian societies. Ethnographic descriptions of these descendant groups, specifically those recounting oral traditions, cultural practices, and ceremonial activities, have been used to interpret the iconography of major Mississippian ritual art corpora, including material from Moundville, Etowah, and Spiro (Reilly and Garber 2007; Lankford et al. 2011; Steponaitis et al. 2019).

These ethnohistoric records have also been used to clarify how Mississippians may have perceived the structure and scope of their universe. Based on these sources, it appears that the Mississippian cosmos was likely understood as a tripartite universe, consisting of a watery Beneath World and celestial Above World separated from each other by an Earth Disk (Figure 2.3) (Duncan 2011; Emerson 1997; Lankford 2007d). Within this model, the Above and Beneath worlds – although multilayered themselves – existed in structural and spiritual opposition to one another.

<Figure 2.3 here>

The Beneath World was envisioned as a dark and watery abyss, home to snakes, serpents, and other formidable water beings. Consequently, it is closely associated with death, chaos, and the afterlife (Emerson 1989; Hudson 1976). In contrast, the Above World, or sky vault, engendered order, light, and purity, serving as a home for weather spirits and great avian beings

(Duncan 2011; Hudson 1976; King and Reilly 2011). Floating atop the waters of the Beneath World, the Earth Disk – also referred to as the earthly plane or Middle World – sat between these two mirrored realms. Finally, connecting these cosmic layers was a great axis mundi, or centering entity, often conceptualized as a tree, pole, or sacred fire (Lankford 2007d, 2011b). Thus, the Mississippian universe was typified by a series of dualistic oppositions between Above and Beneath world forces. However, these forces did not exist as mutually exclusive, value-laden binaries, as good and evil often operate in Christian conceptions of Heaven and Hell. Rather, Above and Beneath world forces likely existed as two sides of the same coin, often acting simultaneously within the same context as essential, interacting parts of a larger balanced whole (Lankford 2008, 94-96).

As part of this balanced whole, a variety of human and non-human beings resided within each realm of the Mississippian cosmos. In this sense, it was a “peopled” universe. Beyond relatively mundane humans and animals, cosmic realms were populated and even traversed by a variety of human and non-human characters, including powerful heroes, enchanted objects, and chimeric monsters in addition to giants, cannibals, and tricksters (see Dorsey 1904a, 1904b, 1904c, 1906; Lankford 1987; Reilly 2011; Swanton 1929; Sumner 1951). These were the often the subjects of Mississippian art (Knight et al. 2001).

To explore the possibility that CMV rim-effigy bowls may depict some of these cosmic characters, we searched for ethnographic analogies in the Native oral traditions of Great Plains and South. Indeed, we were able to identify several recurring characters in these oral traditions that may have served as referents for the figures depicted in rim-effigy bowls. Notably, upon studying the stories and legends that recount the deeds and exploits of these characters, we observed that they all share a common trait – cosmic duality. This trait is manifest in their

ability transcend the earthly plane and move throughout the upper and lower realms of the cosmos, highlighting the foundational principle of oppositional tension. Each of these figures is discussed in turn below.

Serpents

Consistently associated with the watery Beneath World, death, and the afterlife, the Great Serpent monster appears in many Native oral traditions in the Great Plains and South (Dye 2018). This being can take on many different forms, including a snake-like water monster with horns or antlers as well as an underwater panther with a long, serpentine tail. Regardless of form, this figure is always formidable, capable of churning up lakes, streams, and rivers and causing harm to humankind. Even so, this netherworld being is also known to offer cosmic power and protection to individuals brave enough to seek passage into the depths of the Beneath World (see Lankford 2011b, 87-88; Reilly 2011, 119).

The image of this serpent being is found frequently across all forms Mississippian art. However, in addition to its horned or antlered underwater form, the Mississippian serpent monster is also occasionally depicted with wings – with the most notable corpus of such images originating from Moundville (Steponaitis and Knight 2004). Previous studies of Mississippian iconography have concluded that these winged serpent images may reference the ability of the Great Serpent to move from the Beneath World to the Above World. Notably, George Lankford has suggested that this movement might actually be manifest in the constellation Scorpio, which not only resembles a serpent but also rises just above the southern horizon during the summer months in the Northern Hemisphere (Lankford 2007b, 2007c).

This Above/Beneath World duality of the Great Serpent was central to the mortuary beliefs of many historic Native groups in the Great Plains and South (Lankford 2007b, 179-180). Specifically, the Great Serpent's ascension into the Above World reflects its guardianship over the "Path of Souls" to the afterlife, which was visible in the night sky as the Milky Way. Like the Great Serpent, the Path of Souls had an astronomical cognate. Along this path, the deceased journey to "Realm of the Dead" (Reilly and Garber 2011, 119). Thus, the Great Serpent was at once both underwater antagonist and celestial guardian, posing great threat to humanity while also guiding souls from one life to the next. In this sense, the Great Serpent embodies the polar tension that epitomizes the Mississippian cosmos.

Crested Birds

Crested-bird effigies in the CMV generally resemble two distinct natural prototypes – wood ducks and woodpeckers. Both of these birds make noteworthy appearances in American Indian legends recounting the origins of the Earth. There are two primary creation stories among historic groups in the Great Plains and South, namely the Flood and Earth Diver stories. While many variations of these legends exist – sometimes even blending elements of each – all appear to work upon the same basic premise: Prior to the origin of the Earth, the world was flooded. Only the Above World (sky) and Beneath World (water) existed.

Across Earth Diver stories, different animals are enlisted to dive beneath the primal waters and retrieve a clump of mud or sand from the bottom, which is then spread to form the Earth Disk (Dorsey 1904b, 11; Kongas 1960; Lankford 1987, 106-117). In the Central Plains, specifically among the Crow, Skidi Pawnee, and Arikara, it is a duck that successfully completes this task. While other protagonists (e.g., a muskrat or crawfish) also occur in these legends, the

essential element of the Earth Diver story is the ability of the animal to penetrate the waters of the Beneath World from above (Kongas 1960). This trait is inherently dualistic, as the animal must be able to traverse the boundary between the Above and Beneath worlds in order to create the Earth disk. The duck is a particularly apt embodiment of this duality because it has the ability to both fly and swim.

Woodpeckers exhibit a similar cosmic duality in several Native origin stories. According to the Creek version of the Flood/Earth-Diver legend, the world in the beginning was inhabited only by “two red-headed woodpeckers, which hung to the clouds, with their tails awash in the waters” (Swanton 1928, 488). The Alabama version of the Flood story is similar (Swanton 1929, 121). Ethnohistoric sources often note that these stories were used to explain woodpeckers’ tail markings (see Swanton 1928, 1929). However, it is also notable that the woodpeckers in these stories are essentially straddling cosmic realms – existing simultaneously in the sky and the water. In this sense, they act as a physical connection between the Above World and Beneath World, similar to an axis mundi.

Reinforcing this dualistic understanding of woodpeckers within the Mississippian cosmos is a shell engraving from Spiro Mounds (Lankford 2007a, Fig. 2.9). The engraving depicts several crested birds – potentially woodpeckers – flying among the branches of a stylized tree. A strikingly similar scene is described in an Alabama allegory wherein a woodpecker harnesses the world’s water when he discovers “a cane as big as a tree ... [lights] upon it, and [begins] pecking.” Water pours forth from the hole and “all the creeks [are] overflowed” (Swanton 1929, 124). Lankford (2007a) interprets the tree in the Spiro engraving as an axis mundi that binds cosmic realms together. Thus, the tree in the Alabama water story may also be interpreted as a centering entity – specifically one that can channel the waters of the Beneath World into the

realms above. When considered together, the Alabama water story and the Spiro shell engraving suggest that woodpeckers may have indeed been perceived as dualistic cosmic beings, able to fly throughout the Above World but also access the Beneath World via the axis mundi – sometimes even acting as connecting entities themselves.

