THE COSMOS IN CLAY: AN ANALYSIS OF AVERY ENGRAVED VESSEL MOTIFS

A Thesis

Presented to the Faculty of the Graduate School of Cornell University

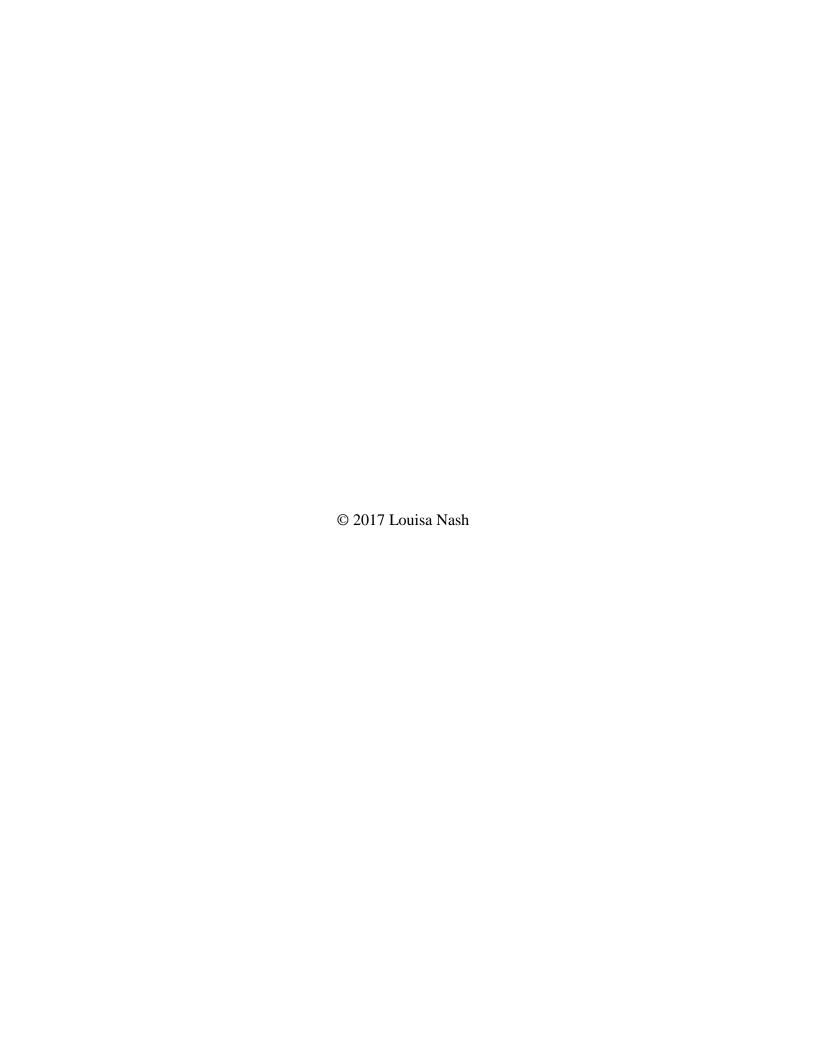
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ABSTRACT

This study seeks to provide new interpretations for the abstract and geometric Avery Engraved vessel motifs created by the prehistoric Caddo. I argue that certain motifs represent wings, feathers, and the Upper World, while other motifs act as locatives and are representative of the Lower World in the Caddo's conception of a tiered universe. Given the nature of archaeological research, it is not possible to ascertain all of the implications, nuances, and complexities of the motifs that appear on Avery Engraved vessels. However, this study and others like it, which work to extrapolate the meaning of motifs through comparative analysis with representational engraved shell imagery and through the use of ethnographic and ethnohistoric data, can enrich our knowledge about how the Caddo rendered and communicated core beliefs in nonrepresentational ways.

BIOGRAPHICAL SKETCH

Louisa Nash attended the University of Oklahoma and obtained her Bachelor of Arts in Anthropology in 2013. She has worked in both the Southwest and Southeast regions of the United States and enjoys researching various projects on Caddo, Mississippian, Mimbres, and historic archaeology.

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Introduction

The prehistoric Caddo, who lived in present-day southwest Arkansas, northwest Louisiana, eastern Oklahoma, and northeast Texas from about A.D. 800–1700, were highly skilled potters who created intricate designs on a variety of vessel structures. In addition to routine food preparation, storage, and serving uses, pottery was a highly visible medium that was used during community feasts, religious rituals, and burial ceremonies as grave goods (Townsend and Walker 2004:245). Caddo potters did not create figural designs on their vessels but instead adorned their pottery with nonrepresentational motifs that likely pertained to important cultural, religious, and cosmological themes. A decoration type known as Avery Engraved portrays motifs that have traditionally been interpreted by scholars as relating to the celestial Upper World in the Caddo's conception of a tiered universe by representing the sun (Pauketat and Emerson 1991:928).

However, after comparing the abstract geometric motifs on Avery Engraved vessels with representational images from the broader corpus of Caddo religious imagery found principally on engraved shell cups from Caddo sites, and considering recent Caddo iconological studies and ethnographic and ethnohistoric analogies, I believe that Avery Engraved vessels actually portray motifs that directly reference specific aspects and beings of both the Upper and Lower Worlds. Additionally, the Upper World is likely referenced by motifs that symbolize feathers rather than the sun. The relation of Avery Engraved motifs to the Lower World has not, to my knowledge, been discussed to any great length in the literature. Yet, within this study's sample size of 132 Avery Engraved vessels, Lower World motifs had been used in conjunction with Upper World ones to reference fundamental religious beliefs concerning the tiered cosmos, beings of power, and the journey to the afterlife. These new interpretations of Avery Engraved motifs provide a

greater understanding of how abstract, geometric motifs were used by the Caddo as referents and locatives that conveyed nuanced aspects of the dualistic and opposing realms of the universe.

In this thesis, I will provide some basic background on the culture and society of the prehistoric Caddo. Next, the methodology and use of a comparative iconographic approach and the use of ethnographic and ethnohistoric material will be considered. I will then demonstrate through the analysis of Avery Engraved vessels from burials located in Texas, Arkansas, and Oklahoma how motifs, in both isolation and in combination, were placed on vessels in order to derive particular cosmological and religious associations with either the Upper or Lower Worlds or both. This study further elucidates how the Caddo expressed religious themes through both the medium of ceramics and through nonrepresentational imagery.

