VIOLENCE, ENVIRONMENTAL CRISIS, AND HUMAN SACRIFICE AMONG THE MOCHE CULTURE

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by

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ABSTRACT

Violence, Environmental Crisis, and Human Sacrifice Among the Moche Culture

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Literature Review

The essence and comprehension of Moche's political and social organization have changed throughout the decades of extensive archaeological research and interpretation. Rafael Larco Hoyle (1938, 1939), one of the pioneering Peruvian archaeologists, was able to distinguish the Moche culture from the later, well documented, Chimú culture by developing a five-stage chronology through analysis and interpretation of Moche art style and ceramic vessels (Trever 2017). Furthermore, extensive and immense adobe temples, pyramids, and palaces suggest the Moche were a highly stratified political and religious hierarchy that expanded their range of influence through militaristic behavior as a state-like society (Alva and Donnan 1993; Bawden 1996). However, several scholars have debated Moche's sociopolitical organization and provided several theories and interpretations. Sutter and Cortez (2005), Sutter and Verano (2007), Toyne, et al. (2014) address these theories in their literature, which will I will discuss in the following.

Rafael Larco Hoyle (1938, 1939) and other academics propose that the Moche were a sole centralized civilization led by political and religious rulers from Huacas de Moche located by Cerro Blanco in the Moche river valley (Bawden 1996; Mosely 2001; Shimada 1994). Additional theories suggest that the Moche, rather than a state society, were a collection of

culturally similar conflicting polities throughout the North Coast (Verano 2001b). Others have also suggested that each valley was a self-reliant chieftain society (Castillo Butters and Quilter 2010), whereas it also has been argued that each valley was politically autonomous but then became connected throughout the years by a nexus of common Moche political and religious ideology and material culture (Castillo and Uceda 2008). It is widely acknowledged by scholars, that there was a separation of two spheres of northern and southern Moche influence: the north typically "characterized as a loose confederation of culturally similar polities" (Sutter and Verano 2007:193) and the south characterized as a militaristic and expansionist state society (Billman 1999; Shimada 1994; Wilson 1988). Understanding Moche's sociopolitical structure will provide further insight into the Moche elites' motives for human sacrifice and warfare.

The purpose of Moche warfare and human sacrifice as depicted on iconography and archaeological evidence continues to be another topic of debate amongst scholars. Sutter and Cortez (2005) addressed three competing models, largely derived from ethnohistoric analogies and iconographic interpretation that potentially offer clarification for Moche human sacrifice. Model A offers an explanation that the Moche performed staged ritual one-on-one combat amongst the local elite within their society (Alva and Donnan 1994; Bourget 2001). Model B proposes combat with non-Moche polities through traditional militaristic state expansion (Lau 2004; Proulx 1982; Wilson 1988: 66). This model parallels with Model C but only focuses on non-Moche polities (e.g., Recuay, and Gallinazo cultures). Model C posits the Moche were engaging in religious or secular warfare with conflicting independent Moche polities in neighboring valleys (Schaedel 1972; Sutter and Cortez 2005; Verano 2001a, b, c). This research is a thorough examination of Model C. Furthermore, placing Model C in the greater context of

the Moche's social-political organization will support the proposed model of two separate spheres of northern and southern Moche influence.

In several studies, the use of mortuary samples gathered from Moche archaeological sites provides further insight into the origin of sacrificial victims by determining the biological analysis of biodistance and oxygen isotope compositions of dental samples gathered from skeletal remains of sacrificed and non-sacrificed individuals (Sutter and Cortez 2005; Sutter and Verano 2007; Toyne et al. 2014). Their research allowed these scholars to determine the origins of the Moche sacrificial victims at Huaca de la Luna and apply them to the competing models discussed in Sutter and Cortez (2005), which their research and results will be further discussed later in the paper.

Thesis Statement

Through review of relevant literature, iconographic interpretation, ethnohistoric analogies, and archaeological and osteological analysis, this research reveals how the Moche elite and priests utilized human sacrifice to affirm and advance their religious and political polities to maintain order over internal and neighboring rival polities.

Theoretical Framework

This research will re-evaluate theories proposed by previous scholars and analyze multiple events of Moche human sacrifice during periods of warfare, religious ceremonies, and responses to natural disasters. Additionally, this research will examine Moche mortuary patterns, iconography, archaeology and the osteological analysis of skeletal remains of human sacrificial victims through an ontological approach that deconstructs Moche iconography and an archeological examination of their physical remains.

Project Description

The purpose of this project is to analyze and reflect upon the relation of human sacrifice and violence among the archaic Moche culture through the examination of relevant literature, Moche iconography, Moche mortuary patterns, and the archaeological record. Additionally, this project will also review multiple events of human sacrifice during periods of warfare, religious ceremonies, and responses to environmental crises to determine if there is any correlation for the existence of human sacrifice between Moche polities. To provide further context of Moche archaeological sites, this project will mainly focus on Moche power centers such as Huacas de Moche. Furthermore, this study will build upon previous research conducted by Moche and Andean scholars. Understanding the role of human sacrifice in Moche civilization is directly related to understanding human sacrifice as a whole. Human sacrifice was also seen in later, well-documented societies, such as the Chimú and Inca cultures. However, this religious practice did not originate with either of these societies but has a larger cultural significance in the history of Peru. The expected outcome of this research is to reveal that the Moche elite and priests used human sacrifice to advance their sociopolitical and religious ideologies.

DEDICATION

I dedicate this work to the individuals who study and reconstruct the narrative of archaic cultures, and the violent and sanguineous tradition they practiced, human sacrifice.

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INTRODUCTION

Before this research dives into the world of the Moche, some context of their culture will be explored. The Moche, also known as the Mochica, was named after the Moche river valley in the North Coast of Peru. Unfortunately, a written record used by the Moche remains nonexistent. In order to fully grasp the mere identity of the Moche, archaeology and anthropology provide a better understanding and interpretation of the Moche culture through analysis of material remains, features, and iconography. The Moche dominated the majority of the North Coast of ancient Peru during the Early Intermediate Period (200-850) of the Common Era (CE) (Castillo and Uceda 2008; Trever 2017). Their influence and material culture ranges to the far north Piura Valley and as far south as the Huarmey Valley (Benson 2012; Trever 2017).

The Moche utilized the vast knowledge of craftsmanship, sociopolitical structure, and technology from pioneering Peruvian cultures to make them culturally distinct from the pre-Columbian world (Alva and Donnan 1993; Castillo and Uceda 2008). Although they lived in an arid coastal environment, the Moche thrived by incorporating maritime resources and advanced agriculture through a system of irrigation canals by channeling rivers from the Andes to cultivate and augment agriculture potential (Alva and Donnan 1993; Castillo and Uceda 2008). Their diet consisted of a variety of native crops, domesticated terrestrial animals, and aquatic game. Not only were they specialists in sophisticated metallurgy, textiles, and ceramics; they were also able to construct astonishing adobe temples, pyramids, and palaces known as *huacas* (Alva and Donnan 1993).

The term *huaca* was derived from the ancient Incan language, Quechua, often embodying a revered object, a natural and sacred location, or a supernatural entity or being (Benson 2012).