Conehead Humans

Many of the human effigies in the CMV corpus are distinctive for their cone-shaped heads or head coverings. This “conehead” figure appears to be largely unique to the CMV and adjacent regions. Lankford and Dye (2014) have suggested that these effigies may reference the wild brother of the legendary Hero Twin duo. The Twins, also widely known as “Lodge-Boy” and “Thrown-Away,” appear in nearly every Native oral tradition throughout the Americas (see Sumner 1951). The story of the Twins is often told in sequential episodes recounting their life histories.

The Twins’ origin story generally begins with the unnatural death of a pregnant woman at the hands of a cannibal or monster. The Twins are ripped or cut from her womb. One of brothers, known as Lodge-Boy, is raised by the boys’ father while the other, known as Thrown-Away, is cast out along with the afterbirth following their mother’s murder. One day Thrown-Away suddenly appears, revealing himself to his brother and coercing him into a series of rebellious escapades. The boys’ father eventually discovers their mischievous antics and plots to catch Thrown-Away, making several attempts before he is finally successful (see Lankford and Dye 2014; Sumner 1951).

Having been discarded after birth, Thrown-Away is always portrayed as a wild and untamed figure with mysterious origins. He often spawns from his mother’s placenta or emerges

from the depths of lake, river, or spring (Dorsey 1904a, 1904b, 1904c; Lankford 1987; Sumner 1951). He is frequently described as having sharp teeth, long hair, and sly or sneaky behavior (Dorsey 1906, 144, Lankford and Dye 2014). For these reasons, Thrown-Away must always be captured, or domesticated. These characteristics have obvious links to the themes of chaos and death ascribed to the watery Mississippian Beneath World.

Distinctive cone-shaped heads among human rim effigies in the CMV may specifically reference Thrown-Away's appearance in several origin stories. Stories from the Central Plains recount that Lodge-Boy and his father catch – or tame – Thrown-Away by tying up his long hair in an inflated animal bladder, preventing him from returning to the bottom of the lake, pond, or stream from which he emerged. Lankford and Dye (2014) posit that CMV conehead effigies depict Thrown-Away as he appears in this particular scene with his hair tied up in a bladder.

In every version of the Twins' story, the boys embark on a series of cosmic adventures recounted in many subsequent legendary episodes. The two work together to conquer monsters, giants, and cannibals – often killing their mother's murderer as well. They steal antlers from underwater serpents and plunder eggs from the nests of the great Thunderbirds (Lankford 1987, 162; Sumner 1951). Their success in these adventures often becomes essential to the welfare or restoration of mankind (Sumner 1951, 79). As a result of these victories, the Twins eventually ascend to the Above World as Thunderers (i.e., Lightning Boy and Thunder Boy), or weather spirits (Dye 2014; 2017a; Duncan and Diaz-Granados 2000; Sumner 1951, 65).

It is significant that Thrown-Away is constantly portrayed as a dualistic character in Native lore. Early in his life history, he is strongly associated with the forces of the Beneath World. However, through his domestication, he becomes a culture hero, battling formidable foes in order to maintain cosmic balance. Notably, his final apotheosis brings him into the Above

World, contrasting directly with his origins. Thus, Thrown-Away's life history, in addition to his literal existence as a twin, typifies the oppositional tension of the Mississippian cosmos.

Raptors

Like conehead effigies, some raptor effigies may also reference dualistic Twin lore. As noted, several Native oral traditions recount the Twins' battle with Thunderbirds, powerful raptors associated with the powers of the Above World (Sumner 1951, 19, 35, 66). Notably, many raptor rim-effigy bowls exhibit inward facing heads accompanied by a pair of talons in place of a tail, depicting the bird as "belly up" or otherwise incapacitated (see Figure 2.2c) – perhaps a reference to its defeat by the Twins. Some traditions even maintain that the boys ascend to the Above World as raptors themselves (see Sumner 1951, 59-79). Ethnohistoric accounts of Native groups indicate that war clubs, feathers, and falcon pelts were viewed as symbols of the Twins and/or the Thunderers. The Tunica, Omaha, and Creek often included these items in the ritual bundles of sodalities dedicated to the veneration of the Thunderers (see Dye 2017a, 2017b; Duncan and Diaz-Granados 2000).

An Iconographic Model

The identification of cosmic referents among CMV rim-effigy bowls provides the foundation for an iconographic model of the vessel form itself. As described above, rim effigies in the CMV appear to reference several dualistic cosmic beings. In particular, this duality, or slipperiness of cosmic classification, reflects the intricate balance of cosmic forces that is integral to Native belief systems throughout the Great Plains and South (Lankford 2008, 95). Beyond the effigies themselves, the broader rim-effigy bowl form also alludes to this oppositional tension.

Specifically, the placement of rim effigies and the use of decorative motifs and design elements appear to constitute a holistic, three-dimensional rendering of the tripartite Mississippian cosmos. In this sense, CMV rim-effigy bowls may be interpreted as miniature *cosmoscapes* (Figure 2.4).

<Figure 2.4 here>

Cosmoscapes

A cosmoscape is a template for understanding the structure and extent of a particular universe. This not only includes realms such as land, water, or sky and the beings that inhabit them, but also the cosmic planes and otherworldly beings that may lie beyond. Put simply, a cosmoscape is a more expansive conceptualization of a landscape, which is often concerned only with the humans, plants, animals, or built features within an earthly realm. Cosmoscape is an ideal concept for characterizing indigenous American templates of the universe – including the ancient Mississippian template – because these models often eschew binary distinctions between natural and supernatural entities. Rather, the cosmos is viewed as an integrated whole, where generative dualities may exist within a place, time, or being – but not as mutually exclusive dichotomies (e.g., natural/supernatural, person/thing, good/bad, life/death) (Bloch 2021; Norton-Smith 2010, 82-86).

A growing number of scholars studying indigenous cultures in the Americas have opted to frame their work within the context of cosmoscapes in order to achieve more accurate representations of Native beliefs, practices, and worldviews (Berlo 2011; Bold 2020; Reichel 2012; Slater 2014). For example, the concept of cosmoscape, when used in American contexts like the Mississippian Valley, more aptly captures the ubiquitous indigenous belief in an

animated cosmos. That is, non-human entities, such as animals, plants, otherworldly beings, and even geological features like lakes, caves, and mountains, are often viewed as having human-like agency (Bold 2020; Slater 2014, 8-15). This agency, or personhood, is inherent to the cosmos itself and, by animating sacred non-human entities, connects all planes of the universe to create a complex whole (Reichel 2012, 138).

Beyond recognizing widespread presence of cosmic animacy in their surroundings, indigenous cultures in the Americas often recreate their cosmoscapes on a smaller scale. Many built environments have been identified as “maps” of the cosmos. For example, the Navajo create ritual sand paintings that serve as cosmic diagrams (Berlo 2011). Similarly, tribes in the Colombian Amazon build communal roundhouses to mirror the structural elements of their cosmos (Reichel 2012, 130). By interacting with these entities, humans are able to connect with and conceptualize the cosmos on a smaller scale. This allows them to absorb, harness, or consult with the forces of the universe.