Caddo Culture and Society

The Caddo people, whose complex and distinctive culture has been the focus of many archaeological studies, are considered to be linked together by a common cultural and historical heritage (Perttula 1996, 2012). From about A.D. 800 into historic times, the Caddo people lived as distinct communities and social groups in principally sedentary dispersed settlements, with civic-ceremonial centers near the edge of communities. These communities were comprised of isolated farmsteads, several larger villages with groups of farmsteads, and the civic-ceremonial centers that were visited by individuals from nearby settlements (Perttula 2012).

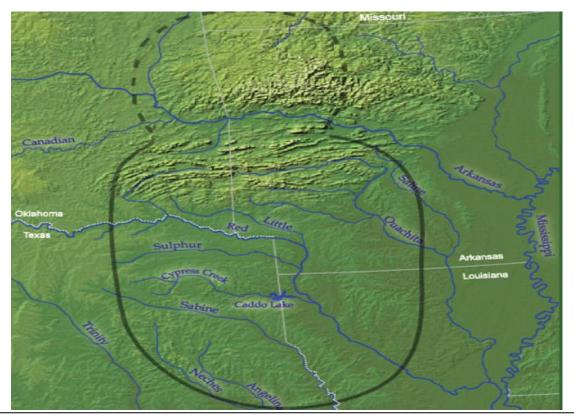


Figure 1. Map of the Caddo region. Solid line shows primary area; dashed line represents the northern extent of Caddo habitation (from Texas Archaeological Research Laboratory, 2010).

The region that the Caddo traditionally inhabited, as evidenced through archaeological investigation and ethnohistoric and historic accounts, centers on the Red River and its tributaries (Perttula 1996). This includes areas in present southwest Arkansas, northwest Louisiana, eastern Oklahoma, and northeast Texas, as shown in Figure 1 (Perttula 2012). For this study, analysis will focus on whole Avery Engraved vessels originating from sites in Arkansas, Texas, and Oklahoma from around the Middle to Late Caddo periods. The temporal duration of Caddo chronology can be divided into five general periods, as seen in Table 1; these period divisions are based upon broad trends seen in the archaeological record (Perttula 1996; Dowd 2011b). Regional phases further delineate specific social and cultural changes.

Table 1. Caddo period and phase chronology (adapted from Dowd 2011b; Perttula 2012).

Periods	Period Dates (A.D.)	Phases of the Middle	Phase Dates (A.D.)
		Red River Area	
Formative Caddo	800–1000	Albion	900–1100
Early Caddo	1000–1200	Mound Prairie	1100–1300
Middle Caddo	1200–1400	Early McCurtain	1300–1500
Late Caddo	1400–1680	Late McCurtain	1500–1700
Historic Caddo	1680-1860+	Historic	1700-1730+

The McCurtain Phase, a regional phase of the Middle Red River, begins at A.D. 1300, ends at A.D. 1700, and roughly corresponds to the Middle and Late Caddo periods. Sites occurring during this phase are located along the Red River drainage and also along the Little River drainage (Dowd 2011b:6). It was during the entirety of the McCurtain Phase that Avery Engraved vessels occurred most frequently at sites (Dowd 2012). By the end of the McCurtain Phase, around A.D. 1700, Avery Engraved vessels had largely been "replaced by conical Taylor and Hodges Engraved vessels" (Perino 1983:74).

During certain phases, including the McCurtain Phase, Caddo settlements—while still located near civic-ceremonial centers—were generally small and featured only a few structures, such as one to three houses and their associated cemeteries (Dowd 2011b; Wyckoff and Fisher 1985). The number of settlements connected to civic-ceremonial centers varied by time and by region; the availability of resources and the type of landscape, such as floodplains, terraces, mountains, etc., greatly impacted the number of settlements connected to civic-ceremonial mound centers. Studies on settlement patterns have been conducted; for example, of the 279 known Caddo sites in present-day Choctaw and McCurtain counties in Oklahoma, 259 of the sites have been considered residential settlements while the remaining sites feature mounds (Brooks 2012:347). The civic-ceremonial centers were formed using one or more platform or conical earthen mounds situated around a large plaza. Near these mounds, some civic-ceremonial centers contained elite residences such as that of prominent religious leaders. Structures, like

temples, were sometimes built on flat platform mounds; conical mounds frequently contained burials, and ceremonial fire mounds were also used for public and religious functions and celebrations (Perttula 1996:306). Elaborate ceremonies and mortuary rituals were conducted at mound centers, with the socially and politically elite members of society being buried in shaft tombs accompanied by exotic, rare, and elaborately made grave goods (Perttula 1996, 2012). Certain Avery Engraved vessels, particularly bottles, have also been discovered in the context of shaft tombs and mound burials (Skinner et al. 1969). Caddo society during both prehistoric and historic times was socially ranked, and matrilineal descent is evident through kinship terms (Dowd 2011b; Perttula 2012:9).

The Caddo relied on the procurement of natural resources and also practiced intensive horticulture that primarily concentrated on the production of maize, squash, and beans (Perttula 2012). After A.D. 1200, maize agriculture expanded; it further intensified after A.D. 1400 (Perttula 1996:304). The Caddo were also engaged in extensive local and long-distance trade systems, importing items including copper, large chert bifaces, stone pipes, and columella conch shells from which the Caddo formed engraved shell cups and gorgets; these trading systems continued after the arrival of Spanish explorers and into historic times (Perttula 1996:312; Perttula et al. 2001). During the historic period, which began for the Caddo around A.D. 1680 when they experienced sustained contact with Europeans, three confederacies—the Kadohadacho, the Hasinai, and the Natchitoches—developed (Perttula 2012; Dowd 2011b). Presently, those of Caddo descent are members of the Caddo Nation of Oklahoma (Dowd 2011b).

Caddo societies share many features with their southeastern neighbors: the utilization of and intensification in the production of maize, social and political ranking with recognized elites,

and complex ceremonies comparable in nature to other Mississippian societies. While some archaeologists believe the Caddo to be a western or peripheral expression of the larger Mississippian world (Blitz 2010), other scholars argue that the Caddo developed independently (Perttula 1996, 2012). Presently, many scholars conducting research on Mississippian societies, cultures, and iconographies acknowledge and emphasize local, regional, and temporal variation and diversity (Knight et al. 2001; Reilly 2004; Reilly and Garber 2007:1).

