

Comparing Archaeological Cultures along the Northern and Southern Gulf Coasts of Mexico

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The Gulf Coast of Mexico unites two distinct culture-historical regions: the Southeastern United States and Mesoamerica. In the Southeast United States, precocious earthen and shell monument construction dates to as early as 4500 BC and precedes agriculture by millennia. In Mesoamerica, the first public architecture dates to the early-middle Formative period, at around 1500 BC, after the development of corn agriculture. Other than differences in agriculture, what else divides these two regions? What unites these two regions? Most notably, we conclude that complexity precedes in fits and starts along the northern Gulf Coast of Mexico, whereas once monument building begins along Gulf Coastal Mesoamerica, social and cultural development continues unabated. We hypothesize differences in these two regions may be tied to early developments in horticulture, maize cultivation, and a writing system in the southern Gulf region. We should not and do not intend to make general evolutionary comments using the comparative approach – rather, these two regions have unique histories and sequences of social and cultural development. This paper strives to abandon a culture-historical perspective and consider an “Archaeology of the Americas” united by the Gulf of Mexico and related regions.

Keywords: Archaic mounds, hunter-gatherer monumentality, cultural complexity, Mesoamerica, Southeast USA



Introduction

Maurice Merleau-Ponty once wrote that “the world is not an object such that I have in my possession the law of its making; it is the natural setting of, and the field for, all my thoughts and all my explicit perceptions” (2012 [1945]:xxiv). As Americanists who have worked in both the Southeastern United States and in Mesoamerica, our experiences in the field and visiting sites have set the stage for writing this comparative article. It is perhaps natural to seek to compare both the Northern and Southern Gulf Coasts, connected as they are by a shared body of water, and knowing that both ancient and modern watercrafts have made the journey between these two regions (White and Weinstein 2008:230). Experience links our work here – visits to La Venta bringing to mind the earthen mound complexes of Louisiana and Mississippi – yet, knowing that very little material culture exists to link these two places together (see White 2005), we strive to understand basic structural similarities and differences. Bearing this in mind, we consider two study areas, the Northern and Southern Gulf Coasts of Mexico, and social and cultural events revolving around monumentality and environment.

Along the northern Gulf Coast, itinerant and sedentary indigenous communities constructed monumental settlements and frequently returned to them, rebuilding and resettling over multiple



generations. In flat, marshy river deltas, the foothills of the Ouachita and Appalachian Mountains, along Florida’s St. Johns River Valley, and in the Mississippi River valley, the ancestors of Muskogean, Caddoan, and Siouan communities built monuments out of earth, sediment, and shell, along with seasonally occupied villages. Their stories about how the world was made described mythical and natural creatures diving into primordial waters, mining mud, and bringing it to the surface to build land (Judson 1914). It is this process that Native peoples of the northern Gulf recreated in building their earthen and shell mounds. Indigenous oral traditions from the Gulf Coast compare natural land-building processes to the actions of real

and mythological animals, in particular crawfish-as-earth divers (Erdoes and Ortiz 1984:105-107; Judson 1914). Early 20th century anthropologists recorded oral histories from coastal Louisiana indigenous communities that described a mythical creature called the Earth Diver, who in the form of a crawfish, descended into the waters, when the Earth was only water, to form the land they built their villages on (Judson 1914:5-7; Kidder 2012; Rodning and Mehta 2016). Given that many coastal communities and other Southeastern United States Native American societies share this oral tradition, it is likely rooted in prehistory and perhaps influenced native decision-making to live in these dynamic deltaic landscapes. Relationships to landscapes and landforms would necessarily have been informed by both oral histories and human-made landmarks, including earthen and shell mounds, a practice with deep antiquity in Louisiana and Florida, where the earliest earthen and shell monuments in North America can be found. For indigenous societies of the wet and water landscapes across the river valleys of the Southeastern United States, land formation and earthen construction was mythically, ritually, and ideologically important (J. Brown 1997; Blitz and Livingood 2004; Knight 1986; Sherwood and Kidder 2011).