Today, huacas are commonly associated with archaic mud-brick structures and complexes that could evoke ceremonial, religious, and hierarchical value. Huacas were erected and further developed from previous structures and were utilized as Moche urban and power centers, such as Huaca Dos Cabezas, Huacas de Moche, and Pañamarca (Trever 2017). These major power centers discovered throughout the northern coastal valleys of Peru "seem to have had distinct specialties of craft production and areas of artistic achievement, as well as local styles" (Trever 2017: 5). The study of Moche power centers by Moche scholars is crucial to perceiving and constructing the identity of the Moche culture.

To the untrained eye, several Moche ruins resemble large "sand-colored" mounds camouflaged throughout the Peruvian desert (Benson 2012: 37). These once vigorous and populated sites formerly left behind by the Moche are now buried beneath the layers of eolian sediment, patiently waiting to be unearthed and breathe life once again. Excavating these archaeological sites can prove to be a challenging task due to the erosion of the adobe constructions by torrential El Niño flooding and the constant encroaching sand dunes (Benson 2012). However, if fortunate, "[t]he combination of coastal aridity and ancient architectural practice of encasing older temples within new adobe construction has led," to the occasional preservation of extravagant elite tombs, grave goods, material culture, and elaborately painted murals along the adobe walls (Trever 2017: 5).

Moche grave goods and rich iconographic ceramic vessels were highly sought after by *huaqueros* (looters) (Benson 2012: 5). Ceramic vessels, in particular, stirrup-spout vessels looted from the southern Moche and Chicama Valleys were recovered and then placed into private collections. The study of these ceramic vessels allowed Larco Hoyle (1948) to develop a ceramic sequence into a chronological five-stage order, Moche I-V or Phase I-V, due to the variation of

ceramic art and technical changes; though it has been adjusted over time, it is still broadly applied (Benson 2012; Sutter and Cortez, 2005: 522). This sequence reflects the progression of Moche style and motifs in the southern valleys while also reflecting changes in Moche sociopolitical and religious ideologies (Benson 2003, 2012). As the study of the Moche culture advances, the Larco sequence soon followed. Modern dating methods and cognizance of Moche occupation and material culture in the northern valleys was limited when Larco Hoyle developed his sequence, although he was aware of his limitations (Benson 2012). Shortly before his death in 1966, a new wave of understanding the Moche presence and ceramics in the northern Piura Valley began to wash over (Castillo and Uceda 2008). Larco Hoyle's sequence needed to be altered due to certain Moche phases appearing earlier and lasting longer in several Moche sites (Benson 2012; Castillo and Uceda 2008). In order to apply the sequence to the northern valleys; the Moche were then divided into three separate phases: "Early Moche (southern Phases I and II), Middle Moche (southern III and early IV), and Late Moche (southern late IV and V)" (Benson 2012: 7-8; see Castillo and Uceda 2008: 711 Figure 36.2).

The study of Moche ceramics by Larco Hoyle (1938, 1939, 1948) and other scholars paved the way to understanding Moche sociopolitical and religious ideologies (Castillo and Uceda 2008; Donnan 2001; Donnan and McClelland 1999). In Chapter I, I discuss and reflect upon the rise and fall of the Moche's sociopolitical structure and organization through review of relevant literature. In this chapter, I explore the two separate spheres of Moche influence, social power, and social hierarchy. Archaeological site reports at major Moche power centers provide further knowledge to the extent of Moche rule within their respective valleys. Furthermore, discussing Moche violence and warfare is pivotal to understanding their motives through militaristic expansion in the southern valleys, which I will also discuss in Chapters II and III.

Within Chapter I and III, I also explore the effects of environmental crisis and natural disasters within the North Coast of Peru, such as El Niño/Southern Oscillation (ENSO) and encroaching sand dunes, and how it affected the Moche.

Chapter II will revolve around Moche iconography depicted on fineline ceramic vessels and adobe murals. I analyze and interpret the various themes of warfare, violence, religious ceremonies, human sacrifice, supernatural and mythological figures commonly found in Moche iconography. Donna McClelland redrew the majority, if not all, of the iconographic scenes on fineline ceramic vessels I analyzed. One particular recurring theme I discuss in great detail is the Sacrifice Ceremony, an important religious and ceremonial practice of warrior capture and human sacrifice conducted by the Moche elite and priests (Donnan 1975, 2010; Trever 2017). Through analysis and interpretation, I apply the usage of iconography in the grander scale of Moche sociopolitical and religious ideologies and human sacrifice.

In Chapter III, I focus on Moche human sacrifice found in the archaeological record. Human sacrifice was undoubtedly a common and highly-regarded ritual practice among the Moche. Within this chapter, I evaluate Moche mortuary patterns and compare them to the human sacrificial victims found at major Moche power centers, while also discussing the osteological analysis of the sacrificial victims. Additionally, I address the three competing models regarding the purpose of Moche human sacrifice mentioned in Sutter and Cortez (2005). Moreover, I review multiple events of human sacrifice during periods of warfare, religious ceremonies, and responses to environmental crises.

CHAPTER I

MOCHE SOCIOPOLITICAL STRUCTURE

The Sources of Moche Sociopolitical Structure and Social Power

Theoretical explanations and interpretations of Moche sociopolitical structure ultimately remain a vigorous topic of debate among Moche scholars. As mentioned before, the Moche was initially associated as one of the first emerging state-level societies in South America; however, this claim has proven to be recently controversial and contested. Neo-evolutionary models that have been utilized to conceptualize the Moche as a state society was debated and critiqued by Quilter and Koons (2012). Furthermore, theoretical explanations of Moche sociopolitical structure has been used to develop previous notions of Moche society (see Literature Review). Undoubtedly, the Moche exemplified a highly stratified and elitist society. However, conceptualizing the Moche as a single state, and arguably chiefdoms, reflects an outmoded approach and misconception of the Moche (Chapdelaine 2011).

Providing one's own definitions or labels for each Moche sociopolitical organization can prove to be a challenging task, as any scholar can craft a definition to conform to their data (Quilter and Koons 2012: 136). Millaire (2008) explains the anthropological definition of a chiefdom society as a "complex form of sociopolitical organization in which social relations are mainly based on kinship, marriage, age and gender," which the chieftains and their kin assume authority over the "administration of the people and the land" (230). Defining the Moche as a chiefdom is no longer viable due to the intricacy of the economic and political institutions the Moche polities employed (Millaire 2008: 230). Spencer and Redmond (2004: 175) listed a three diagnostic criteria for identifying a statehood society: (a) the appearance of a four-tier regional

settlement-size hierarchy; (b) the presence of royal palaces and specialized temples; and (c) the conquest/subjugation of distant territories. While the Moche may evoke the criteria addressed by Spencer and Redmond (2004); claims for Moche statehood, or at least a multi-valley expansive Moche state, has been further reevaluated and critiqued by Quilter and Koons (2012). Instead, they posit that the Moche, rather than an organized religious system that empowered the emergence and evolution of a state society, the "Moche was a religious system that realigned the political economies and social relations of North Coast societies" (Quilter and Koons 2012: 138). Although a commonly accepted definition or title for Moche sociopolitical structure continues to evolve; conceptions of diversity among Moche polities has peaked an area of interest and research, albeit this sociopolitical diversity is linked by a cultural unity (Chapdelaine 2011). The utilization and reliance of religion prove to be pivotal for the cultural integration among the Moche that can is seen throughout time and across the valleys of Moche occupation and influence (Chapdelaine 2011; Donnan 2010).