Methodology

The methodology that has been employed to investigate the relationship between Avery Engraved vessel motifs and associated religious meaning emphasizes the use of visual analysis, a form of analysis frequently found in art history, in which the individual elements and larger context of images are examined and discussed (Writing Studio Duke University 2016). This analysis, as used for Avery Engraved vessels, will recognize and consider the following: the primary and secondary design motifs; the relationships among various motifs; and how motifs differ based on certain vessel forms, such as bottles. As particular designs are discussed, certain terms may require clarification. Theme can be understood as "a large-scale design or combination of design elements," while a *motif* is considered "a smaller design unit" that is distinctive (Muller 1989:12). When referring to individual components of a motif, the term element is used. Representational images are those that clearly portray an identifiable image, such as an animal, human, or supernatural being. While some images may seem to imply or suggest a referent, if they do not portray a recognizable form, then images are referred to here as nonrepresentational. Nonrepresentational images often do not intend to "present an accurate depiction of the physical appearance of people or things" (Oxford Living Dictionaries 2016).

Studies that investigate iconography, especially nonrepresentational iconography on vessels, provide an entirely new avenue of investigation into how prehistoric communities structured, replicated, retained, and transmitted their religious worldviews (Gadus 2013). For this study, the connection between symbolic imagery and cosmological worldviews is considered. Symbols, including religious symbols, are organized into complex systems (Gertz 1973), and archaeologists are able to study these systems through material remains because "ideology is materialized in objects," and "symbols are material things that can be manipulated and used by people in the past" (Fogelin 2007:65; DeMarrais et al. 1996; Robb 1998, 1999). Symbolic imagery, including Avery Engraved vessel motifs, enabled the Caddo to graphically express core cosmological beliefs that were a central part of their social and cultural identity.

In this study, information on vessels has been obtained from the George T. Wright collection curated at the Sam Noble Oklahoma Museum of Natural History, site report descriptions and photographs, and from photographs of vessels from various sites and museum collections compiled by the Arkansas Archeological Survey. A total of 132 vessels were analyzed from a minimum of 27 sites across Arkansas, Oklahoma, and Texas. The exact number of sites is uncertain, because many vessels in this study were donated to museum collections with an unclear provenience. In some instances, Avery Engraved vessels taken from several sites were amassed by individuals into different collections that were later donated to museums. In contrast with carefully recorded archaeological excavations, these collecting practices have resulted in some Avery Engraved vessels having very little contextual information; this lack of provenience presents serious limitations as to the types of research questions that can be addressed. For example, the role of Avery Engraved vessels in regard to questions of gender and social status would presently be difficult to ascertain from many museum collections because collectors and

looters frequently did not determine or record information about the age, sex, and status of the individual with whom the vessels were buried.

The known sites and collection mentioned above were chosen because of the availability of information and images for whole vessels that they provide, as well as the fact that these sites represent relatively contemporaneous McCurtain phase communities. These sites are also representative of different regions, allowing for a wider comparative sample. The engraved shell used in this study consists of a gorget from the Roden Site and the published works of Phillips and Brown (1978, 1984), which depict over 300 plates that feature rubbings and line drawings of engraved shell cups, cup fragments, gorgets, and gorget fragments from Craig Mound at the Spiro site in Oklahoma.

Only whole vessels have been analyzed in this study; small sherds, whether decorated or plain, are difficult to classify under the Avery Engraved decoration type. This problem arises because "types were defined from complete vessels that often had different decorative patterns on vessel rims and bodies" (Girard 2012:255). Caddo potters in particular often used "different interchangeable techniques and designs on the rims and bodies of their vessels" (Dowd 2012:139). Additionally, it is difficult to determine the complete motif and to note the frequency of motif co-occurrence from smaller sherds. Sherds also make it harder to identify the exact positions of motifs on vessels and any relationships among motif elements.

While sherds from Avery Engraved vessels occur throughout sites, such as in storage or refuse pits in the floors of houses, burials are the chief location at each site where whole Avery Engraved vessels are found; therefore, for this study, Avery Engraved vessels from burials are primarily used. As most or all of these vessels were interred with individuals, the vessels form a comparable data set since they "are all from discrete contexts and had similar functions and

social meanings" (Dowd 2011b:33). The engraved shell cups and gorgets were primarily found deposited in Craig Mound at the Spiro site, which also contained burials.

The Use of Ethnographic and Ethnohistoric Information

Ethnographic and ethnohistorical analogies have long been valuable to archaeologists by providing information as to the possible significance and meanings of materials, practices, and symbols (Feder 2008). Ethnographic analogies are made when descriptions of recent groups serve as a model for understanding prehistoric cultures. Ethnohistory involves written descriptions of groups provided by early explorers, settlers, missionaries, and others. These records, while often heavily biased due to the differing cultural practices and beliefs of their recorders, can reveal the practices of native inhabitants before their cultures were significantly altered by Europeans and Americans (Feder 2008:414).

However, an inherent drawback to a heavy reliance upon these analogies for the interpretation of the past is the possible failure to recognize cultural change by assuming continuity between present or historically-documented religious beliefs and prehistoric ones. Failure to recognize bias in historic reports may also impart incorrect information and assumptions about past cultures. When these drawbacks are avoided and analogies are kept in perspective, ethnographic and ethnohistoric records can divulge useful information and possible interpretive frameworks that can be viewed in conjunction with the archaeological record.

Ethnographic and ethnohistoric material has been drawn from native peoples in the Muskogean, Algonkian, Caddoan, and Siouan language families (Dowd 2011a:87; Hall 1997). These groups share a number of cosmological beliefs and parallels among their mythologies despite their diverse languages, cultures, and geographies (Dowd 2011a:87). While scholars

recognize the acute importance of interpreting the iconography of a particular society based upon that society's specific material, these "shared beliefs have allowed for the development of a general Southeast cosmological model, which has proven useful for identifying certain iconographic themes" (Dowd 2011a:87). These iconographic themes can then guide researchers as they assess the specific contexts, mythologies, and ethnographies of groups, since shared motifs may have had different meanings across different peoples. Wherever possible, Caddo mythology and sites are used to interpret Avery Engraved vessel motifs.

European documents written about the Caddo were first created by individuals who kept records and diaries while traveling with Hernando de Soto's expedition in 1542. The Terán map, a map of a historic Caddo village on the Red River, was drawn by Spanish explorers in 1691 who resided in this village for a week and created other documents pertaining to Caddo culture (Sabo 2012). This map, along with photographs taken from 1868–1872 of a Caddo village near Fort Sill Oklahoma, provides glimpses into the settlement patterns and community organization of the historic and prehistoric Caddo (Sabo 2012, Schambach 1982a, 1982b). During the late 1600s the Spanish and French had sustained contact with Caddo communities, and contact with Europeans and Americans from missionaries, ranches, and trading posts increased throughout the eighteenth and nineteenth centuries. Early ethnographic works, such as those written by Dorsey (1905), Fletcher (1903), and Swanton (1928, 1929, 1942, 1946), further provide information on the beliefs, organization, and cultural traditions of the Caddo and other Southeastern peoples.