Rim-Effigy Bowls as Cosmoscapes

Among rim-effigy bowls, the three layers of the Mississippian cosmos are present both in the bowl itself as well as the larger space it occupies. Broadly, this space consists of a sphere bisected by a horizontal plane. The plane flush with the rim of the bowl can be interpreted as the Earth Disk. This is highlighted by the occasional appearance of incised looped square or festoon motifs directly below the rim of some bowls, a design that has been interpreted as a symbol of the four corners of the Earth (Lankford 2007a, 24). The equivalence of this horizontal plane with the Earth Disk is also apparent in the use of “tail riders” – modeled birds, panthers, or turtles that

are perched upon a tabular tail effigy. Tail riders appear to sit atop the horizontal plane of the rim, creating the image of an animal dwelling upon the Earth Disk.

The body of the effigy figure, or the bowl itself, may double as a receptacle for the waters of the Beneath World, as indicated by the occasional presence of scroll or swirl cross designs encircling the vessel body (see O'Brien 1994, Fig. 1.1). These motifs have previously been recognized as representations of portals to the Beneath World (Lankford 2011b, 2007c, 24). This interpretation of the bowl, or body, as a cosmic container is supported by documentation of historic American Indian cosmology. Specifically, as Lankford (2007c) posits, the Earth Diver and Flood stories in the Great Plains and South suggest that the waters of the Beneath World are enclosed in a solid container, the bottom of which holds the soil or mud that is used to create the Earth. Similarly, the Muskogean believe that a stone bowl rotates through the horizon from the Above World to the Beneath World as day turns to night (Reilly 2011, 119).

Sitting atop the Earth Disk is a conceptual reflection of the bowl itself, forming the vault of the Above World or night sky of the Beneath World. The notion that an intangible celestial realm lies above the bowl is indicated by the occasional presence of beaded rims. This beading is very similar to the petaloid borders that surround incised designs on shell cups from Spiro. Reilly (2007) has suggested that petaloid motifs serve as celestial locatives. Thus, the placement of beaded rims at the junction between the spaces above and below the Earth Disk could symbolize a transition between cosmic realms.

Most importantly, however, this cosmoscape is “peopled” or animated by the beings depicted by the effigies themselves. The head – and sometimes tail – of a cosmic character extend into the space above the bowl’s orifice, while its body lies below. This creates a sense of

simultaneous existence both above and below the Earth Disk – a possible reference to the character’s cosmic duality and the importance of balancing Above and Beneath world forces.

This type of structural configuration appears in other Mississippian art forms. Specifically, Hixon style gorgets provide an apt model for interpreting the iconography of rim-effigy bowls. Within Hixon-style design fields, two crested birds appear to be standing upon a horizontal bar separated by a vertical striped pole. Beneath the horizontal bar is often a set of parallel lines that resemble the upper contours of a ceramic pot. Lankford (2007a) interprets this design field as a cosmic model, where the vertical pole symbolizes an axis mundi, the stylized pot acts as the Beneath World, and the horizontal bar, doubling as the pot’s rim, represents the Middle World. . Much like the axis mundi, the crested birds – perched upon the rim of a pot – seem to connect the Beneath World (the pot) to the Above World (the semicircular space above the pot). In this way, Hixon-style gorgets exhibit imagery very similar to CMV rim-effigy bowls. Notably, Hixon-style crested birds bear a striking resemblance to several crested-bird effigies on bowls recovered from the region (Figure 2.5).

<Figure 2.5 here>

Unlike Hixon gorgets, rim-effigy bowls do not depict an obvious axis mundi. However, it should be remembered that rim-effigy heads were occasionally hollow, containing a single ceramic rattle. To limit spillage, the most reasonable way to “rattle” a full rim-effigy bowl would be to swirl it in a circular motion. Interestingly, this motion not only creates a watery vortex symbolic of the Beneath World (see Nowak 2018), but also figurative vertical axis comparable to the striped pole depicted in Hixon-style gorgets. Although a physical axis is not present, this movement creates an axis of sound (see Lankford 2007a), suggesting that – when maneuvered – rim-effigy bowls may have become interactive cosmoscapes.

Studies of other Mississippian ritual ceramic vessels, including Ramey Incised pots from Cahokia and burial vessels from the Craig Mound at Spiro, support this reading of CMV rim-effigy bowls (Lambert 2018; Pauketat and Emerson 1991). Nor were such cosmic references confined to Mississippian time. During the Late Woodland period in the Lower Mississippi Valley, pots of the Coles Creek culture were commonly decorated with multiple parallel lines at the rim, a three-dimensional version of the “centering” theme that symbolically defined the vessel’s orifice as an axis mundi (compare vessels in Ford 1951, 74-79 to stone palettes and copper gorgets bearing the same theme in Knight and Steponaitis 2011, 219-226, 236).

Discussion: Rim-Effigy Bowls in Context

Overall, rim-effigy bowls appear to represent animated Mississippian cosmoscapes, reinforcing the concept of Above World/Beneath World tension or cosmic balance. But who used these vessels? A previous study of the spatial distribution of the rim-effigy bowl styles and themes used in this study indicates that these vessels were likely produced and used locally (Azar 2020). Bowls of a certain style not only tend to come from the same geographical area but also tend to depict a single theme, suggesting that communities throughout the CMV were producing or commissioning particular vessels for local use.

To characterize the communities who may have used rim-effigy bowls, we again turned to the recorded traditions of historic Native groups. In the late nineteenth and early twentieth centuries, ritual sodalities were prevalent among the Ponca, Pawnee, Iowa, Osage, Caddo, Tunica, and Omaha (Bailey 1995; Dye 2018; Fletcher and LaFlesche 1911; Fortune 1932; Huffman and Early 2014; Murie 1914; Skinner 1915). As elite social collectives, sodalities practiced esoteric and proprietary forms of ritual activity, often worshipping specific animal

spirits, culture heroes, or other otherworldly characters. Part of this ritual activity included the maintenance of sacred bundles containing cosmologically-charged items (e.g., animal pelts, rattles, maces, pipes, or feathers) that aided in conjuring a totemic spirit or cosmic being (see Dye 2017b broad review of historic sodalities). Sodalities also owned other forms of ritual sacra, like finely crafted ceramic vessels. These items were often manufactured in limited numbers by skilled sodality members that were commissioned based on their reputation within the group (Bailey 1995, 47; Dye 2019, 11). Ritual sacra produced in these contexts essentially served as inalienable possessions (see Weiner 1985; 1992).

Given these historic-period examples, David Dye (2017b; 2018; 2019) has previously argued for the presence of prestigious ritual sodalities or collectives in the Late Mississippian CMV, identifying ceramic vessels – including rim-effigy bowls – as inalienable possessions reflecting group identity. However, all rim-effigy bowls in the CMV – regardless of their effigies – seem to act as handheld cosmoscapes. This shared form seems to likewise indicate a shared function throughout the region, hardly reflecting a form of esoteric cosmic knowledge belonging *only* to sodality members.

Contrasting use wear patterns across vessels support the notion that rim-effigy bowls were not strictly elite wares, but rather a regionally recognized ceramic form that transcended social or ritual boundaries. In particular, while many rim-effigy bowls in the CMV are finely crafted, others are not. Some bowls are highly burnished and well formed with intricate effigy features and painted or incised designs, indicating production by especially skilled potters. These higher-quality rim-effigy bowls rarely show signs of use wear beyond basal abrasion. In contrast, many other rim-effigy bowls in the region feature simple effigies, plain surfaces, and a lack of overall symmetry. These vessels also tend to have interior carbonization and/or exterior sooting,

indicating use during cooking. These two distinct patterns of use wear suggest that some rim-effigy bowls may have indeed been produced by skilled potters for exclusive religious collectives who used them as ritual serving vessels. Others may have been manufactured by less skilled potters at the household or general community level, sometimes functioning as cooking vessels (see Steponaitis et al. 2019, 20-21 for a similar argument with reference to pipes).