Along the southern Gulf Coast, where maize had already existed for millennia, monumental stone sculpture such as the massive basalt heads carved by the Olmec, earthen pyramids, and ostentatious displays of wealth and power first begin at around 1500 BC, in contexts that were both

agricultural and heavily dependent on wetland resources (Arnold 2012:194). The earliest monument construction begins in the Valley of Oaxaca at San Jose Mogote and in the Olmec heartlands of Tabasco and Veracruz. Public buildings are first made at San Jose Mogote but truly monumental complexes appear at San Lorenzo and La Venta between 1400 and 1100 BC (Rosenswig 2016:182). Here, urbanism, monumental heads, and monumental construction coincide with the development of complex social organization, leadership, and ostentatious displays of wealth (Pool 2007). The myths of the Olmec are largely unknown, but Maya origin stories, as told in the Popul Vuh and the Dresden Codex, describe the many different births of humanity, finally arising from corn after a battle in the underworld by mythic hero twins Hunapu and Xbalanque (Christenson 2007). Unlike oral-historical societies of the Northern Gulf Coast, middle and late Formative period writing systems, however challenging to interpret (see Carrasco and Englehardt 2015), allow scholars to decipher and postulate the significance of specific concepts and ideas, like maize and thrones, during the Olmec Era (Pohl et al. 2002; Taube 1996). In contrast to the Northern Gulf Coast, we derive particular importance from the presence of early motifs depicting maize and the development of agriculture in Mesoamerica well before the development of monumentality. For the Olmec, the Formative culture of Mexico before the Maya, Mexica, and Toltecs (cf. Diehl and Coe 1996; Flannery and Marcus 2000), maize was part of a complex system of belief and ritual, and it created the integrating mechanisms by which complex social arrangements developed. Herein, Formative is meant to describe the development of an early and complex culture that, while certainly notable, did have contemporaries who were also engaged in similarly complex phenomena (like at San Jose Mogote or Paso de la Amada, for example; Clark 2004, Flannery and Marcus 2015). While it is possible that full-scale agriculture was not the norm among the Olmec, it was certainly important, and its domestication is attested in the region as early as 5300 BC (Pohl et al. 2007).

Indigenous peoples of the Southeastern United States and the Northern Gulf Coast spoke a variety of languages at the time of European contact; Muskogean languages were the most dominant, however, larger groupings including Siouan languages like Biloxi/Ofo, and isolates like Mabilian, Atakapa, Natchez, and Chitimacha (Hopkins n.d.; Scancarelli and Hardy 2005). Most interestingly, historical linguists have proposed, based on a comparison of 91 lexical sets from the Chitimacha language to words from Southern Gulf Coast languages (Proto-Totozoquean) that both Chitimacha and Mixe-Zoquean speakers shared a common ancestral language (Brown et al. 2014). What is most compelling is that speakers of both languages shared roots for words pertaining to maize agriculture, including terms related to maize, shelled and leached corn, lime, and cornfield (Brown et al. 2014:465). We find this particularly compelling because of the importance attributed to corn in Mesoamerica, especially as it was an important domesticate well before the rise of complex cities, towns, and monuments. Meanwhile, monumental towns along the Northern Gulf Coast were almost all exclusively built by hunting/gathering/foraging societies until about AD 1200. Nevertheless, corn did become a significant component of Mississippian diets after the rise of large-scale permanent settlements like Cahokia (Pauketat 2004). Some have even suggested that *nixtamalization*, how corn is cooked in lye, was also part of indigenous cultural foodways in the American Southeast (Briggs 2015). Brown and colleagues (2014) suggest that Chitimacha speakers and Totozoquean speakers shared an ancestral Mesoamerican homeland at some point at least 1200 to 1500 years ago – this would need to be demonstrated genetically or archaeologically, but their hypothesis does