Avery Engraved Motifs

Avery Engraved vessels were formally described in 1962 in the *Handbook of Texas*Archaeology: Type Descriptions, edited by D. A. Suhm and E. B. Jelks. The *Handbook* describes

Avery vessels as having "several concentric semicircles, all plain lines, [or] plain lines alternated with ticked lines" that repeat around the vessel, usually four times (Suhm and Jelks 1962:1). These repeating semicircular arc motifs are often divided by bands that can include circles, hatching, and the SZ motif. The primary motifs are the ones that are given prominence on the vessel, usually by being the largest and centrally placed on the vessel (Gadus 2013:220). Secondary motifs frequently appear alongside primary motifs, but these are often smaller and less centrally located. Secondary motifs regularly serve to divide the repeating primary motifs. Generally, secondary motifs "appear to take on a modifying role" in relation to primary motifs (Gadus 2013:220). Some motifs were used interchangeably as primary and secondary motifs.

Table 2. Principle primary and secondary motifs recorded from the vessels in this study, also the number of vessels each motif occurred on. Multiple primary and secondary motifs may occur on the same vessel (images of SZ, bars, swirl/spiral, and interlocking ends from Gadus 2013:221).

Primary Motif	Number of Vessels	Secondary Motifs	Number of Vessels
Rayed arcs (placement of rays varies)	31	Hatching ////))))	53
Concentric Circles	23	Circle O	36
Plain arcs	23	Crosshatching ***	22
Ticked arcs (placement of ticks varies)	17	Triangle $\nabla \Delta$	17
Interlocking ends	11	sz 380	17
sz 380	11	Rectilinear lines /	15
Triangle $\nabla \Delta$	9	Curvilinear lines \sim	11
Zig-zag /	5	Bars	7
Swirl/spiral	5	Oval	7
Diamond 💠	3	Half circle	6
Circle	2	Diamond 💠	1
Curvilinear lines ~	2		
Half circle	1		
Primary Motif Total:	146	Secondary Motif Total:	199

The arc, which is comprised of concentric half circle elements, is the dominant motif of Avery Engraved vessels. However, there is a good deal of variance in this typology, as Table 2 demonstrates. As shown by Figures 2 through 5 below, Avery Engraved motifs can be expressed on a variety of different vessel structures such as bottles, jars, simple bowls, carinated bowls, compound bowls, composite bowls, and effigy vessels. Motifs may vary due to the structure of the vessels and differences in space, as "decorative fields of different sizes will differ in their physical visibility" (Braun 1991:367). Currently, it does not appear that scholars have performed residue analyses on Avery Engraved vessels to determine food or drink contents; therefore, at present, it is not possible to attribute motif variance to the past contents of these vessels or to the role these vessels played in serving and storing food or drinks.

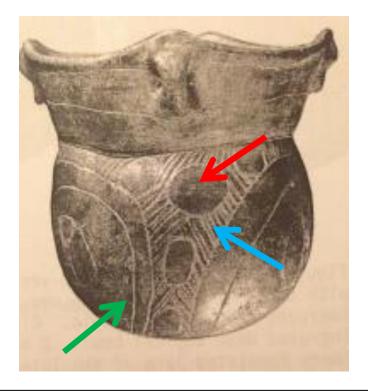


Figure 2. Types of Avery Engraved vessels—jar from the Bob Williams Site with circles (red arrow), concentric circles (green arrow), and hatching (blue arrow) (Perino 1983).

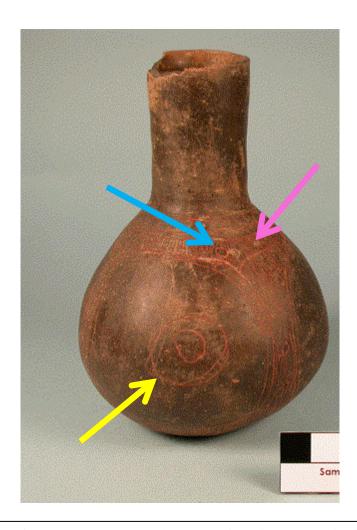


Figure 3. Types of Avery Engraved vessels—bottle featuring concentric circles (yellow arrow), circles (blue arrow), and hatching (pink arrow) from the George T. Wright collection.

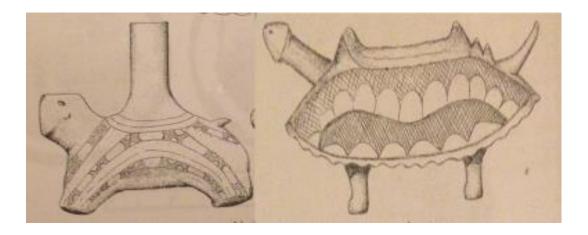


Figure 4. Types of Avery Engraved vessels—bear and turtle effigy vessels from the Roden Site (Perino 1981:8).



Figure 5. Types of Avery Engraved vessels—bowls. Top left: a simple bowl featuring a complex design of interlocking ends that are connected to form an SZ motif (from the George T. Wright Collection); Top right: a carinated bowl with plain arcs (image from Arkansas Archeological Survey). Bottom left: a compound bowl with plain arcs that are separated by hatching; Bottom right: composite bowl with rayed arcs (images from Arkansas Archeological Survey).

Cosmological Associations with Motifs: The Southeastern Ceremonial Complex

First synthesized in 1945, the Southeastern Ceremonial Complex, or SECC concept, focuses on a body of icons and artistic motifs that are believed to portray the principle ideologies of Mississippian religion (Waring and Holder 1945). The corpus of the SECC predominantly features subjects such as ancestors, nature, animals, warfare, and the transformation or

hybridization of animals, humans, and objects into one another (Simek, Cressler, and Douglas 2012:196). The definition of the SECC has undergone a number of revisions regarding type and content of iconographic depictions, thematic messages, and stylistic classifications. With certain images and styles crossing spatial and temporal boundaries, it is emphasized that "variation in styles, genres, thematic content, and chronology" should be more adequately studied to better understand Mississippian art, society, and religion (Knight et al. 2001:130).

Investigation into symbolically significant themes and motifs, especially from traditional SECC studies, has primarily focused on a wide variety of material types largely exclusive of nonrepresentational ceramic vessels. Materials such as engraved shell cups and gorgets, copper masks and repoussé, and effigy statues and vessels were often at the center of discussions pertaining to religious and ritual significance (Knight et al. 2001). Studies on ceramics have chiefly been concerned with "identity and degrees of social interaction between different groups" (Dowd 2011b:1; Krieger 1946; Perttula 1992); utilitarian uses (Braun 1983) and research on "household size, prehistoric diet, trade patterns, learning networks, change" (Rice 1996:138); social and political status (Pauketat and Emerson 1991); and the establishment of relative chronologies. Decoration on pottery is now "interpreted within a broader realm of stylistic behavior," and investigations into cultural and religious meanings have now become more prominent (Rice 1996:149; Gadus 2013).