Importantly, we posit that more simply executed rim-effigy bowls, namely those lacking incised or painted designs, likely held the same religious meaning as more finely crafted rim-effigy bowls, which were often bedecked with incised cosmic symbolism and detailed effigies. That is, regardless of the relative simplicity or complexity of rim-effigy bowl designs, all acted as miniature animated cosmoscapes. The presence of cooking residues on some lower quality rim-effigy bowls does not necessarily indicate a utilitarian or non-ritual function, but may be related to the preparation of ritual medicines, as we discuss further below. The difference between high- and low-quality vessels instead lies in the context of production and use (e.g., elite vs. domestic). This phenomenon may have been similar in some ways to the simultaneous display of Christian crosses in communal church buildings, private household settings, and even restricted spaces reserved for trained clergy.

Based on our identification of rim-effigy bowls as cosmic models referencing universal balance and powerful cosmic beings, it is possible that people across the CMV deployed rim-effigy bowls during rites related to healing, regeneration, or the restoration of cosmic harmony by acknowledging the generative tension between cosmic forces and channeling important cosmic beings. Ritual activity focused on cosmic harmony was common among historic American Indian groups descended from precontact Mississippians. For example, communal green-corn ceremonialism, which celebrates the renewal of life in the form of a successful crop,

was vital to the restoration of cosmic wholeness and harmony among many Southern groups (Fairbanks 1979; Howard 1968; Hudson 1979; Waring 1968). Further, the healing, renewal, and revitalization of people, spaces, and sacred objects was often achieved by Native shamans through supplication to tutelary spirits or transcendental cosmic beings in both the Great Plains and South (Benedict 1923; Dye 2020; Fortune 1932; Murie 1914). Again, because the principles of balance and wholeness were fundamental to the Mississippian cosmovision, rituals involving rim-effigy bowls could have occurred domestically, communally, or within the context of more exclusive social collectives. In all cases, particular effigy themes may have been chosen based on ancestral identity or local tradition, somewhat like the veneration of particular patron saints across the Catholic world.

Based on ethnographic reports of historic American Indian renewal ceremonies and shamanic practices, Mississippian ritual practices likely involved the frequent preparation and consumption of hallucinogenic or stimulant medicines, such as those made from holly (*Ilex*) or jimsonweed (*Datura*) (Dye 2017b; Fairbanks 1979; Fletcher and La Flesche 1911; Hudson 1979; Lankford 2012, 2014; Murie 1981; Skinner 1915). Indeed, residue analyses indicate that Mississippian ritual ceramics – including some rim-effigy bowls – were likely used to prepare or served herbal medicines (see Crown et al. 2012; King et al. 2018; Miller 2015). These medicines would have been ingested by supplicants seeking to achieve renewal or restoration via ritual cleansing or purification (Milanich 1979). In addition, some medicines, especially those made from *Datura*, may have been used to initiate hallucinogenic trances in order to conjure a particular spirit or culture hero that could restore cosmic balance or wholeness (Dye 2020; King et al. 2018; Steponaitis et al. 2019).

Evidence of cooking among lower quality rim-effigy bowls indicates that these vessels may have been used to prepare – not only serve – ritual medicines or other comestibles. As discussed, a brewed decoction would have been ideal for swirling a rim-effigy bowl, both to produce a rattling noise and to create a figurative axis mundi. In this way, the user of the bowl would have for a brief time become the central, motivating force of the cosmos, perhaps providing them access the cosmic power of the effigy figure in order heal, regenerate, or restore balance.

Perhaps bolstering this interpretation of rim-effigy bowls as widely used ritual sacra are archaeological depictions and ethnohistoric descriptions of Native shamans in eastern North America. In a discussion of figural stone pipes from the Lower Mississippi Valley, Steponaitis and colleagues (2019) argue that anthropomorphic pipes depict shamans in the midst of ceremonial activity – perhaps even in trance states fueled by ritual medicines. They suggest that the complex and distinctive hairstyles, hats, and caps donned by these individuals – as rendered in the pipes – would have indicated their role in society as skilled ritual practitioners.

These head coverings may have also conferred special power to their users. Native historic-period ritual practitioners received cosmic abilities through communication with and supplication to otherworldly beings or spirits. Distinctive headwear was thought to facilitate this bond. For example, the medicine societies of the Iowa, Pawnee, Ponca, and Omaha incorporated specific headwear – namely hide or animal-pelt caps – into their practices. These caps, which were often adorned with horns, antlers, or feathers, were thought to possess the shamanistic powers that allowed for the invocation of specific cosmic beings (see Dye 2017b for a deeper discussion). Similarly, hairstyles with crests or coiled braids atop the head, sometimes called

“horns,” were worn by Native religious practitioners in the Great Plains and western Great Lakes as signs of spiritual power (Steponaitis et al. 2019: 17, Fig. 9).

Notably, aside from the conehead human effigies, many rim-effigies from the CMV depict humans with elaborate head coverings, hairstyles, or caps. For instance, many don what may be animal pelts resembling serpent monsters and birds (see Dye 2017b; Hathcock 1983: Fig. 11). Many more of the human effigies exhibit intricate hairstyles and head coverings that were completely unique. It may be that these effigies depict ritual practitioners consuming medicines and performing rites meant to heal or renew balance. Nor is it coincidence that many of the non-human beings depicted on rim effigies – crested birds, raptors, and antlered serpents – are creatures who have prominent crests or other “headgear.”

Conclusions

Based on the iconographic model presented here, we posit that communities throughout the Late Mississippian CMV– regardless of social status – may have utilized rim-effigy bowls during rituals emphasizing the structure and wholeness of the cosmos. Each bowl makes layered references to the vital balance between cosmic forces, a concept that has previously been highlighted as a guiding principle in the Mississippian worldview (see Hudson 1976; Lankford 2008). The cosmic beings embodied by the effigies themselves, combined with their orientation within a handheld cosmoscape, create a readable object laden with meaningful references to foundational oral stories (see Reilly 2011, 120). And in turn, through the production and utilization of these vessels – perhaps in medicine preparation or consumption – CMV Mississippians actively recreated and reinforced the structure of their cosmos.

More broadly, our analysis of CMV rim-effigy bowls extends the scope of current research in Mississippian iconography. The CMV rim-effigy bowl corpus constitutes a significant body of ritual paraphernalia that should not be overlooked in future discussions of representational imagery found across the Mississippian world. In addition, many other finely crafted ceramics were produced during the Late Mississippian period in the CMV that have not yet been subjected to systematic iconographic analysis. To further broaden our understanding of how Mississippians perceived, recreated, and interacted with their cosmos, these ceramics should be recognized as meaningful art objects alongside Spiro's shell cups, Etowah's copper plates, and Moundville's engraved pots.