Examining the sources of power the Moche polities utilized helps provide a better understanding of Moche society. The four sources of power, identified by Mann (1986), are Economic, Political, Military, and Ideology. Castillo and Uceda (2008) state "it is apparent that for the [Moche's] power was configured strategies that combined different sources depending on circumstances, historical backgrounds, traditions and resources" (715). The Moche elites utilized coercion, ideology, sociopolitical, and economic factors to affirm and legitimize their position within their societal structure (Castillo and Uceda 2008). Although the Moche exploited all sources of power, the utilization and materialization of ideology are the most prevalent (Castillo and Uceda 2008; Demmarais et al. 1996). As evident in the archaeological record, the Moche heavily invested in resources to construct and maintain power centers (e.g., Huacas de Moche,

Huaca Dos Cabezas, Sipán), which often incorporated rituals and ceremonies. Moreover, the Moche employed the extensive production of ritual artifacts through metallurgy, textiles, and ceramic vessels. The construction of power centers and manufacturing of ritual artifacts allowed the Moche elites to materialize and spread their ideological influence.

As mentioned previously, a common consensus among Moche scholars has led to a wide recognition of two separate spheres of Moche influence: The Northern and Southern Moche (Chapdelaine 2011; Castillo and Donnan 1994; Castillo and Uceda 2008; Shimada 1994; Zobler and Sutter 2016). The 90 km arid desert, Pampa de Paiján, separated the Northern and Southern Moche allowing correspondence to divergent polities (Benson 2012; Castillo and Uceda 2008). The following sections examine the separate spheres of Moche influence and polities in a more in-depth discussion.

The Northern Moche

The region of the Northern Moche influence and material culture in the northern valleys of the North Coast of Peru has been divided into three separate valley systems: 1.) The upper Piura Valley, near the Vicús region; 2.) The lower Lambayeque Valley, and 3.) The lower Jequetepeque Valley (Castillo and Uceda 2008: 718). Moche occupation in the northernmost Piura Valley was "brief yet visible" during the Early Moche phase, and unlike the other Moche occupations along the coast, the Moche of Piura adapted to a "fertile enclave up-valley" (Castillo and Uceda 2008: 718). It has been interpreted that the Moche occupied the Piura Valley as a "commercial colony" in order to access Ecuadorian resources, such as gold and *Spondylus* shells, which have been found in the several Moche sites throughout northern and southern valleys, and depicted in iconography (Castillo and Uceda 2008: 718). Whereas another argument is that the Moche of Piura was a multiethnic society that coexisted in a shared enclave with non-Moche

inhabitants (Castillo and Uceda 2008: 718). Or perhaps the Moche from Piura were Vicús elites that engaged and utilized similar material culture as the Moche (Castillo and Uceda 2008). Nonetheless, the Moche of the Piura valley had culturally drifted from their southern neighbors, possible due to "lost or ceased contact with the southern polities, or failed to impose their cultural canons" (Castillo and Uceda 2008: 719).

Northern Moche occupation in the Lambayeque and Jequetepeque Valleys developed through the Early, Middle, and Moche phases while benefiting from intra-valley interactions and relationships, rather than using inter-valley interactions and relationships (Castillo and Uceda 2008). The implementation of efficient irrigated systems was sought after by the Moche through the incorporation of new territories in the northern and southern valleys; however, the irrigated systems in the Lambayeque and Jequetepeque Valleys never reached their capacity (Castillo and Uceda 2008). Thus, there was no desire or need for inter-valley conflicts over territory and resources, nor was there any evidence of the Northern Moche attempting to challenge the Southern Moche (Castillo and Uceda 2008).

Moche scholars had intensively excavated and researched the Moche power centers of Sipán, also known as Huaca Rajada, and Pampa Grande in the Lambayeque Valley. Sipán, the seat of power for the elites during the Middle Moche phase, contained elaborate elite royal burials interred with retainer sacrifices and highly crafted grave goods. The elites were adorned in religious regalia (see the Sacrifice Ceremony) to participate in ritual roles for religious ceremonies (Alva 2001; Castillo and Uceda 2008). Pampa Grande is one of the largest sites during the Late Moche phase that was rapidly constructed and combined with storage facilities, craft production workshops, living spaces, as well as a ceremonial complex (Castillo and Uceda 2008; Shimada 1994). Pampa Grande was potentially utilized as a "population-reduction

strategy" during a short period before being abandoned at the end of the seventh century (Castillo and Uceda 2008: 720). The frequency of Gallinazo ceramics discovered at this site has led Shimada (1994) to argue that the Moche forced the preceding Gallinazo culture to live at Pampa Grande as forced labor; ultimately erupting in a revolt.

The extensive and intensive research conducted at prominent Moche sites (e.g., Huaca Dos Cabezas, San José de Moro, Pacatnamú) in the Jequetepeque Valley has revealed a better understanding of Moche culture in the northern valleys. Mortuary patterns vary between the Moche of Jequetepeque and Southern Moche, "where rich chamber burials with niches, middle-range boot-shaped shaft tombs, and poor and shallow pit tombs are the typical forms, in contrast to small chamber and pit burials common in the south" (Castillo and Uceda 2008: 720). However, the Moche of Jequetepeque share a common practice of religious ceremonies, in particular the Sacrifice Ceremony, with the Southern Moche (Alva and Donnan 1993). Excavations at the site of San José de Moro revealed female elite burials of high-status interred with grave goods and adorned in religious regalia (see the Sacrifice Ceremony) associated with Moche religious ceremonies (Donnan and Castillo 1992).

Population pressure during the Middle Moche phase at Huaca Dos Cabezas had caused the Moche to expand their territory into developing new irrigation systems, which ultimately developed into autonomous regions that evolved into independent polities as a foundational effect (Castillo and Uceda 2008). As a result, the independent polities had "engaged in factional competition and developed hostile relationships that required self-defense, and thus the construction of defensive sites" (Castillo and Uceda 2008: 721). Although, political integration was practiced among the northern Jequetepeque polities, Moche polities at San José de More engaged in regional ceremonial practices (Castillo and Uceda 2008).

The Southern Moche

The region of the Southern Moche influence and material culture in the southern valleys of the North Coast begins at the Chicama and Moche Valleys (Castillo and Uceda 2008). These two valleys are the region where Larco Hoyle (1948) initially developed his ceramic sequence of the Moche. Larco described the evolution and progression of Moche ceramic ware, as well as other material culture. The heart and seat of the Southern Moche power and influence resided 6 km inland of the Moche river valley at the architectural Cerro Blanco complex, Huacas de Moche (Castillo and Uceda 2008; Sutter and Verano 2007). Further excavations and research conducted within the Urban Sector located between Huaca de la Luna and Huaca del Sol not only confirmed that Huacas de Moche was the "largest ceremonial center in the south but also as a residential, production and civic center" (Castillo and Uceda 2008: 716). In the Chicama Valley, Mocollope and Huaca El Brujo could have potentially been regional capitals dependent on the power center Huacas de Moche (Castillo and Uceda 2008), or as alternative capitals within their respective valley (Franco et al. 2001).