Caddo vessels were decorated using abstract and geometric designs instead of the representational iconography of the broader SECC (Townsend and Walker 2004; Reilly 2004:126). This variation appears deliberate, as representational imagery is found on other Caddo items, like engraved marine columella shell cups and gorgets, at Caddo sites such as the Spiro site and Roden Mounds site in Oklahoma and Texas respectively. Geometric and abstract

designs unaccompanied by other representational figures can make attaching particular cosmological associations to these designs difficult; however, ascertaining general symbolic meaning is still possible (Reilly and Garber 2007; Lankford et al. 2011; Philips and Brown 1978). Potential meanings or associations of nonrepresentational motifs can be suggested by iconographical studies that center on the comparison of abstract motifs with representational imagery; these studies can be further supported by ethnographic and ethnohistoric accounts.

The principle thematic meaning traditionally related to Avery Engraved vessels is that of the celestial realm because arcs, especially rayed and ticked arcs, are believed to be related to the "sun circle" motif and to represent sunrises (Waring and Hodder 1945:4; Phillips and Brown 1978; Perino 1983). The sun circle motif has long been considered a principle motif in the SECC (Waring and Holder 1945:4). However, given the specific types of primary and secondary motifs uncovered during the course of this study, I believe that there is more nuance and variance to Avery Engraved vessel motifs than this simple assessment. Many vessels have motifs of crosshatching, SZ, and interlocking ends that are related with the Lower World, as discussed in the section below. The means by which motifs are associated with different cosmological realms are largely through studies of representational imagery, like the kind found on engraved shell cups, along with ethnographic and ethnohistoric accounts.

Cosmological Associations with Motifs: Discussion

Tiered Universe

Ethnohistoric accounts show that the cosmological model for the Caddo, as well as for other Southeastern groups, is that of a tiered universe consisting of three principle layers. The Upper or Above World is a celestial realm that consists of air as well as some solid elements on which beings reside. It is home to forces such as the sun, the Thunderbirds, and the four directional

powers, sometimes referred to as the wind powers (Dowd 2011a:88). The Middle World is the realm that humans, animals, and plants inhabit. Finally, the Lower or Beneath World consists mostly of water (Lankford 2007a:15). Some of the "forces representing the Beneath World include the Great Serpent, water spirits such as snakes and panthers, and sometimes serpents that held the Middle World in place at each of the four corners" (Dowd 2011a:88).

Relating to celestial phenomena, the Upper World is conceived of as being predictable, cyclical, and associated with order and structure (Lankford 2008:95). The Lower World lacks predictability and is related with change, fertility, and unexpected events such as natural disasters (Lankford 2008:95). Hudson (1975:127) clearly delineates the dualism of the Upper and Lower Worlds: "the Upper World represented structure, expectableness, boundaries, limits, periodicity, order, stability, and past time. The Under World represented inversions, madness, invention, fertility, disorder, change, and future time." These realms carried no moral connotations; "the Under World is not evil, nor is the Upper World good" (Lankford 2008:95). The dual and opposing nature of these realms contrasted with each other but was considered by Southeastern people to be the natural structure of the cosmos. The principle goal of people residing in the Middle World was to maintain balance between these two opposing realms (Lankford 2008:95).

The dualism between the Upper and Lower Worlds is discussed in ethnographic accounts of Caddo beliefs. It is presently "unclear to what extent this dualism is incorporated into artistic expressions in the Caddo area" (Dowd 2011a:90–91). It is sometimes portrayed on engraved shell cups and gorgets, which can feature images relating to serpentine, avian, human, and feline subjects. The figures that feature combinations of avian and serpentine attributes are likely representative of Upper and Lower World themes and may explore the relationship between these opposing powers (Phillips and Brown 1978, 1984). Similarly, other types of Caddo vessels,

such as Ripley Engraved, Wilder Engraved, and Johns Engraved, have been analyzed and argued as representing themes related to the Upper World and Great Serpent, Lower World, and the Middle World, respectively (Gadus 2013:243). This study on Avery Engraved vessel motifs further contributes to the exploration of the degree of cosmic dualism that has been artistically expressed by the Caddo.

Upper World Imagery on Avery Engraved Vessels

Historically, the Upper World was perceived by Southeastern tribes as existing above a sky arch or vault from which the Middle World was suspended (Hudson 1976). The common arc motif found on Avery Engraved vessels is possibly related to this concept of a sky vault or arch. During a study of Ramey vessel iconography, Pauketat and Emerson (1991:928) suggested that the similar arc motif found on Ramey vessels may have been representative of such a sky arch and therefore a reference to the layered cosmos. Others have suggested that the arcs found on Mississippian vessels, such as Ramey vessels, actually symbolize rainbows (Hall 1973; Pauketat and Emerson 1991).

The most readily available interpretation for arcs, particularly ticked or rayed arcs, is that these images relate to either the sun or fire (Pauketat and Emerson 1991:928). Traditionally, rayed circles, the cross-in-circle motif, and even isolated circles have been believed to represent the sun (Waring and Hodder 1945). Since it is impossible to know with complete certainty what these images represented, the arcs on Avery Engraved vessels may very well still represent either the sunrise or sunset. Fire is also possibly represented by these arcs; among historic Southeastern tribes, fire was often considered a representation of the sun or as an intelligent entity that worked with the sun (Swanton 1928:208). Furthermore, the Caddo had an important relationship to the moon, and these arcs may in fact represent the moon and rays of moonlight (Gadus 2013; Dorsey

1905; Miller 1996). While any of these interpretations may be perfectly valid, it can only serve to broaden our understanding of nonrepresentational Caddo iconography by considering new interpretations.

As the majority of arcs on Avery Engraved vessels have ticked or rayed secondary motifs, I believe these modifying features may further clarify the objects or the themes that the arcs symbolize. These rays and ticks may symbolize rays of sunlight, moonlight, or the flames of fire as previously discussed. Additionally, building on recent iconographic research, scholars have compared the ticked marks that appear on the scrolls and spirals of other vessel types with imagery from engraved shell cups and gorgets. Some researchers have argued that this type of secondary, modifying motif symbolizes feathering and references the Upper World by acting as a locative, a visual element that signifies a location (Emerson 1989:71; Hall 1977; Texas Archaeological Research Laboratory 2012).