References Cited

- Azar, M. (2020) Making Heads or Tails: An Iconographic Analysis of Late Mississippian Rim-Effigy Bowls in the Central Mississippi River Valley. Master's thesis, Department of Anthropology, University of North Carolina at Chapel Hill. Chapel Hill, N.C.
- Bailey, G. (1995) *The Osage and the Invisible World: From the Works of Francis La Flesche*. University of Oklahoma Press, Norman.
- Benedict, R. (1923) *The Concept of the Guardian Spirit in North America*. Memoir 29. American Anthropological Association, Washington D.C.
- Berlo, J. (2011) Navajo Cosmescapes – Up, Down, Within. *American Art* **25**, 20-13.
- Bogg, R. and Bogg, L. (2016) *Cat Serpents: Underwater Spirits in Mississippian Pottery*. Longbranch Books, Longbranch, WA.
- Bold, R. (2020) Constructing Cosmescapes: Cosmological Currents in Conversation and Contestation in Contemporary Boliva. *Journal of Ethnographic Theory* **10**, 195-208
- Bomar, B. (2011) The Moundville Duck Bowl. *Alabama Heritage* **100**, 8-9.
- Cobb, C. and Drake, E. (2008) The Colour of Time: Head Pots and Temporal Convergences. *Cambridge Archaeological Journal* **18**, 85-93.
- Crown, P., Emerson, T., Gu, J., Hurst, W.J., Pauketat, T., and Ward T. (2012) Ritual Black Drink Consumption at Cahokia. *Proceedings of the National Academy of Sciences* **109**, 13944–13949
- Dorsey, G. (1904a) *Traditions of the Arikara*. Publication 17. Carnegie Institution of Washington.
- Dorsey, G. (1904b) *Traditions of the Skidi Pawnee*. Memoirs of the American Folklore Society, Volume 3. The American Folklore Society, Boston, New York.
- Dorsey, G. (1904c) *Traditions of the Osage*. Publication No. 88, Anthropological Series Vol. 7(1). Field Columbian Museum, Chicago.
- Dorsey, G. (1906) *The Pawnee Mythology (Part 1)*. Publication 59. Carnegie Institution of Washington.
- Duncan, J. (2011) The Cosmology of the Osage: The Star People and their Universe. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by G. Lankford, F.K. Reilly III, and J. Garber, University of Texas Press, Austin, 18-33.
- Duncan, J. and Diaz-Granados C. (2000) Of Masks and Myth. *Midcontinental Journal of Archaeology* **25**, 1-26.

Dye, D. (2014) Lightning Boy Face Mask Gorgets and Thunder Boy War Clubs: Ritual Organization of Lower Mississippi Valley Warfare. Paper presented at the 71st annual meeting of the Southeastern Archaeological Conference, Greenville, South Carolina.

Dye, D. (2017a) Lightning Boy and Thunder Boy: The Hero Twins in the Lower Mississippi Valley. Manuscript on file, Anthropology Department, University of Memphis, Memphis, Tennessee.

Dye, D. (2017b) Animal Pelt Caps and Mississippian Ritual Sodalities. *North American Archaeologist* 38(1): 63-97.

Dye, D. (2018) Ceramic Wares and Water Spirits: Identifying Religious Sodalities in the Lower Mississippi Valley. In *Ceramics of Ancient America: Multidisciplinary Approaches*, edited by Y. Huntington, D. Arnold, and J. Minich, University Press of Florida, Gainesville, 29-61.

Dye, D. (2019) Head Pots and Sodalities in the Lower Mississippi Valley. In *Shaman, Priest, Practice, Belief: Materials of Ritual and Religion in Eastern North America*, edited by S. Carmody and C. Barrier, University of Alabama Press, Tuscaloosa, 208-234.

Emerson, T. (1997) Cahokian Elite Ideology and the Mississippian Cosmos. In *Cahokia: Domination and Ideology in the Mississippian World*, edited by T. Pauketat and T. Emerson, University of Nebraska Press, Lincoln, 190-228.

Fairbanks, C. (1979) The Function of Black Drink among the Creeks. In *Black Drink: A Native American Tea*, edited by C. Hudson, University of Georgia Press, Athens, 120-149.

Fletcher, A. and La Flesche, F. (1911) *The Omaha Tribe*. Twenty-Seventh Annual Report of the Bureau of American Ethnology. Government Printing Office, Washington, DC.

Ford, J. (1951) *Greenhouse: A Troyville-Coles Creek Period Site in Avoyelles Parish, Louisiana*. Anthropological Papers 44. American Museum of Natural History, New York.

Fortier, Andrew C.

1996 The Marge Site: Late Archaic and Emergent Mississippian Occupations in the Palmer Creek Locality (11-Mo-99). American Bottom Archaeology, FAI-270 Site Reports, vol. 27. University of Illinois Press, Urbana and Chicago.

Fortune, R. (1932) *Omaha Secret Societies*. Columbia University Contributions to Anthropology Vol. 14. Columbia University Press, Columbia.

Gannon, T. (1999) *A Mortuary Analysis of the Vernon Paul Site (3CS25): Sociopolitical Organization at a Late Mississippian Site in Cross County, Arkansas*. Ph.D. dissertation, Department of Anthropology. University of Arkansas, Fayetteville.

Hathcock, R. (1983) *The Quapaw and Their Pottery*. Hurley, Camden, Arkansas.

Hathcock, R. 1988 *Ancient Indian Pottery of the Mississippi River Valley*. Walsworth Publishing Co., Marceline, Missouri.

House, J. (2003) *Gifts of the Great River: Arkansas Effigy Pottery from the Edwin Curtiss Collection*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.

Howard, J. (1968) *The Southeastern Ceremonial Complex and Its Interpretation*. Missouri Archaeological Society, Memoirs 6. University of Missouri, Columbia.

Howell, M. (2011) Sonic-Iconic Examination of Adorno Rattles from the Mississippian-Era Lake George Site. *Music in Art* **36**, 231-244.

Hudson, C. (1976) *The Southeastern Indians*. University of Tennessee Press, Knoxville.

Hudson, C. (1979) *Black Drink: A Native American Tea*. University of Georgia Press, Athens.

Huffman, T. and Earley, F. (2014) Caddoan Archaeology on the High Plains: A Conceptual Nexus of Bison, Lodges, Maize, and Rock Art. *American Antiquity* **79**, 655-678.

Kelly, J. (1997) Stirling-Phase Sociopolitical Activity at East St. Louis and Cahokia. In *Cahokia: Domination and Ideology in the Mississippian World*, edited by T. Pauketat and T. Emerson, University of Nebraska Press, Lincoln, 141-166.

King, A, Powis, T., Cheong, K., Deere, B., Pickering, R., Singleton, E., and Gaikwad, N. (2018) Absorbed Residue Evidence for Prehistoric *Datura* Use in the American Southeast and Western Mexico. *Advances in Archaeological Practice* **6**, 312-327.

King, A. and Reilly, F.K. III (2011) Raptor Imagery at Etowah: The Raptor Is the Path to Power. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by G. Lankford, F. K. Reilly III, and J. Garber, University of Texas Press, Austin, 313-348.

Knight, V.J. (1986) The Institutional Organization of Mississippian Religion. *American Antiquity* **51**, 675-687.

Knight, V.J. (2006) Farewell to the Southeastern Ceremonial Complex. *Southeastern Archaeology* **25**, 1-5.

Knight, V.J. (2013) *Iconographic Method in New World Prehistory*. Cambridge University Press, New York.

Knight, V.J., Brown, J., and Lankford G. (2001) On the Subject Matter of Southeastern Ceremonial Complex Art. *Southeastern Archaeology* **20**, 129-141.

Knight, V.J., Lankford, G., Phillips, E., Dye, D., Steponaitis, V. and Childress, M. (2017) The Holly Bluff Style. *Southeastern Archaeology* **36**, 195-213.

Knight, V.J. and Steponaitis, V. (2011) A Redefinition of the Hemphill Style in Mississippian Art. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by G. Lankford, F.K. Reilly III, and J. Garber, University of Texas Press, Austin, 201–239.

Kongas, E. (1960) The Earth Diver (Th. A 812). *Ethnohistory* **7**, 151-80.

Lambert, S. (2018) Addressing the Cosmological Significance of a Pot: A Search for Cosmological Structure in the Craig Mound. *Caddo Archaeological Journal* **28**, 21-37.

Lankford, G. (1987) *Native American Legends: The Southeast*. August House, Atlanta.

Lankford, G. (2007a) Some Cosmological Motifs in the Southeastern Ceremonial Complex. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F.K. Reilly III and J. Garber, University of Texas Press, Austin, 8-38.