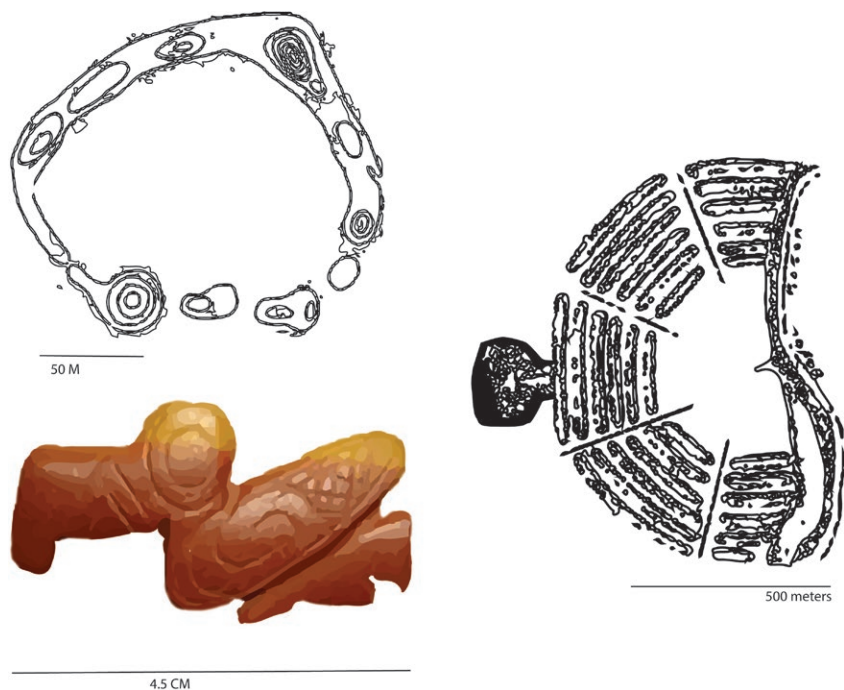


Figure 1. Monumental Architecture Along the Northern Gulf Coast of Mexico. Top left, Watson Brake. Bottom left, Poverty Point Culture Spoonbill bird effigy bead. Right, the UNESCO World Heritage Poverty Point site.

present some interesting linguistic similarities between two largely disparate and distant regions. This is not to fuel any pseudo-archaeological claims that the Maya or their ancestors/descendants founded Southeastern United States Mississippian mound building cultures. Instead, we aim to show basic similarities between regions and to posit why and how human societies seek solutions to fundamental environmental and cultural challenges.

Herein, we first review culture history along the Northern Gulf Coast, with particular attention to the Lower Mississippi Valley and the Mississippi River Delta, and then we review culture history along the Southern Gulf Coast, focusing on the Olmec heartlands. After this review, we present a synthesis describing commonalities and differences between the two regions, concluding with some thoughts on cross-cultural comparison and what novel data can be deciphered from the study of these two regions. Our experiences in these two regions, the phenomenology of travelling through ancient lands linked by a body of water, set the stage for this analysis and interpretation. Our experiences preclude our investigation; what is clear is that streams, floods, and bodies of water, as well as unique physical geographies, and oral traditions played a significant role in how indigenous communities interacted with their world. Recognizing the disparate histories and traditions of the northern and southern Gulf, we employ phenomenology and our experience of place as a tool to interpret similarities and differences between these two regions.

Northern Gulf Coast of Mexico

The earliest known monuments in North America were built by hunter-gatherers in coastal and central Louisiana and along the St. Johns in northeastern Florida – both regions were crucibles of complexity in North America and figure significantly in long-term histories of indigenous landscape modification (Figure 1 and Figure 2). In these wet and watery places, they constructed land out of earth and shell and created novel environments for biodiverse ecological communities. First, we review this history in Louisiana and then in northeastern Florida.

Louisiana

Nowhere is this more evident than at the recently categorized UNESCO World Heritage site of Poverty Point, located today in Epps, Louisiana (Gibson 2007; Greenlee 2015). The Poverty Point