Engraved shell cups and gorgets from the Spiro site feature the engraved image of "Birdman," pictured in Figure 6, who appears to have long flight feathers covering downy feathers. These downy feathers, originally thought of by scholars as flower petals and termed the "Petaloid Motif," also appear on the tail of the "Birdman" figure but with a triangular spine or quill design (Reilly 2007:45). It has been argued that this petaloid motif communicates to the viewer that the image's theme is celestial (Reilly 2007). As this motif occurs frequently with a "frame or border composed of bands or stripes" (Reilly:2007:46), as seen in Figure 7, I believe that it is conceivable that the ticked or rayed arcs on Avery Engraved vessels also relate to Upper World themes in this same manner by portraying the downy and tail feathers of birds. The triangular rays may especially correspond to the feather spine or quill design.



Figure 6. Birdman (from Reilly 2007; Phillips and Brown 1984:Plate 203).

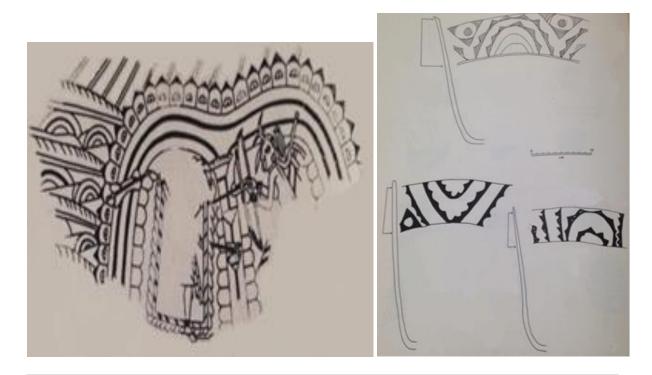


Figure 7. Right: fragmented scene on engraved shell cup of possibly a celestial sacrifice featuring the petaloid motif with triangular quills on an arc (from Reilly 2007:46; Phillips and Brown 1984:Plate 165). Left: Avery Engraved vessel imagery from the Sam Kaufman Site with rayed arcs appearing similar to the quilled petaloid motif (from Skinner et al. 1969).

Similarly, if the rayed and ticked marks on Avery Engraved vessels indeed correlate to the petaloid motif, then I propose that it is possible that the triangles on Avery Engraved vessels, when they occur as a primary motif and are not hatched or crosshatched, may be an enlarged, stylized representation of the prominent triangular-shaped tail feather quill or spine. Figure 8 shows Avery Engraved vessels and engraved shell cup images that portray birds with triangles for tail and flight feathers (Phillips and Brown 1978:Plate 121, Plate 86).



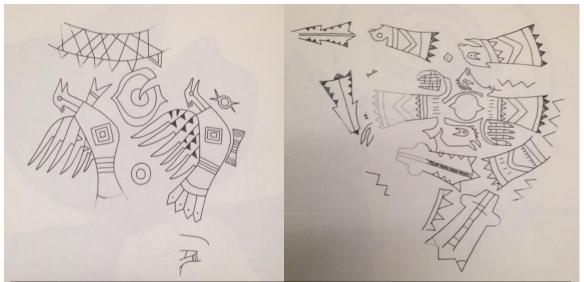


Figure 8. Top: simple bowls with concentric triangular motifs from the George T. Wright Collection and the Roden site respectively (Perino 1981:31). Bottom: Birds with triangular motifs representing feathers from engraved shell found at the Spiro site (from Phillips and Brown 1978:Plate 121, 68).



Figure 9. Top: (left- from the Roden site, right- from the Spiro site) two engraved shell gorgets showing dancers with fans or shields on their backs that appear similar to Avery Engraved plain and ticked arcs (Perino 1981:7; Gadus 2013; Phillips and Brown 1978). Bottom left: simple bowl from the George T. Wright Collection featuring the ticked arc motif; Bottom right: compound bowl from Arkansas with plain arc motif.

Further reinforcing a feathered association with Avery Engraved vessel arc motifs, engraved shell gorgets from the Roden site in Texas and from the Spiro Site in Oklahoma both depict a pair of dancers facing a pole with a shield or fan attached to their backs, as seen in Figure 9 (Gadus 2013; Phillips and Brown 1978). If these objects are indeed fans, they would have been composed of feathers; if they are portrayals of shields, then it is believed that they have a feathered petaloid motif (Gadus 2013:236). As the Spiro engraved shell gorget shows a

dancer with a whole bird on his back, the association of the fan or shield with feather designs is likely an accurate one. These feathered shields or fans are depicted using arcs much like the ones found on Avery Engraved vessels, as in Figure 9.

The ticks and rays acting as feathering could serve as references to the Upper World and to important figures such as "Birdman," who is believed to be a mythic hero who "symbolizes rebirth, the defeat of death, and continuation of social continuity" (Gadus 2013:232; Brown 2007). These themes would have been significant to Caddo society and particularly relevant to portray on objects included in burials. It therefore seems appropriate that these Avery Engraved vessels, acting as grave goods, might convey messages of renewal.

Carrying the Upper World and celestial realm interpretations of Avery Engraved vessels further in relation to their use as grave goods, the feathered petaloid motif may also signify the "Path of Souls" (Reilly 2007:47). In many Native cultures, it is believed that the dead follow the Milky Way or Path of Souls to reach the afterlife. For example, in a Caddo story that was titled in 1905 "Coyote Regulates Life After Death," it was recorded that "the people are taken to the sky when they die and become the stars that we see at night" (Dorsey 1905:15). Further concerning ethnographic records on the Path of Souls for the Caddo, Spanish explorer Espinosa wrote in 1746 that the souls of the deceased ascend into the air and travel to the House of Death that is situated in the south (Bolton 1987:146; Lankford 2007c). Ethnographic accounts such as these, along with archaeological material, show that traditional Caddo beliefs included the concept of the Path of Souls.

Celestial paths like the Path of Souls are portrayed on Spiro shell cups. The shell cup image with the Path of Souls in Figure 10 has an arc with the petaloid motif, which includes downy and tail feathers that have a triangular quill or spine design. The shell cup drawing

featuring turkeys on a feathered celestial path in Figure 10 also prominently features ticked and rayed arcs similar to those seen on Avery Engraved vessels, such as the ones in Figure 11. It is possible that on Avery Engraved vessels, the arc motif, especially the rayed or ticked arc, refers to feathering and thus is a reference to the celestial realm and possibly to the Path of Souls.