Lankford, G. (2007b) The Great Serpent in Eastern North America. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F. K. Reilly and J. Garber, University of Texas Press, Austin, 107–135.

Lankford, G. (2007c) The “Path of Souls”: Some Death Imagery in the Southeastern Ceremonial Complex. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F.K. Reilly and J. Garber, University of Texas Press, Austin, 174–212.

Lankford, G. (2007d) *Reachable Stars: Patterns in The Ethnoastronomy of Eastern North America*. University of Alabama Press, Tuscaloosa.

Lankford, G. (2008) *Looking for Lost Lore: Studies in Folklore, Ethnology, and Iconography*. University of Alabama Press, Tuscaloosa.

Lankford, G. (2011a) Regional Approaches to Iconographic Art. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by George E. Lankford, F.K. Reilly III, and J. Garber, University of Texas Press, Austin, 3-17.

Lankford, G. (2011b) The Swirl Cross and the Center. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by George E. Lankford, F.K. Reilly III, and J. Garber, University of Texas Press, Austin, 251-278.

Lankford, G. (2012) Weeding Out the Noded. *Arkansas Archeologist* **50**, 50-68.

Lankford, G. (2014) Following the Noded Trail. *Arkansas Archeologist* **53**, 51-68.

Lankford, G. and Dye, D. (2014) Conehead Effigies: A Distinctive Art Form of the Mississippi Valley. *Arkansas Archeologist* **53**, 37-50.

Lankford, G., Reilly F.R., III, and Garber, J. eds (2011) *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*. University of Texas Press, Austin.

Lazarus, Yulee W., and Carolyn B. Hawkins
1976 Pottery of the Fort Walton Period. Temple Mound museum, Fort Walton Beach, Fla.

Lewis, Thomas M. N., and Madeline Kneberg
1946 Hiwassee Island: An Archaeological Account of Four Tennessee Indian Peoples. University of Tennessee Press, Knoxville.

Mainfort, R. (2003) Assessing Late Period Phases in the Central Mississippi Valley. *Southeastern Archaeology* **22**: 17.

Mainfort, R. (2005) A K-Means Analysis of Late Period Ceramic Variation in the Central Mississippi Valley. *Southeastern Archaeology* 24(1): 59-69.

Meltzer, D. and Dunnell, R. eds (1992) *The Archaeology of William Henry Holmes*. Smithsonian Institution Press, Washington D.C.

Milanich, J. (1979) Origins and Prehistoric Distributions of Black Drink and the Ceremonial Shell Drinking Cup. In *Black Drink: A Native American Tea*, edited by C. Hudson, University of Georgia Press, Athens, 83–119.

Milanich, Jerald T., Ann S. Cordell, Vernon James Knight Jr., Timothy A. Kohler, and Brenda J. Sigler-Lavelle
1984 McKeithen Weeden Island: The Culture of Northern Florida, A.D. 200-900. Academic Press, Orlando.

Miller, J. (2015) Interior Carbonization Patterns as Evidence of Ritual Drink Preparation in Powell Plain and Ramey Incised Vessels. *American Antiquity* **80**, 170–183.

Milner, George R.
1984 The Robinson's Lake Site. *American Bottom Archaeology, FAI-270 Site Reports*, vol. 10. University of Illinois Press, Urbana and Chicago.

Morse, D. (1989) *Nodena: An Account of 90 Years of Archaeological Investigation in Southeast Mississippi County, Arkansas*. Arkansas Archeological Survey, Research Series **30**. University of Arkansas, Fayetteville.

Morse, P. (1981) *Parkin*. Arkansas Archeological Survey, Research Series No. **13**. University of Arkansas, Fayetteville.

- Morse, D. and Morse, P. (1983) *Archaeology of the Central Mississippi Valley*. 2nd ed. University of Alabama Press, Tuscaloosa.
- Murie, J. (1914) *Pawnee Indian Societies*. Anthropological Papers 11: 543-644. American Museum of Natural History, New York.
- Nowak, J. (2018) Iconography Beyond Sight. An Object-Oriented Approach to Prehistoric Southeastern Ceramics. Paper presented at the 75th Annual Meeting of the Southeastern Archaeological Conference, Augusta, Georgia.
- O'Brien, M. ed (1994) *Cat Monsters and Head Pots: The Archaeology of Missouri's Pemiscot Bayou*. University of Missouri Press, Columbia.
- O'Brien, M. and Dunnell, R. (1998) A Brief Introduction to the Archaeology of the Central Mississippi River Valley. In *Changing Perspectives on the Archaeology of the Central Mississippi River Valley*, edited by M. O'Brien and R. Dunnell, University of Alabama Press, Tuscaloosa, 1-30.
- Pauketat, T. and Emerson, T. (1991) The Ideology of Authority and the Power of the Pot. *American Anthropologist* **93**, 919-941.
- Perino, G. (1967) *The Banks Village Site, Crittenden County, Arkansas*. Missouri Archaeological Society, Memoir 4.
- Perino, Gregory
1967 The Cherry Valley Mounds and Bands Mound 3. Central States Archaeological Societies, Memoir 1.
- Phillips, P. (1939) Introduction to the Archaeology of the Mississippi Valley. 2 volumes with plates bound separately. Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge.
- Phillips, P., Ford, J., and Griffin, J.B. (1951) *Archaeological Survey in the Lower Mississippi Alluvial Valley, 1940–1947*. Papers of the Peabody Museum of Archaeology and Ethnology **25**. Harvard University, Cambridge, Mass.
- Pluckhahn, Thomas J.
2003 Kolomoki: Settlement, Ceremony, and Status in the Deep South, A.D. 350 to 750. University of Alabama Press, Tuscaloosa.
- Rands, R. (1956) Southern Cult Motifs on Walls-Pecan Point Pottery. *American Antiquity* **22**, 183-186.
- Reichel, E. (2012) The Landscape in the Cosmoscape, and Sacred Sites and Species among the Tnaimuka and Yukuna Amerindian Tribes (Northwest Amazon). In *Sacred Spaces and Sites:*

Advances in Biocultural Conservation, edited by Gloria Pungetti, Gonzalo Oviedo, and Della Hooke, Cambridge University Press, 127-151.

Reilly, F.K. III (2011) The Great Serpent in the Lower Mississippi Valley. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by G. Lankford, F.K. Reilly III, and J. Garber, University of Texas Press, Austin, 118-133.

Reilly, F.K. III, and Garber, J. eds (2007) *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*. University of Texas Press, Austin.

Reilly, F.K. III, and Garber, J. (2011) Dancing in the Otherworld: The Human Figural Art of the Hightower Style Revisited. In *Visualizing the Sacred: Cosmic Visions, Regionalism, and the Art of the Mississippian World*, edited by G. Lankford, F.K. Reilly, and J. Garber, University of Texas Press, Austin, 294–312.

Sears, William H.

1953 Excavations at Kolomoki, Season III and IV, Mound D. University of Georgia Series in Anthropology 4. University of Georgia Press, Athens.

1956 Excavations at Kolomoki, Final Report. University of Georgia Series in Anthropology 5. University of Georgia Press, Athens.

Skinner, A. (1915) *Societies of the Iowa, Kansa, and Ponca Indians*. American Museum of Natural History, New York, Anthropological Papers **11**, 679-801.

Slater, D. (2014) *Into the Heart of the Turtle: Caves, Ritual, and Power in Ancient Central Yucatan, Mexico*. Ph.D. dissertation, Department of Anthropology, Brandeis University, Waltham, Mass.

Steponaitis, Vincas P.