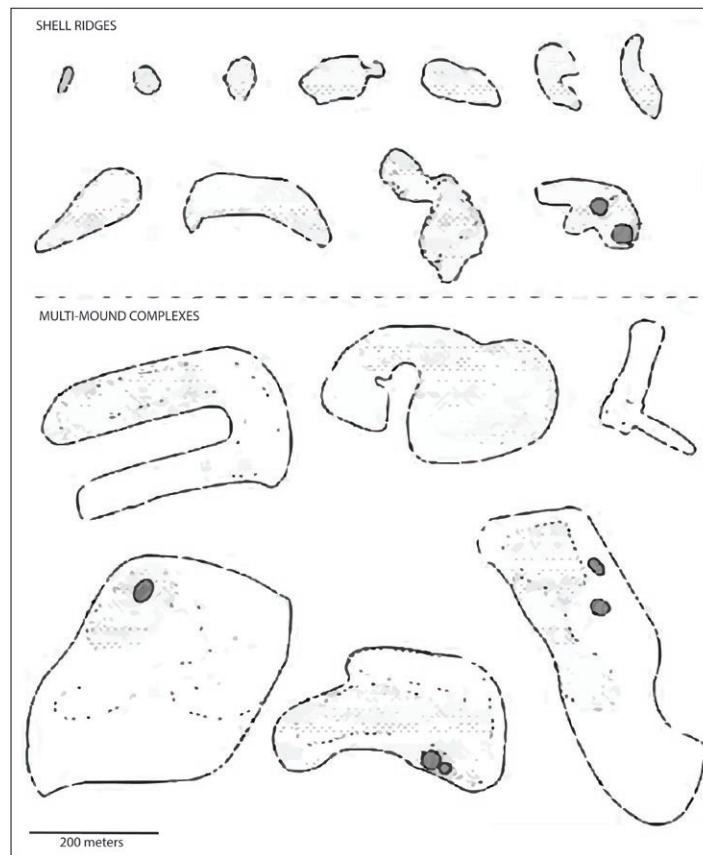


Figure 2. Morphology of Archaic Mounds in the St Johns River Valley (adapted from Randall 2013).

site, constructed between 1600 and 700 BC, has evidence of a large 30 m tall mound, several small mounds, and six arcuate-shaped rings that span 1.2 km. It is not the earliest monumental site in the region. That honor belongs to the Watson Brake site, a circular ring of earthen mounds dating to around 3500 BC (Saunders et al. 1994; Saunders et al. 2005), but Poverty Point is certainly one of the most impressive. Over a span of 5500 years, monument construction in the form of earthen and shell mounds remained a salient component of lifeways in the Lower Mississippi Valley and coastal Louisiana. By the time that agriculture and the monument building tradition gained prominence in the Central Mississippi Valley, ca. AD 1000, Coles Creek and Plaquemine cultures were still engaged in hunter-gatherer-fisher lifeways along the Gulf Coast and deltaic lobes of the Mississippi River (Rees 2010). Plaquemine cultures are most clearly identified by earthen mounds, grog-tempered ceramics, bone tools, and occasional stemmed lithic projectile points (Brain 1989; Kidder 1998; Neuman 1984; Rees 2010; Rees and Livingood 2007). Unlike Mississippian cultures to the north at Cahokia, to the east at Moundville, and elsewhere (Knight and Steponaitis 1998; Pauketat 2004), scholars suggest Plaquemine societies may not have exhibited strong social hierarchies and were largely independent and insular without extensive trading networks, and that by the beginning of the historic period, Mississippians and Plaquemine people had sufficiently mixed and hybridized (Rees 2010:190-192). In the most recently formed regions of the river delta, the Lafourche subdelta and the Plaquemines subdelta, the culture histories of Coles Creek, Plaquemine, and Mississippian societies is most relevant in this paper, as they flourished over the past two millennia (see Frazier 1967; McIntire 1958; Mehta and Chamberlain 2019; Törnqvist et al. 1996:1694).

Settlement pattern studies indicate that complex societies inhabited the Mississippi River Delta region for thousands of years (Gibson and Carr 2004; Kidder 1998; Rodning and Mehta 2016, 2019), and while scholars have focused on social hierarchies, site size relationships, ceramic chronologies, and cultural models of these coastal peoples (Davis 1984; Giardino 1984; Quimby 1951, 1957; Schilling 2004), few have directly emphasized the sustainability and resilience of indigenous lifeways in the region (see Rodning and Mehta 2016) and the moments in time when ecological tipping points were reached and settlement became unsustainable.

Let us consider the Chitimacha story published by Katharine Judson about how the world was made. Judson was a professor of history at the University of Washington and compiled several collections of Native American stories early in the 20th century. Her re-telling of the world building story as told to her by indigenous informants is as follows:

When the Earth was first made, the Creator of All Things placed it under water. The fish were first created. But when the Creator wanted to make men, there was no dry land. Therefore, Crawfish was sent down to bring up a little earth. He brought up mud in his claws. Immediately it spread out and the earth appeared above the waters. Then the Great Mystery made men. He made the Chitimachas... The mounds in the Chitimacha country are the camping places of the spirit sent down by the Creator to visit the Indians (Judson 1914:5-7).