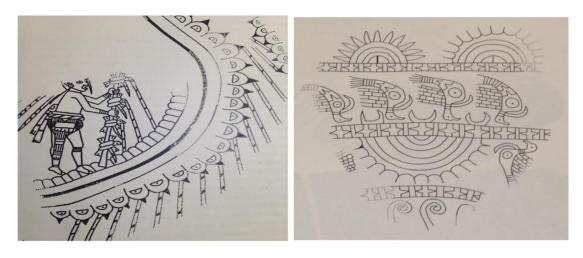


Figure 10. Left: a likely depiction of a journey on the Path of Souls, which is portrayed as an arc with the petaloid motif having a triangular quill design; Right: turkeys flying on what is believed to be a feathered celestial path—note the rayed and ticked arcs, which are similar in appearance to those found on Avery Engraved vessels (see Figure 11) (Phillips and Brown 1978:Plate 87; 1984:Plate 164; Gadus 2013, Reilly 2007).



Figure 11. Left: simple bowl with the ticked arc motif from the George T. Wright Collection. Right: simple bowl from Arkansas with ticked arcs, SZ, and circle motifs.

Lower World Imagery on Avery Engraved Vessels

Other Avery Engraved primary motifs do not seem to carry Upper World associations. While this may seem an unusual assessment regarding vessels so commonly associated with Upper World sun motifs, I believe that certain motifs, particularly on Avery Engraved bottles, may instead reference the Lower World. The 12 analyzed Avery Engraved bottles mainly have concentric circles, SZ, interlocking ends, hatching, and crosshatching motifs. Including all combined Avery Engraved vessel types sampled in this study, 5 had the swirl or spiral motif, 11 had the interlocking end motif, 28 had the SZ motif, 22 had crosshatching, and 55 had hatching present. The watery Lower World is often represented by snakes and images pertaining to the Great Serpent, a powerful being who presided over the Lower World. The majority of the previously listed motifs have long been associated with snakes by scholars in prior iconographic studies (Reilly 2007; Dowd 2011a; Lankford et al. 2011; Phillips and Brown 1978).

Nonrepresentational references to snakes are often integrated into the SZ and spiral or swirl designs on engraved vessels (Dowd 2011a:85). Spirals could also relate to the marine columella shell. Shell was a valued material associated with the Lower World, and shell cups were used during ceremonialism related to social integration, life, and fertility (Emerson 1989:72). The spiral motif and the interlocking ends motif also closely resemble a snake and have been compared to the canebrake rattlesnake motif that has been found on other vessels, which feature representational images of rattlesnakes (Gadus 2013:226). The SZ motif, as seen on vessels in Figure 13, is likely also closely linked to snakes due to its serpentine form and its placement on the Great Serpent's body, visible in the images displayed in Figure 12 (Phillips and Brown 1978; Hart and Perttula 2010).

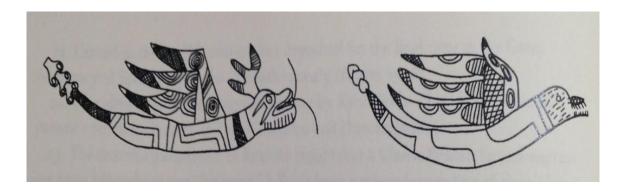


Figure 12. Images of the Great Serpent with wings on ceramics from the Mississippian site Moundville located in Alabama; images feature motifs also found on Avery Engraved vessels (see Figure 13) such as SZ, arcs, concentric circles, and crosshatching (Reilly 2007; Moore 1905:229, 1907:374).



Figure 13. Avery Engraved vessels featuring motifs found on Great Serpent images. Left: bottle from the Sam Kaufman site with concentric circles, crosshatching, SZ, and circle motifs (Skinner et al. 1969). Center: bottle from the George T. Wright Collection with concentric circles, SZ, and circle motifs. Right: simple bowl from Arkansas with SZ motif and crosshatching.

The spiral, SZ, and interlocking ends motifs are frequently found with hatching or crosshatching. Crosshatching is nearly always interpreted as a snake motif, as it appears on the bodies of snakes and the tails of rattlesnakes (Phillips and Brown 1978, 1984; Gadus 2013; Dowd 2011a; Pauketat and Emerson 1991). Crosshatching "symbolized renewal based on the

earthly serpent's ability to shed its skin" (Dye 2012:148). These Lower World–related motifs appear on other types of Avery Engraved vessels besides bottles; they also appear simultaneously with Upper World–related iconography. The relationships among motifs and the combination of both Upper and Lower World iconography on Avery Engraved vessels possibly portray the dualism that is so prevalent in the Caddo's traditional belief systems.

Upper and Lower World Imagery Combinations

Many of the Avery Engraved vessels in this study contain both Upper and Lower World motifs. While it is possible that motifs such as arcs, crosshatching, and SZ imagery have different meanings when associated together, the possibility that these motifs are dualistic or opposing in nature should not be ignored. Rather, when Upper and Lower World motifs occur on the same vessel together, the relationship between and interplay of motifs and themes should be explored. Phillips and Brown (1978:Plate 38) relate that triangles, especially hatched or crosshatched triangles, can be associated with serpents. Engraved shell cups from Spiro demonstrate how rounded triangles appear on snakes and how the heads of some snakes are triangular in shape (Phillips and Brown 1978:Plate 38). Arcs, which as previously discussed possibly symbolize wings and act as a locative for the Upper World, do occur on Mississippian clay vessels that depict the Great Serpent when winged.

These representational images of the Great Serpent, including the ones shown in Figure 12, contain either the SZ motif or a triangle on the Great Serpent's body. Concentric circles and crosshatching can also be observed from these images. The Caddo possibly used these types of geometric motifs to convey a nonrepresentational version of this powerful being. As scholars have noted, based on ethnographic information, the Great Serpent has a variety of powers, which

include the ability to take on aspects of several different creatures and to transcend realms (Gadus 2013). It is argued that these different aspects "symbolize his embodiment of the above, middle, and beneath worlds" (Dye 2012:147).

When the Great Serpent is shown with wings, these wings likely act as a locative for the celestial realm. The Pawnee, a Caddoan-speaking group, explicitly identified the Great Serpent with the constellation Scorpio (Fletcher 1903:15). This constellation, with its serpentine form, was believed to depict the Great Serpent in the prehistoric Southeast, since the night sky was conceived as "the visible manifestation of the Lower World" (Gadus 2013:239; Reilly 2004:127; Lankford 2007b:132–134; Dorsey 1905:15). Ethnographic and ethnohistoric data reveal that the Caddo believed that, in order for the souls of deceased people to reach the Realm of the Dead, a journey on the Path of Souls or Milky Way must be undertaken; during this journey the souls may encounter obstacles such as the Great Serpent, who is the guardian of the Realm of the Dead and can either help or harm people. The deceased must correctly engage with the Great Serpent to be permitted to pass into the Realm of the Dead (Lankford 2007c:178). The interpretation that Avery Engraved vessels portray aspects of both the Upper and Lower Worlds and specific themes that may reference the Path of Souls aligns with the context of these vessels as grave goods.