1983 *Ceramics, Chronology, and Community Patterns, An Archaeological Study at Moundville*. Academic Press, New York and San Francisco.

Steponaitis, V. and Knight V.J. (2004) Moundville Art in Historical and Social Context. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, edited by R. Townsend and R. Sharp, Art Institute of Chicago and Yale University Press, New Haven, 167-181.

Steponaitis, V., Knight, V.J., and Lankford, G. (2019) Effigy Pipes of the Lower Mississippi Valley: Iconography, Style, and Function. *Journal of Anthropological Archaeology* **55**: 101070.

Sumner, M. (1951) *Lodge-Boy and Thrown-Away: An Analytic Study of an American Indian Folktale*. Ph.D. dissertation, Department of Anthropology, Stanford University.

Swanton, J. (1928) *Religious Beliefs and Medical Practices of the Creek Indians*. Bureau of American Ethnology Bulletin **43**. Government Printing Office, Washington, D.C.

Swanton, J. (1929) *Myths and Tales of the Southeastern Indians*. Bureau of American Ethnology Bulletin **88**. Government Printing Office, Washington, D.C.

Thruston, Gates P.

1890 *The Antiquities of Tennessee and the Adjacent States*. First edition. R. Clarke, Cincinnati.

Waring, A. (1968) *The Southern Cult and Muskhogean Ceremonial: General Considerations*. In *The Waring Papers*. edited by Stephen Williams, Papers of the Peabody Museum of Archaeology and Ethnology **58**. Harvard University, Cambridge, 30-69.

Waring, A. and Holder, P. (1945) *A Prehistoric Ceremonial Complex in the Southeastern United States*. *American Antiquity* **47**, 1-34.

Weiner, A. (1985) *Inalienable Wealth*. *American Ethnologist* **12**, 210-227.

Weiner, A. (1992) *Inalienable Possessions: The Paradox of Keeping-While-Giving*. University of California Press, Berkeley.

Wesson, C. (1998) *Mississippian Sacred Landscapes*. In *Mississippian Towns and Sacred Spaces*, edited by R.B. Lewis and C. Stout, University of Alabama Press, Tuscaloosa, 93-122.

Willey, Gordon R.

1949 *Archeology of the Florida Gulf Coast*. Smithsonian Miscellaneous Collections 113. Smithsonian Institution, Washington, D.C.

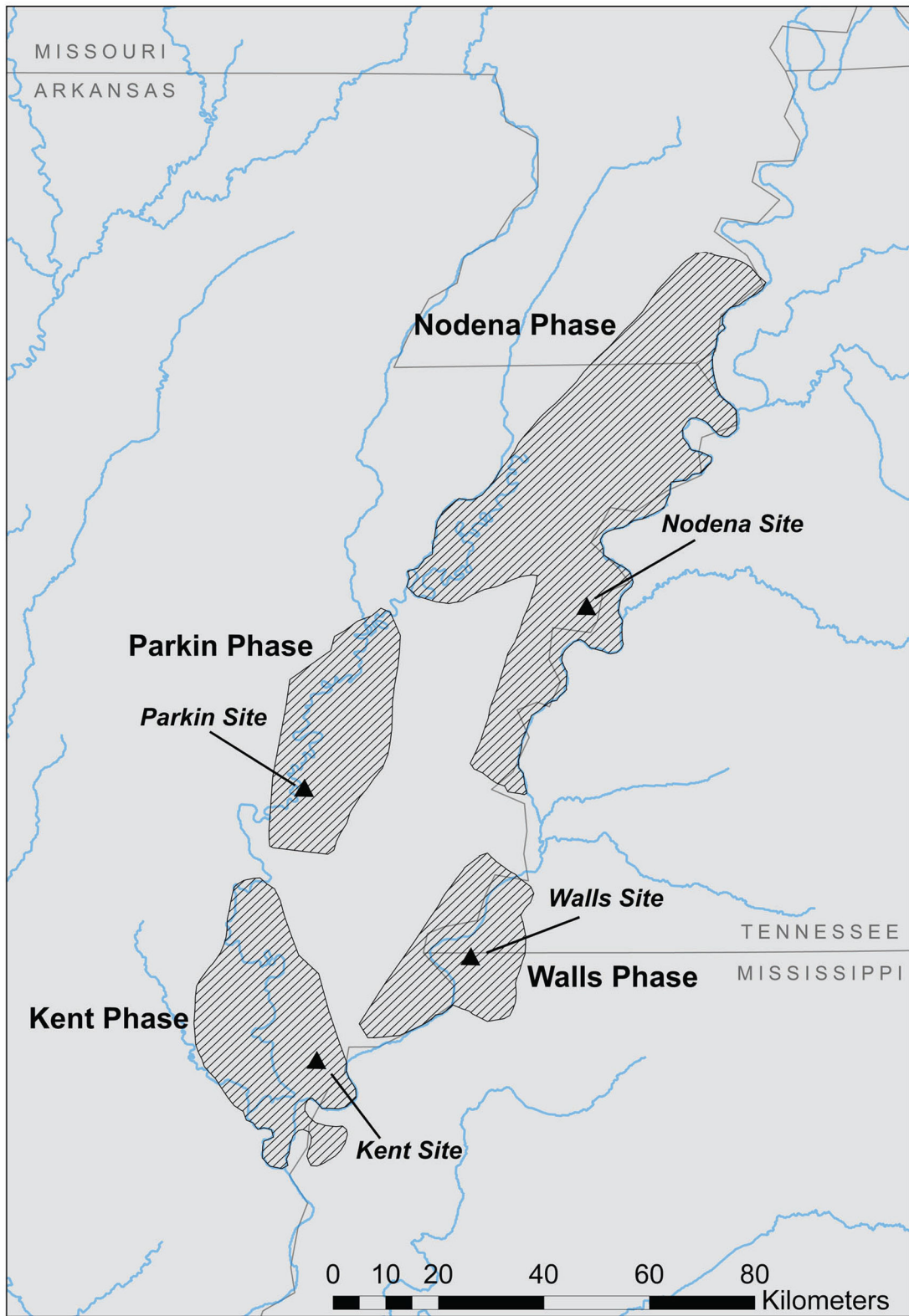


Figure 1. Late Mississippian ceramic phases in the CMV (adapted from Morse and Morse 1989: Fig. 12.1).



a



b



c



d

Figure 2. Rim-effigy bowl themes: (a) serpent from Beck (13-O-07), (b) crested bird from Bradley (11-P-02), (c) raptor from Middle Nodena (10-Q-04), and (d) conehead from Walls (13-P-01).