The Southern Moche began expanding their territory into multiple valleys south of the Moche Valley (i.e., Virú, Chao, Santa, and Nepeña Valleys). The lower Santa Valley seemed to have been particularly pursued after by the Moche due to its reliable year-round water supply (Castillo and Uceda 2008). Through their personal communication to Chapdelaine, Castillo and Uceda (2008) explain that the Moche of the Santa Valley's material culture and constructional methods were almost culturally identical to the Moche of the Moche Valley. However, there is limited Moche presence south of the previously mentioned valleys, possibly functioning as commercial posts or as enclaves (Castillo and Uceda 2008). Across the southern valleys, the Moche encountered and interacted with other cultures, such as the Virú culture that eventually

became integrated within the Moche realm. Although the Virú continued the production of their material culture, they began incorporating elements of Moche material culture (Castillo and Uceda 2008).

The expansion campaigns the Southern Moche engaged in ultimately achieved a "high degree of centralization" that evokes a powerful state-like society at Huacas de Moche (Castillo and Uceda 2008: 717). The lords and elites of Huacas de Moche had authority of their territory in the southern valleys "through an administration based on a settlement pattern of subsidiary valley capitals and local centers, through a tight elite control of the territory and centralization of its resources" (Castillo and Uceda 2008: 717). Furthermore, to affirm their power, as well as their sociopolitical and religious ideologies over their territory, the Southern Moche utilized ideology, the practice of religious ceremonies, the debatable ritual combat, and human sacrifice, which will I will further elaborate in Chapters II and III.

Moche Social Hierarchy

The analysis of iconographic representation, mortuary patterns, and domestic contexts has allowed Moche scholars to conceptualize a "complex social organization comprising many divisions and segments, with groups that show a high degree of specialization, sexual and gender differentiation, clustering of individuals of similar status, and qualitative differences between social strata" (Castillo and Uceda 2008: 722). Three distinct Moche classes have been identified: the poor, commoners, and the ruling elite.

The Moche that fell under the poverty social class is noticeably understudied; however, several excavations at Moche sites began to shed light. Castillo and Uceda (2008) explain that the Moche poverty class, especially women and children, at San José de Moro were discarded in pit burials in concurrence with areas of labor production of chichi (maize beer). These burials do

not correspond with the mortuary treatment of the commoners and elite classes. In fact, small children were plentiful in these pit burials, “as if children had not been conferred with the social status of their elders and were always treated as poor” (Castillo and Uceda 2008: 723). A cemetery comprising of 29 children, 28 males, and 27 females of the poverty class at Pacatnamú was discovered by Donnan (1997. The body position and orientation of the remains were more organized than the burials at San José de Moro, and some were even buried in cane coffins; the analysis of the remains and their associations revealed that they had limited and restricted access to resources and goods. Shimada (1994) posits that the poverty class of the Moche could have had close relations to the Gallinazo people, or perhaps the poverty class was enslaved Gallinazo. However, this claim has been disputed due to a better understanding of the Gallinazo as an “underlying cultural tradition” (Castillo and Uceda 2008: 723).

The individuals who fell into the commoners, or middle class, of Moche society contains the largest amount of households and burials with distinct variability. The commoners are typically buried in “boot-shaped shaft tombs in the northern [valleys, and] inside small niche chambers in the southern” valleys (Castillo and Uceda 2008: 722). These individuals can be interred with ceramic vessels that sometimes includes iconographic scenes, few metal objects, and frequent material remains concerning craft production (e.g., textile production for females, or metallurgy for males) (Castillo and Uceda 2008). It appears that the identities of the commoners are intentionally represented by their functional aspect and role within their society (Castillo and Uceda 2008)

The elite ruling class of the Moche consisted of men, women, and even children born from royal lineages. Typically, they were interred in elaborate royal burials within small funerary platforms with high-quality grave goods (Castillo and Uceda 2008). These burials were not only

elaborate and complex, but the elites were adorned with religious regalia and ritual paraphernalia that allowed the elites to enact in religious ceremonies (see the Sacrifice Ceremony). As expected, the elites' household dwellings were much larger than the commoner's. They were constructed with multiple rooms with well-fitted adobe and located within or in connection to temples (Castillo and Uceda 2008). Furthermore, the Moche elites are often represented in portable art (e.g., ceramic portrait vessels or ceramic stirrup spout bottles) and monumental art (e.g., polychrome reliefs or painted murals) as warriors, military commanders, priests, or deities (Castillo and Uceda 2008).

Environmental Crisis: The Collapse of the Moche

The Moche polities throughout the northern and southern valleys collapsed at different times that transpired over three hundred years due to various and combined factors (Castillo and Uceda 2008). During the second half of the sixth century, the Moche endured a thirty year "famine-causing drought," as well as a flood spawned by El Niño events during 556 CE, which would have led to the destruction of the irrigation systems and spreading disease (Benson 2012: 131). The analysis of the ice core records by Shimada et al. (1991) illustrates recurring El Niño events during the end of the sixth century and the first half of the seventh century, with episodes of drought found in between (Benson 2012; Shimada 1994). Eolian and deep alluvial deposits are evident in the archaeological record at many Moche sites, in particular, Huacas de Moche (Bawden 1996; Shimada 1994).

The Southern Moche at Huacas de Moche encountered a perilous El Niño event of torrential flooding during Moche Phase IV, roughly before 600 CE (Benson 2012). The huacas was severely damaged by the flooding and was eventually repaired; however, encroaching sand dunes began to infiltrate and engulf the city (Benson 2012). The stratigraphy of Huaca Cao Viejo

in the Chicama Valley reveals a similar pluvial event and flooding damage which led to the abandonment of the site during Moche Phase IV (Benson 2012). In addition, the encroachment of sand dunes and eolian sediment at Huaca Dos Cabezas in the Jequetepeque Valley resulted in the abandonment of the site around 650 CE (Donnan 2014). Environmental disruptions (i.e., drought, torrential flooding, and encroachment of sand dunes) led to the abandonment of the once irrigated and cultivated land along the coast, forcing the inhabitants to move farther inland (Benson 2012).

Castillo and Uceda (2008) argue that environmental crisis is not the sole factor that caused the demise of the Moche. Another factor they suggested was the "failure of a power strategy based predominantly on the manipulation of materialized expressions of ideology" (Castillo and Uceda 2008). The Moche polities had previously prospered from the success of the ideology power strategy; however, this strategy began to fail during the start of the seventh century (Castillo and Uceda 2008). Ideological influence and materialization were unable to legitimize the social structure of Moche polities; inevitably causing social disruptions and conflicts within their society (Castillo and Uceda 2008).

The fall and the abandonment of Moche tradition ultimately led the inhabitants of the North Coast of Peru to the reconfiguration and development of two noticeable cultures, the Lambayeque culture in the northern valleys and the Chimú culture in the southern valleys (Castillo and Uceda 2008).