Salient points from the Chitimacha creation story are numbered below:

- 1) Animals exist before humanity.
- 2) Water exists before humanity.
- 3) Land is made before humanity, from mud pulled out of primordial waters.
- 4) Only after land is made by a member of the animal world (earth diver), does the Great Mystery make humans (in the form of Chitimachas).
- 5) Land is made in the form of mounds, which are spiritual places (camping places of the Spirit).

Florida

One key point in the cosmogonic myth presented above is that wet conditions and water environments are key components to early monument building in the southeastern United States. The Chitimacha myth is simply a local version of a much more prevalent and significant Earth Diver mythology permeating the many nations and communities of the Southeast. Descendant communities like the Apalachee, Miccosukee, and Timucua shared stories about Earth Diver, and archaeologists have invoked elements of Native cosmology to hypothesize and explain how world renewal and construction was structured by both mythical and real animals at mound and monumental sites in northern Florida, the homeland of these descendant groups (Goodwin et al. 2019; Sassaman and Heckenberger 2004).

In northeastern Florida, and in particular along the St. Johns River valley, shell mound and shell ring building cultures constructed anthropogenic landscapes that date to as early as 5300 BC (Randall et al. 2014:25). Often referred to as Mount Taylor and/or Orange-period cultures, these societies extensively harvested riverine shell-fish, imported oceanic shell-fish, and mined older mounds and middens to reuse shell for newer construction efforts (Randall et al. 2014:21). At the Shell Mound site in Levy County, Florida, located along the Gulf Coast, archaeologists have hypothesized that ritual bird bone paraphernalia found in the mound constituted the remains of a ritual offering representing world renewal (Goodwin et al. 2019:14). This site is just one among many, most often found in wet and watery environment where water birds, shellfish, and crawfish can be found in abundance. Ken Sassaman and colleagues (2020) have proposed that monumental sites and ritual infrastructure is often constructed in places of ritual and cosmological significance, and we think this is a compelling point supported by the widespread use of, and commonalities in, Earth Diver mytho-praxis across the Southeastern United States (see Lankford 2011). In Florida, as in Louisiana, the building of earthen and shell monuments is a practice tied to wet and watery places by societies who did not practice agriculture.

Southern Gulf Coast of Mexico

The starting point for Formative complexity along the Southern Gulf Coast is the beginning of maize cultivation during the preceding Archaic period (Piperno and Smith 2012). Unlike the northern Gulf, cultivation and reliance on maize precedes village life and monumentality by thousands of years. In Mesoamerica, maize (along with squash, beans, and chili peppers) is domesticated first

at around 6700 BC in the Balsas River lowlands (Piperno et al. 2009; Piperno and Smith 2012:154), but monumental sites do not come online until ca. 1500 BC at San Jose Mogote in the Valley of Oaxaca and at San Lorenzo, La Venta, and Tres Zapotes (Pool 2012:173). These villages arise in alluvial, swampy floodplains near volcanic and mountainous ecosystems abutting gulf mangroves and marshes. While San Lorenzo is characterized by an enormous earthen platform, residential buildings, ceremonial complexes, and massive sculptural heads depicting leaders, the subsequently occupied site of La Venta has the first monumental earthen pyramid in Mesoamerica. Perhaps (and most likely) it is a coincidence that the pyramid at La Venta is 34 m tall, which is approximately the same height as the big earthen pyramid/mound at Poverty Point – yet one cannot help but wonder about some greater superorganic similarities between distant cultures. Novel and exciting discoveries by Takeshi Inomata and colleagues working in the southern Maya Lowlands have discovered contemporaneous monumental sites with La Venta, along with enormous earthen platforms almost as old as San Lorenzo (Inomata et al. 2018; Zorich 2019). Future publications will soon shed light on these issues, most importantly, the issue of Formative period monumental architecture and complexity in southern Mesoamerica world. Nevertheless, at this point we recognize La Venta for its characteristic features, including notable, spectacular, and ostentatious displays of wealth in the form of caches of jade celts, figurines, and hematite mirrors, as well as expansive mosaics of serpentine blocks that were purposely buried after they were made. Four monumental heads and seven basalt altars have also been found at La Venta, suggesting the importance of individual rulers, power, and leadership more broadly.