The combination of Upper and Lower World motifs can both signal "action or actors in multiple world levels," as in the case with the Great Serpent, and highlight the dual, opposing forces of the cosmos (Gadus 2013:239). Since the principle goal of humans residing in the Middle World was to maintain balance and harmony between the realms (Lankford 2008), using ceramics to portray these themes would have been one way that the Caddo could have engaged with and communicated these fundamental religious beliefs to others in their community. Motifs

are not the only way that Avery Engraved vessels can signify cosmological meaning, however.

The color of the vessels is significant as well.

The colors used for Avery Engraved vessels can also be correlated to dualistic religious meanings. The majority of Avery Engraved vessels are red with engraved lines that appear white, either due to added pigment or due to the paste of the vessel, and it is likely not a coincidence that these two colors have significant symbolic value. Based on ethnographic information from the seventeenth and eighteenth centuries concerning the application of color on ceremonial objects, scholars have argued that the colors red and white "symbolize the Lower world of change (red) and the Upper world of order (white)" (Hart and Perttula 2010:208; Lankford 1992). Avery Engraved vessels often feature red slip with white pigment rubbed into the engraved lines. Similarly, vessels that are black, such as bottles, often have red pigment rubbed into the engraved lines.

Unfortunately, 115 of the vessels used in this study were referenced from black and white pictures that did not always specify the vessels' coloration. Of the specified vessels, 81 were red with lighter pigment or paste, 20 were black with lighter paste, and 22 were black with red pigment. The vessels with rubbed-on red pigment are often bottles, which, as previously discussed, often feature a higher number of Lower World motifs. The white applied to red slipped vessels may further accentuate the Upper World themes; likewise, along with the red slip, it may serve to communicate the combined themes of the Upper and Lower Worlds. From present accounts by members of the Caddo Nation of Oklahoma, the colors red and white remain especially sacred and continue to be employed during current religious ceremonies (Hart and Perttula 2010:209). These colors, particularly when combined with different motifs on Avery Engraved vessels, likely symbolize the cosmological dualisms present in prehistoric Caddo

worldviews. Knight (1981:55) has argued that a vessel itself can be considered "culturally modified earth" because it is made from clay and that the very nature of the vessel is a reference to the Middle World (Pauketat and Emerson 1991). Connotations of the tiered universe are present, then, in Avery Engraved vessels that have combined Upper and Lower World motifs, with an underlying implication of the Middle World communicated by the form of the clay vessel itself.

Conclusions

Directions of Future Research

Future research projects on Avery Engraved vessel motifs could follow a number of avenues. Research could focus on possible temporal changes in motifs; it would be especially interesting to note if Lower World imagery varies over time. For this type of project, archaeological site reports would be utilized instead of museum collections so that vessels could be fairly accurately dated. As Avery Engraved vessels were replaced by Taylor and Hodges Engraved vessels at the end of the McCurtain Phase and the beginning of the historic period, further research could investigate the relationship between the motifs of these two vessel types and those of Avery Engraved (Perino 1983:74).

Regional and inter-site differences in motif depictions on Avery Engraved vessels could also be a future line of inquiry. In addition, future studies could examine the motifs present on Avery Engraved vessels and large sherds from non-burial contexts, like those from storage and refuse pits and from inside house structures. Residue analysis could be performed on vessels from both burial and domestic contexts to further investigate any connections between motifs and food or beverages. This type of study could be especially relevant for Avery Engraved

bottles, as bottles primarily displayed motifs that referenced the Lower World. It is possible that these bottles may have been used in a manner similar to that of engraved shell cups and contained specially prepared beverages that were to be ceremonially consumed, such as the historically known black drink that was brewed from a type of holly tree (Dye 2012:141).

Prospective studies could also be conducted concerning the connection between Avery Engraved vessels found within a burial context and other grave goods, particularly other vessel types. For example, at the Bob Williams Site, Avery Engraved vessels were frequently uncovered with Nash Neck Banded and Emory Punctated vessel types in graves. It would be enlightening if this co-occurrence has been found at other sites as well and if any relationships between these vessel types could be discerned.

Finally, future analysis could also center on potential correlations between Avery Engraved vessels and the age, sex, and social status of the individual with whom the vessels were interred. Fields and Gadus (2012:371–385) found that, at a site in Texas called Pine Tree Mound, burials of both men and women contained vessels with imagery; however, only some adult males were interred with bottles that were adorned with imagery related to the Great Serpent. This restricted access to imagery could reflect status differences in that community. Determining if certain Avery Engraved motifs were also restricted to a particular subset of a site's population, such as adult males, would contribute to studies on the social organization and stratification of Caddo sites.

Concluding Remarks

The prehistoric Caddo primarily applied nonrepresentational motifs to their pottery vessels to depict fundamental cultural, religious, and cosmological themes. To interpret and better understand these themes as they appear on pottery vessels, a comparative iconographic visual

analysis between Avery Engraved vessel motifs and representational engraved shell imagery was implemented in addition to the use of ethnographic and ethnohistoric accounts and recent iconographic studies. Upon referencing the wider corpus of Mississippian and Caddo iconography, it is possible to assess Avery Engraved motifs more specifically and in greater detail rather than solely relying on the traditional conclusion of sun imagery. While it is still very possible that the rayed, ticked, and plain arcs relate to fire and the sun, it enriches and broadens our understanding of the prehistoric Caddo's use of nonrepresentational imagery when alternative interpretations are considered. This study also expands our knowledge concerning the degree to which cosmic dualism is graphically expressed by the Caddo.

The primary arc motif, whether plain, ticked, or rayed, may reference the Upper World by symbolizing wings and feathers instead of the sun. Additionally, the unhatched primary triangular motif may also represent tail or flight feathers and refer to the Upper World. Avery Engraved vessels often feature motifs such as SZ, crosshatching, spiral, and interlocking ends that I believe act as referents to the Lower World. Specific beings and aspects of the tiered cosmos, such as the journey to the afterlife on the Path of Souls and the Great Serpent, may also be referred to by Avery Engraved motifs. These new interpretations of motif meaning and the frequent inclusion of both Upper and Lower World motifs on Avery Engraved vessels provide a greater understanding of how the Caddo utilized abstract motifs as referents and locatives to reflect their belief in a dualistic and opposing nature of the cosmos.

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