CHAPTER II

MOCHE ICONOGRAPHY

Violence and Warfare

Warfare is easily recognizable in Moche iconography, more specifically one-on-one combat such as on ceramic vessels and other archaeological sites. Combat is usually depicted throughout the multiple phases of the Moche but is commonly found on Moche IV ceramics. The interpretation of the combat scene in Figure 1, as well as other scenes representing combat, have been mainly debated in the past and addressed into the three separate models discussed in Sutter and Cortez (2005). The scene below represents a large combat scene among Moche warriors alongside a mountain landscape. Warriors can be seen battling each other and knocking down their enemies with their maces and tying ropes around their necks in order to take their fallen enemies as prisoners. Captured nude prisoners can be seen in the scene below

Figure 1. Rollout drawing of a large combat scene by Donna McClelland. Image Courtesy of the Christopher B. Donnan and Donna McClelland Moche Archive, Image Collections and Fieldwork Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.

Initially, staged ritual one-on-one combat, Model A, was strongly argued by Moche scholars due to the recognition and interpretation of the warrior's apparel and weapons in combat scenes are of Moche in style; emphasizing that the Moche warriors are fighting against other warriors from their population (Alva and Donnan 1994; Bourget 2001; Castillo 2000; Donnan 2004; Hocquenghem 1987; Topic and Topic 1997; Shinoda et al. 2002). The scholars assert that the primary objective of these "ritual battles" was not merely to kill the opponents but to wound and defeat them in battle (Sutter and Cortez 2005). The losers of the battle would then be taken as captives and stripped naked from their regalia; often paraded and lead to a religious power center for a sanguineous sacrifice ceremony. Captured nude prisoners that were paraded and lead by Moche warriors is a common theme found on ceramic vessels and along the walls of Moche power centers, which can is seen in Figure 2. Also, they assert that the Moche's representation of the combat scenes is parallel to the ethnohistoric Andean highland ritual battles known as *tinkus,* which may be used to interpret Moche combat. However, Verano argues that the comparison is problematic and further archeological evidence is not consistent with the tinku ritual battles (2014: 286).

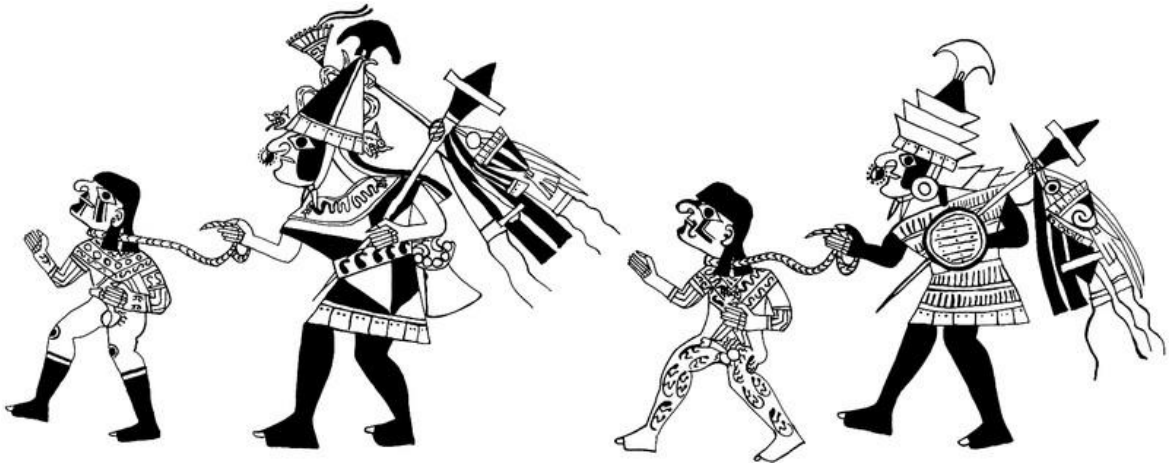

Figure 2. Rollout drawing of warriors leading nude prisoners by a rope by Donna McClelland. Image Courtesy of the Christopher B. Donnan and Donna McClelland Moche Archive, Image Collections and Fieldwork Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.

Model B parallels with Model C, but only focuses on non-Moche polities such as the Nazca, Recuay, and Gallinazo cultures (Lau 2004; Proulx 1982; Wilson 1987: 66). Model B may be reasonably unlikely due to a lack of foreigners represented in these scenes; however, opinions may differ on whether foreigners are depicted in iconography (Lau 2004; Verano 2014). Model C posits the Moche were engaging in religious or secular warfare with Moche polities in neighboring valleys (Kutscher 1955; Schaedel 1972; Verano 2001a, b, c; Sutter and Cortez 2005). Model C can explain the similarities between the Moche combatants depicted in iconography and why one may believe in Model A. It has also been argued that the act of knocking off an opponent's helmet or grabbing the foe's hair, as seen in Figure 3, symbolizes a sign of capture or recognized as a "visual metaphor for a military victory over an enemy or competing polity," which is seen in other cultures (Verano 2014: 286). Furthermore, placing Model C in the greater context of the Moche's sociopolitical organization supports the separate spheres of northern and southern Moche influence.

Figure 3. Rollout drawing of one-on-one combat between two pairs of warriors by Donna McClelland. Image Courtesy of the Christopher B. Donnan and Donna McClelland Moche Archive, Image Collections and Fieldwork Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.

The Sacrifice Ceremony

Religious ceremonies are also depicted in Moche iconography such as ceramic vessels, metalwork, painted murals, and polychrome reliefs. Religious traditions are predominately recognized in Moche III and IV ceramics, just like warfare. The practice of human sacrifices is widely recognized in iconographic scenes of religious ceremonies. The most iconic scene represented in Moche iconography is the Sacrifice Ceremony, or the Presentation Theme, that represents a sanguineous religious ceremony, which is seen in Figure 4 (Donnan 1978, 1988). There are several similar but distinct Sacrifice Ceremony scenes across the Moche iconography. The lower portion of this scene represents two bound captives, whose equipment are right behind them, are having their throats slit by participants who then begin to collect blood in goblets. The upper portion reveals an individual, commonly referred to as the Warrior Priest by Donnan, receiving a goblet that is presumably filled with blood from the Bird Priest. Following the Bird Priest are the Priestess and a Feline Priest who are participating in the ceremony.