Tres Zapotes is the third and final major Olmec center and is located in an ecotone between the Tuxtla Mountains and swampy lowlands near the Papaloapan River Delta. Unlike processes of abandonment at La Venta and San Lorenzo, Tres Zapotes remained occupied past the Olmec decline, and was later occupied by post-Olmec cultures (Pool and Loughlin 2015). Two monumental heads were found at the site and they are smaller and less elaborate than the monumental heads at San Lorenzo. Recently, scholars have started to question direct relationships between agriculture and Olmec social and political development (Arnold 2012:193). As Chris Pool (2012) stipulated, societies with varying levels of commitment to agriculture first developed inequalities and hierarchical relationships along the southern Gulf through their own increasingly unequal social arrangements, that slowly became codified as competition for resources, land, and access to waterways became increasingly delimited (Cyphers 1996; Grove 1994; Pool 2012).

Since we considered indigenous mythology and world formation for the Northern Gulf, we also address it for the Southern Gulf. In this case, the colonial era document commonly known as the Popol Vuh is particularly relevant. Given that much of Mesoamerican textual history was destroyed as a consequence of the Spanish invasion, scholars have had to reply upon epigraphic and pictorial evidence from Mesoamerican societies to recover worldviews and belief systems. Yet, some of these stories survived over centuries and were recorded in the Popol Vuh, a sixteenth century colonial K'iche' document. The Popol Vuh is valuable here because it describes the world formation and the structuring of the cosmos, much like the oral histories from the Southeastern United States. A full retelling of the cosmogenesis section of the Popol Vuh is too long to recount here (Christenson 2007; Tedlock 1996) but salient points from the Popol Vuh creation story are enumerated below:

- 1) Animals exist before humanity.
- 2) Water exists before humanity and humanity is first made from mud and then wood.
- 3) Hero twins, Hunahpu and Xbalanque, undergo an epic quest, ultimately becoming the sun and moon.
- 4) Only after the world exists with both sun and moon are Men finally made from maize. Women are made second.
- 5) The primary goal is to reincarnate their Father, thus bringing maize cultivation to humankind.
- 6) There are four creation cycles.

Discussion and Conclusion

From early Boasian culture area approaches on the distributions of mythic forms (Boas 1916) to later structuralist and semiotic approaches (Barthes 2013 [1957]; Lévi-Strauss 1955; Turner 1995), anthropologists have identified ways in which myths have impacted societies across the world. Recently, scholars have identified the ways in which myths and oral histories embed ecological knowledge (Kimmerer 2013). Following Jeffrey Quilter's "Pre-Columbian world perspective" (2006:12), we first look to elements from published accounts of earth diver stories and the Popol Vuh to draw broad generalizations on monumental societies in both regions and then look to monumentality as a point of comparison.

Before comparing myths and oral histories, we first draw upon our own experiences visiting these sites and employ a phenomenological interpretation. It is fascinating how similar lowland portions of the Olmec coast are to coastal Louisiana and Florida, but perhaps all coastal regions bear some similarities. It was mainly in the grasses, insects, heat, and waterways where we found most of the shared experiences along the Gulf. One wonders, however fleeting interactions may have been, the ways in which communities across the Gulf recognized similar lowland environments. However, we also note, and with thanks to our reviewers for also recognizing this, that much of the American Southeast along the Gulf is fairly uniform and without significant topographic variation. While north-south running river valleys, like the Mississippi, Pearl, Mobile-Tensaw, and Chattahoochee, divide the Gulf-coastal plain, they do not create fundamental divisions and/or demarcations the way that mountains, valleys, and floodplains divide the southern Gulf coast. We therefore posit that major physiographic differences between lowland-highland environments along the southern Gulf must account for social and cultural differences in this region, as opposed to the northern Gulf, which has far more physiographic uniformity. Consequently, we must consider the unique effects of an individual society's relationship to water, floodplains, and mountains, and in particular, variations in local topography, environment, and hydrology.