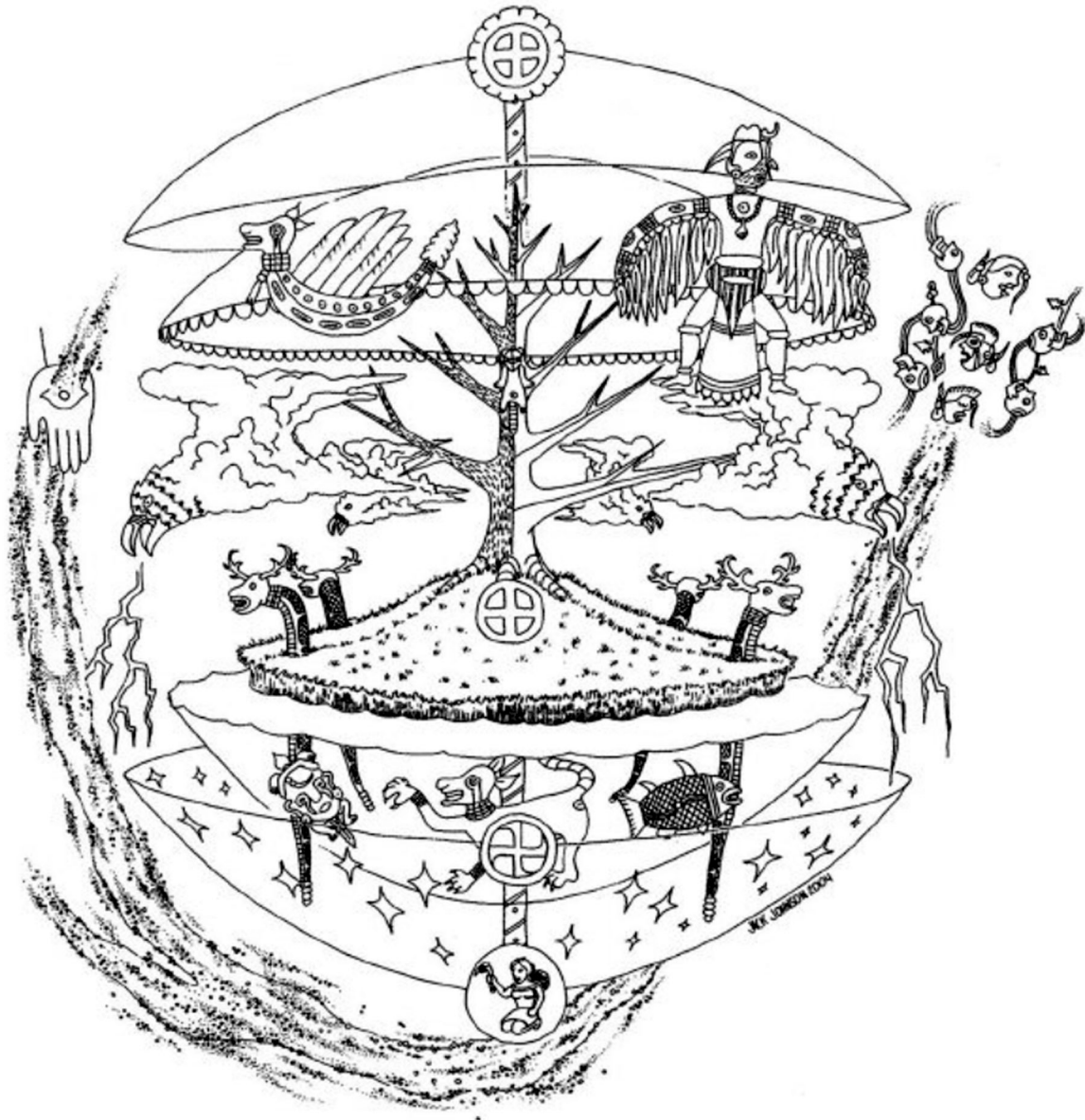


Figure 3. The Mississippian cosmos (illustration by Jack Johnson in Reilly 2004: Fig. 2).

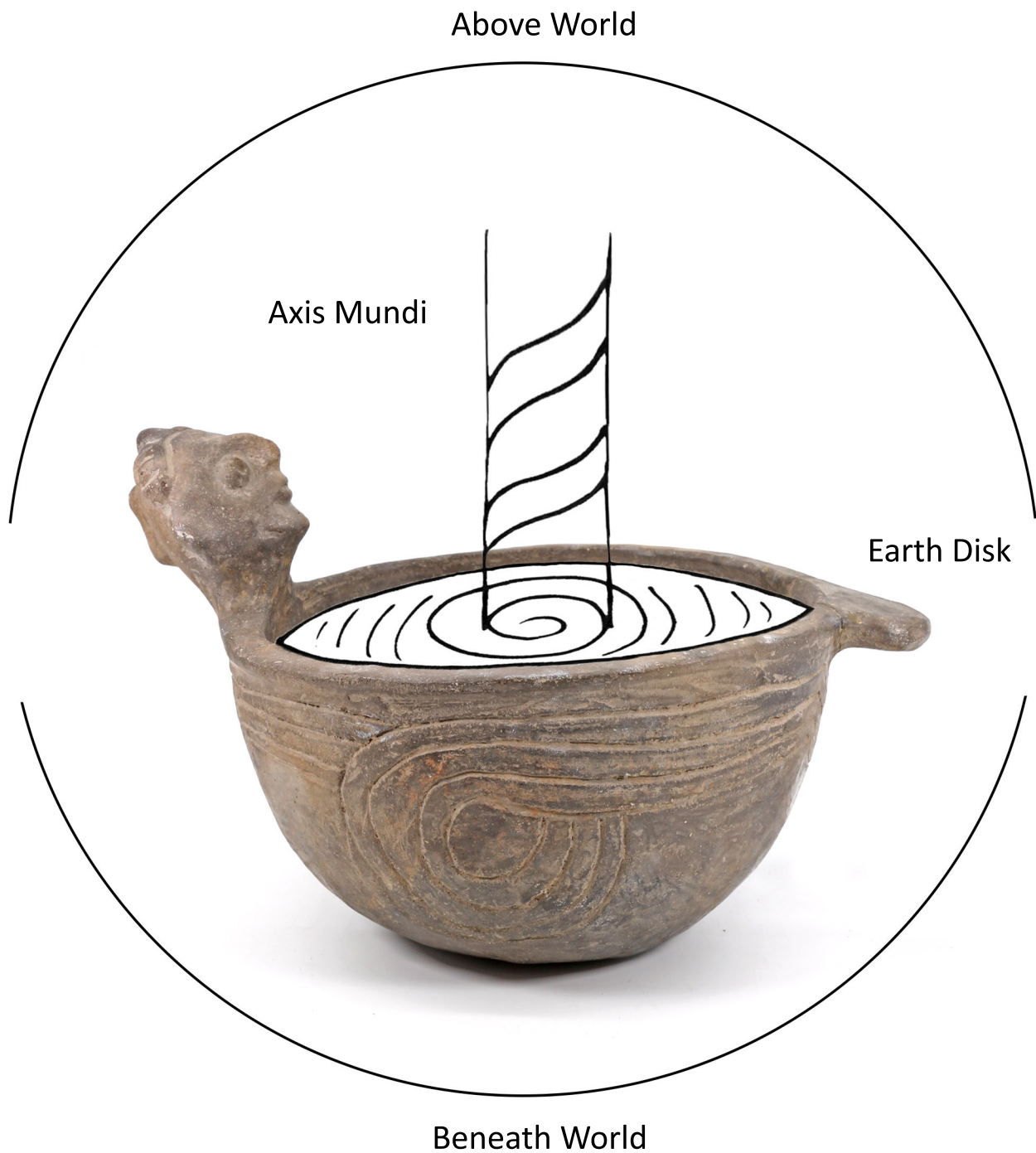


Figure 4. A rim-effigy bowl as a cosmogram. A conceptual axis mundi is created by swirling the contents of the vessel. Note the presence of a looped square motif at the rim. Vessel from Chickasawba Mound (9-Q-2). Courtesy of the University of Arkansas Museum Collections.



a



b

Figure 5. (a) Examples of Hixon-style gorgets from the Hixon and Etowah sites (from Lankford 2007a: Fig. 2.7). (b) Crested-bird rim-effigy bowl from Neely's Ferry (11-N-04) (from Phillips 1939: Pl. 58, vessel D2).

Table 1. Counts of Rim-Effigy Bowl Themes by Phase

Theme	Nodena	Parkin	Kent	Walls	Total
Crested bird	14	31	4	1	50
Serpent	69	33	11	5	118
Human					
Conehead	9	-	5	5	19
Other	11	3	12	7	33
Raptor	14	4	4	1	23
Indeterminate	1	-	1	-	2