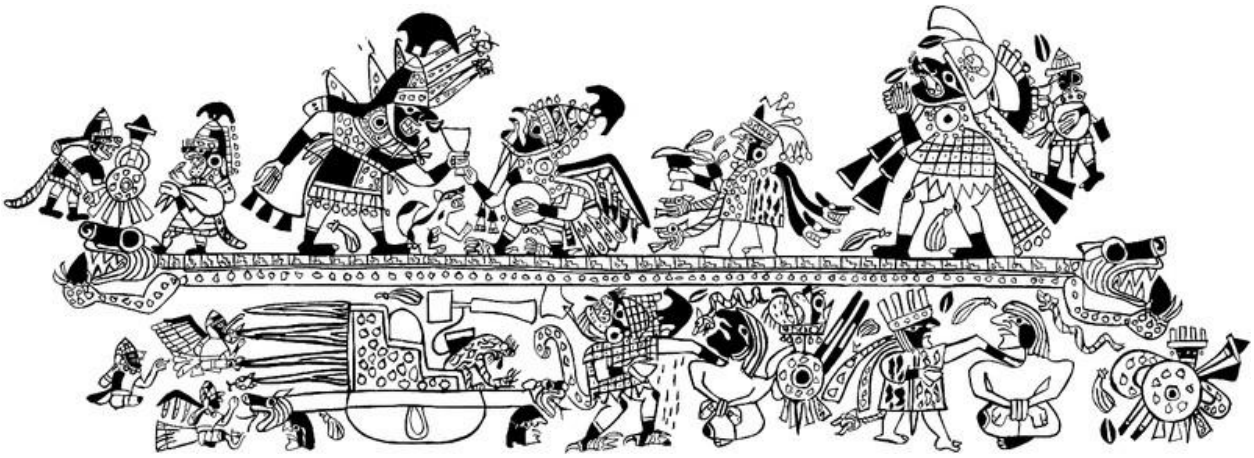

Figure 4. Rollout drawing of the Sacrifice Ceremony, or Presentation Theme. Image Courtesy of the Christopher B. Donnan and Donna McClelland Moche Archive, Image Collections and Fieldwork Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.

Initially, the Sacrifice Ceremony was interpreted as a mythical scene; however, excavations conducted in 1987 at Sipán in the Lambayeque Valley revealed three elaborate elite

tombs of interred individuals adorned in regalia like the Warrior and Bird Priests (Alva 2001; Alva and Donnan 1993, 1994; Donnan 1988). Additionally, there were excavations conducted at San José de Moro in the Jequetepeque Valley revealed female elite tombs which are proposed to be the Priestess (Donnan and Castillo 1992). These incredible tombs indicate that the Moche, at least the elite, actually participated in these religious sacrificial ceremonies; recreating the mythical narratives depicted in Moche iconography. Furthermore, one of the ceremonial goblets from these elite tombs contained human blood antigens, perhaps to be consumed by the attendants of the ceremony (Verano 2001c).

To further elaborate on the Moche tradition of ingesting human blood, two modified human skulls have been found from the Urban Sector of Huaca de la Luna. As quoted in Verano et al. (1999: 59), "[e]thnohistoric accounts and iconographic depictions suggest that the collection and modification of human heads was a temporally and geographically widespread practice in South America" (Browne et al. 1993; Cordy-Collins 1992; Proulx 1971, 1989; Verano 1995). Albeit, it is quite rare for them to be discovered in the archaeological context, except for the trophy head-taking Nasca culture, who are located in the southern coastal region of Peru (Browne et al. 1993; Verano 1995).

Skull 1 as described in Verano et al. (1999) as an incomplete cranium, along with Skull 2, but mainly consist of the vault and facial bones on the left side and most of the mandible. Osteological analysis of the dental trait and crania indicates that Skull 1 was a male of the age of twenty to thirty-five when compared to other Moche skeletal samples (Verano 1997; Verano et al. 1999). The modifications made to the first skull are listed as follows: drilled holes through both the temporal and mandible, filing of tooth roots, a section of the vault removed, and cut marks, which indicate defleshing of the skin. As for Skull 2, which seems to be more complete,

consists of majority of the vault and base skull even though it lacks a mandible. Most of the temporal and facial bone is fragmented, but it has been reconstructed. Just like Skull 1, examination of the morphology of the crania indicates that Skull 2 is a male and is between the age of twenty to thirty when compared to other Moche skeletal samples (Verano et al. 1999). The modification for Skull 2 consist of intentional defleshing of the skin and removal of a portion of the vault.

The intentional modification of these skulls has been construed in placing a bowl of some kind, perhaps a gourd, inside the cranial cavity to possibly drink blood out of even though there were no form of bowls found inside (Verano et al. 1999). Organic material, such as a gourd which is known to be used by the Moche, does not survive well in the archaeological record. "The specific function of these vessels is unknown, as there are no depictions in Moche art that show them being held or used," however, some iconography demonstrate that the Moche collected and manipulated human heads, which "[p]resumably they had some function related to the presentation and sacrifice of prisoners" (Verano et al. 1999: 69). These are the only evidence of modified skulls within the Moche culture, but future excavations may unearth more samples. Perhaps the modification of skulls is unique within the local population of Huacas de Moche and could be considered a "trophy head." Given the location of discovery and concerning the sacrificial sites of Huaca de la Luna, these modified skulls are probably from sacrificed victims (Verano 1999). When taken into context of Models B and C, the modified skulls may reflect continued subjugation of the individual post-mortem.

The archaeological discoveries of these royal and non-royal tombs offer a better understanding of Moche religious ideology and organization. As noted in Verano, these recognizable individuals depicted in the Sacrifice Ceremony were real, or at least they

participated in a guise of supernatural figures and deities; confirming that the Moche conducted religious ceremonies that required the sacrifice of captives as seen plenty of times in iconography and several sites containing sacrificed prisoners (2001c: 115). Additionally, these ritual roles were passed down through time due to multiple, non-contemporaneous burials. Moreover, the Sacrifice Ceremony did not necessarily enact in a single location, but in numerous sites that ranged throughout many valleys.

The Decapitation Motif

The Decapitation motif is prevalent throughout Moche iconography. Often, these scenes evoke religious and secular practices. In Figure 5, an anthropomorphic bird figure is grasping the hair of a nude prisoner by the hair while gripping a *tumi* knife in the other hand; presumably to slit the prisoner's throat or to perform a decapitation. The figure in the scene below could represent a Bird Priest, which would imply that the scene could have taken place.

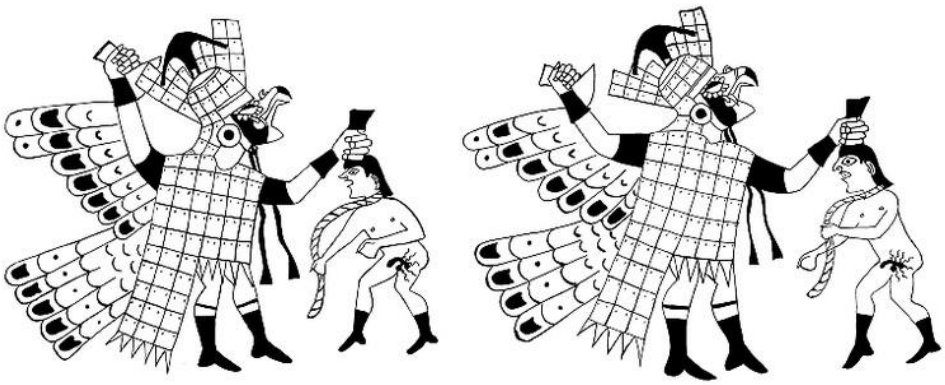

Figure 5. Rollout drawing of anthropomorphic bird figures grasping nude prisoners by the hair. Image Courtesy of the Christopher B. Donnan and Donna McClelland Moche Archive, Image Collections and Fieldwork Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.