We think it critically important that in stories from both sides of the Gulf, primordial waters and the animal world exist before humanity. This is particularly fascinating in light of Western canonical thought as codified in Genesis I, in which water is separated from the sky first, then



plants and animals are made, and only then is mankind created. An appealing inquiry might look at underlying structural elements of world generation myths the world over. In the Popol Vuh, the Hero Twins descend into the underworld, Xibalba, on an epic quest, ultimately leading to the structuring of the universe. The Chitimacha story, on the other hand, has crawfish, an unnamed world builder, diving into the underworld to find mud from which to create land with. Both also share a fascinating connection in that the world needs to be ordered first before humanity (men and women, in that order) can be made. Finally, we find it compelling that in the Popol Vuh, the successful making of humanity is one of maize, the fundamental Mesoamerican staple crop that was enshrined in importance in early Olmec, and in subsequent Maya writing and iconography.

In evaluating monumentality between these regions, we do not think it reasonable to compare volume, size, and scale due to differences in the raw materials from which monuments and public buildings were made. Most critically, both regions have unique histories and cultural trajectories that make comparison challenging. The thermodynamics and energetics of moving sediment is fairly different from mining, carving, and emplacing large megalithic stones (Trigger 1990). Instead, what stands out most distinctly along the northern Gulf Coast is that monument building precedes village life and agriculture. Along the Southern Gulf, complex social arrangements and monuments first develop millennia after village life and corn farming. Chronologically, Poverty Point and San Lorenzo develop within just a few centuries of one another, but their pathways to complexity are quite distinct. Once monumentality develops along the Southern Gulf, it continues unabated through the rise of Maya, Zoque, and related cultures, all supported by fairly intensive agricultural regimes. In the Southeastern United States, places like Watson Brake and Poverty Point rise and fall, followed by numerous other cultures like Tchefuncte, Orange, Mount Taylor, Coles Creek, Plaquemine, and Mississippian, but it is only the final and last cultural complex that begins to employ domesticated maize agriculture as a significant staple component of diet.

In summary, we do find some fascinatingly shared features between these two regions, most importantly shared fundamental traits on the mythological and cosmological ordering of the universe. Additionally, both regions are landscapes of abundance; low-lying swampy regions define both the Olmec and Mississippi River Delta region (see also Reilly 1994). Watery places and water underworlds are significant in the myth-praxis of both regions and perhaps this might be tied to some ancestral linkage, as Brown et al. (2014) suggest for a shared language history. However, there is far more physiographic delimitation and demarcation along the Southern Gulf. Certainly, the Northern Gulf is unique in that monumentality and complexity ebb and flow across time and how little these developments rely upon village life and/or agriculture. Conversely, once the Southern Gulf starts on the path of monumental complexity, this continues through the Maya period. Much of this development was likely catalyzed by innovations in maize cultivation and full-scale agriculture, although in abundant and fecund environments, agriculture can also catalyze the growth and development of non-domesticated edible plants (see Piperno et al. 2017). Finally, rulership and depictions of leadership seem to be the greatest dividing line between the Northern and Southern Gulf during what we call the Formative period. While monumental Olmec art make it abundantly clear that powerful individuals were critical to Olmec social organization, early monumental architecture in Mississippi and Louisiana seems to emerge, both figuratively and literally, out of the proverbial swamp (see also Kidder 2010; Knight 1986, 2006; Sassaman and Heckenberger 2004). With only

small figurative and abstract lapidary art and monumental architecture to guide us, leadership and power along the Northern Gulf are far more enigmatic than along the southern Gulf.

Acknowledgements

Maxime Lamoureux St-Hilaire deserves significant recognition here, for encouraging us to submit this work to *The Mayanist*, and for being an excellent colleague and friend. AFAR and their conference, Maya the Playa (an amazing venue to develop this paper), also deserve recognition. We also recognize the following, in no particular order: Marcello Canuto and the Middle American Research Institute, Tatsuya Murakami and Chris Rodning and Tulane University, Tanya Peres, Jessi Halligan, and Tom Leppard, Florida State University.

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