To further elaborate the decapitation motif. Figure 6 represents a supernatural creature gripping a severed head while the decapitated corpse lies in the background. It is important to

note that the Moche often incorporates mythological and supernatural elements within their iconography. It is to no surprise that in the scene below, a supernatural creature, or perhaps deity, is represented as one of the decapitators in Moche iconography. Which then begs the question, did the Moche conduct religious or secular decapitations?

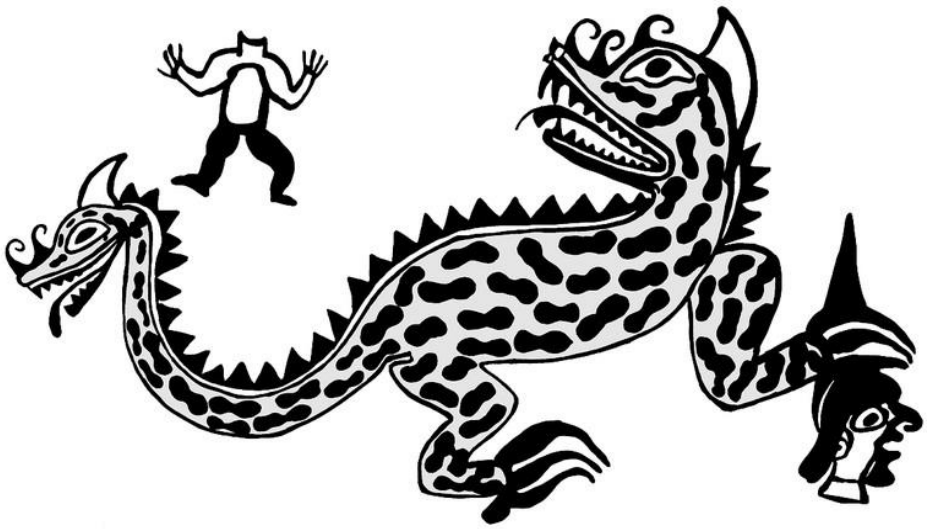

Figure 6. Rollout drawing of a supernatural creature holding a decapitated head. Image Courtesy of the Christopher B. Donnan and Donna McClelland Moche Archive, Image Collections and Fieldwork Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.

Huaca El Brujo in the Chicama Valley provides painted friezes of an arrangement of prisoners and supernatural spider decapitators which included a human femur from a fleshed body integrated into the friezes. Suggesting that the decapitator scenes and prisoner display are not metaphorical (Verano 2001c: 115; Verano et al. 1998). Several portrayals of the decapitator being is presented on Moche iconography, as well as prominent evidence of Moche decapitation are found at Huaca Dos Cabezas in the Jequetepeque Valley.

There are other accounts of decapitation depicted in Moche visual representations and in the archaeological context. Several portrayals of the decapitator being (e.g., fish, spider, supernatural human, and birds of prey) is presented on Moche iconography. The different

representations of the Moche decapitator have been suggested that they were "patrons of specific valleys, settlements, or groups" (Cordy-Collins 2001: 25). The Decapitator is usually holding an individual's severed head or performing the decapitation with a tumi knife. One of the most prominent sites that contained multiple beheadings is the Cuarto de los Cráneos at Huaca Dos Cabezas. As discussed in Cordy-Collins (2001), excavations performed in 1994 revealed eighteen severed human heads neatly placed in the room. An analysis of the human heads indicates that there is a possibility that the heads were freshly severed when they were neatly placed even though they were found fleshless. The freshly severed heads are supported by the articulation of the cranium, mandible, and some cervical vertebrae that revealed cut marks (Cordy-Collins 2001). However, the author does not mention the gender of the severed heads. Furthermore, a Moche ceramic bowl was excavated in the fisherfolk barrio that depicted a Supernatural Fish Decapitator (Cordy-Collins 2001). Perhaps this specific decapitator was the patron of the fisherfolk at Huaca Dos Cabezas.

The following year, excavators unearthed an interment of an elderly man adorned with copper ornaments while grasping a copper tumi knife in his left hand and a ceramic human head jar laid by his right hand. This particular interment has been interpreted as an actual Moche decapitator who may have performed the decapitations (Cordy-Collins 2001). The decapitator burial is the only burial where a tumi knife is found in the hand of an individual, unlike the silver and gold tumis that were found around the neck of the Warrior Priest at Sipán (Alva and Donnan 1993). Additionally, the copper knife indicates that it is functional due to the weight and strength, whereas the soft tumis found at Sipán could be decorative or seen as a symbol of power. An analysis of the skeleton at Huaca Dos Cabezas revealed that the old man's "interosseous crests of his forearms exhibit extremely heavy muscle attachments . . . [t]o remove

a human head with a handheld knife would require considerable strength" (Cordy-Collins 2001: 31). The osteological evidence aids the support that the individual from Huaca Dos Cabezas performed the decapitations. The purpose of the decapitations at Huaca Dos Cabezas is not definitive but religious in nature. It is hard to associate if this site falls under Models A, B, or C since more research needs to be conducted.

CHAPTER III

MOCHE HUMAN SACRIFICE

Huaca de la Luna Human Sacrifices

The most well-known archeological site containing sacrificial victims conducted by the Moche, is the Huacas de Moche, or Huaca del Sol and Huaca de la Luna, in the Moche Valley. Majority of excavations take place at Huaca de la Luna, partially because Huaca del Sol was damaged by huaqueros, who diverted the river into the pyramid in order to easily remove the mud brick core (Bawden 1996). The most notable locations containing sacrificial victims from Huaca de la Luna are Plazas 3A (400-650 CE) and 3C (230-550 CE), although, these plazas are not the only sections consisting of sacrificial remains, such as some tombs in the Urban Zone that contain retainer sacrifices (Verano 2008: 195). Plaza 3A was excavated by Bourget (1997, 2001), who uncovered roughly about seventy-five individuals in six distinct events. Some of the victims in Plaza 3A were embedded in colluvial and alluvial sediment (i.e., mud), which implies that they were sacrificed during and after torrential flooding caused by at least two El Niño episodes (Bourget 2001). At least 33 individuals in Plaza 3C, were embedded in eolian sediment (i.e., windblown sand), implying that this group was deposited during common dry conditions (Verano 2008).

Concerning chronology, evidence from excavations conducted at Plaza 3C revealed it was enclosed with adobes preceding the erection of Plaza 3A (Tufinio n.d.). Providing support that the plazas were “not in use at the same time, but date to different construction phases of Huaca de la Luna” (Verano 2008: 206). There were other samples taken to be radiocarbon dated as Verano (2008: 206) mentions in the following:

> Four radiocarbon dates were obtained from materials in Plaza 3C: two from materials in Plaza 3C: two from materials above the plaza floor and two from below it. Three utilized samples of rope recovered from around the ankles and wrists of skeletons of or isolated limbs; the fourth was done from a sample of fly beetle remains collected from within the skull of H33. Because of the small size of the samples, all were analyzed by accelerator mass spectrometry (AMS). Since skeletal remains were found in two stratigraphically distinct contexts-above and below the floor of Plaza 3C – were expected some differences in dates. Laboratory results confirmed these exceptions.

As supported by evidence of radiocarbon-dated samples, human sacrifices in Plaza 3C were embedded in eolian sediment (i.e., windblown sand) and slowly conducted over several centuries during regular events of weather associated with the traditional arid environment. Which may reflect early militaristic expansion or rival Moche polities that engaged in one-on-one combat. The earliest evidence of human sacrifice was performed in the beginning construction stages of Huaca de la Luna (Verano 2008). Whereas construction of Plaza 3A was rapidly built as part of a final stage of construction in Huaca de la Luna as a result of threatening El Niño flooding (Bourget 1997, 1998; Verano 2008). Even though there were failed attempts in dating the skeletal remains through means of radiocarbon dating due to lack of collagen preservation in Plaza 3A, however, Uceda et al. (2008) were able to date a log sample from the roof of Platform II to roughly about 426 – 690 CE.

Alternating layers in the stratigraphy is evident in infrequent rainfall over time, which revealed no signs of correlation between the sequences of rainfall and the Plaza 3C victims (Verano 2008). There were no signs of torrential flooding from rainfall in Plaza 3C, unlike in Plaza 3A. As mentioned in Sutter and Cortez (2005), the data from the high-resolution ice cores by Shimada et al. (1991) indicates that there was frequent torrential flooding around the same time. Bourget (2001) posits that the victims from Plaza 3A were sacrificed during and after El Nino flooding due to the alternating layers of colluvial and eolian sediment. Environmental and

sociopolitical disruptions, caused by torrential flooding, spawned local skirmishes among rival polities which ultimately led to the human sacrifices at Plaza 3A.

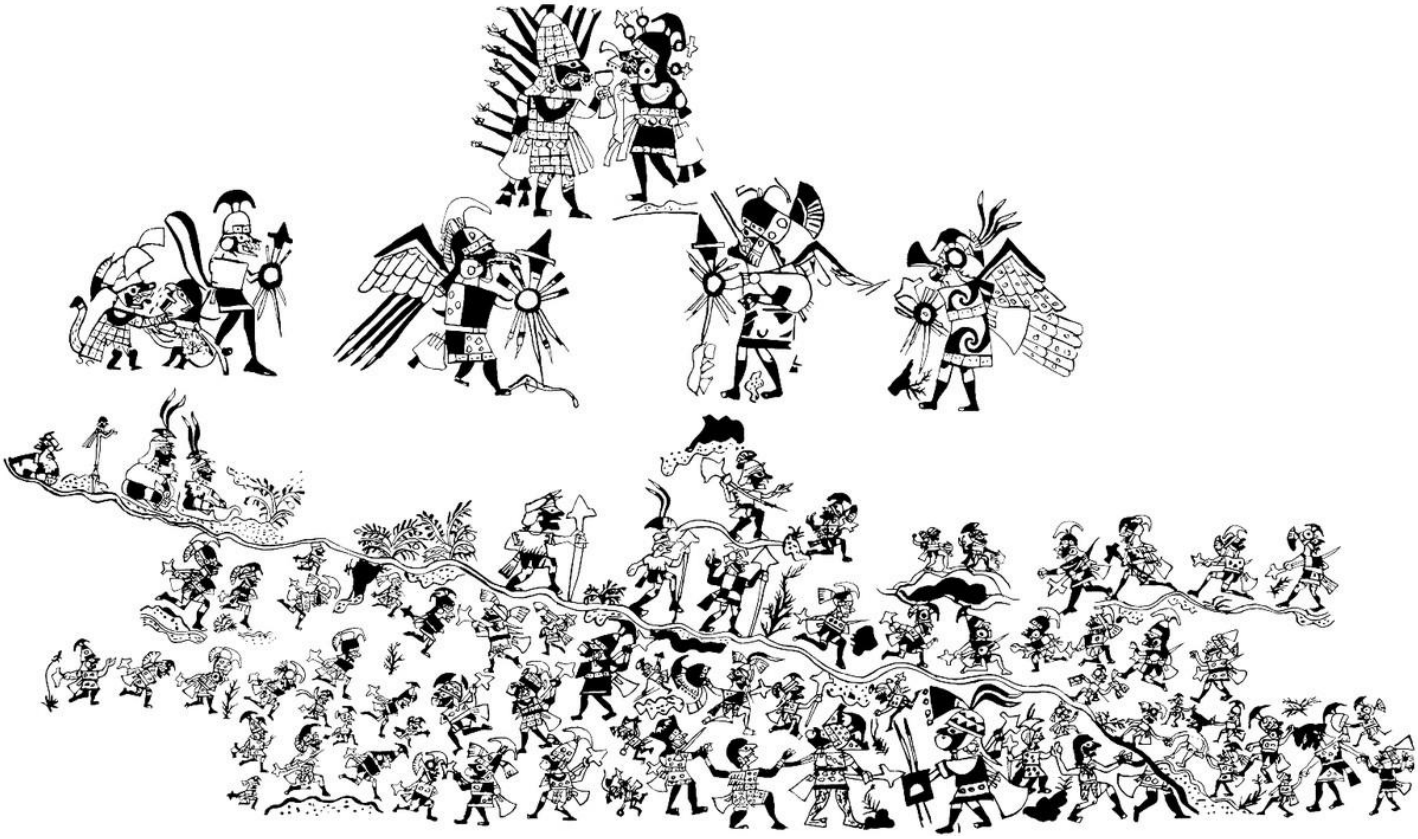

Figure 7. Rollout drawing of a large battle scene and the Sacrifice Ceremony, or Presentation Theme. Image Courtesy of the Christopher B. Donnan and Donna McClelland Moche Archive, Image Collections and Fieldwork Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.

Figure 7 is an interesting scene and should be taken into consideration. The lower portion represents a large combat scene amongst Moche warriors. Scattered throughout the combat, Moche warriors are capturing prisoners. The upper portion reveals the sanguineous tradition of the Sacrifice Ceremony. If taken into context, this scene could potentially represent the victims at Huaca de la Luna, who were taken as prisoners and ultimately sacrificed in a religious ceremony.

The individuals who were sacrificed were young healthy males who had shown signs of previously healed injuries and parry fractures that are mainly consistent with combat; indicating

that they were professional warriors with experience. There is evidence consisting of fracture wounds in “the early stages of healing at the time of death: apparently wounds sustained in combat or following capture” (Sutter and Verano 2007: 195). This suggests that there was a period of elapsed time after they were captured and right before they were sacrificed. The fact that the sacrificial victims were all elite warriors reflects all three models; however, analysis and placement of the remains may determine which model holds more support. The victims from both plazas were seated and bounded before they were sacrificed, which supports all three models and is also represented in several scenes of Moche iconography (Figure 4). The sacrificial remains associated with Plaza 3C are usually all found articulated while most of the remains in Plaza 3A are disarticulated (Sutter and Cortez 2005; Verano 2008). The disarticulation of the skeletal remains in Plaza 3A may be a result of vulture scavenging, which is seen in Moche iconography (Sutter and Verano 2008).

Osteological analysis of the remains in both Plazas 3A and 3C indicate that majority of the victims had their throats forcefully slit across the cervical vertebrae, as well as a few signs of “unequivocal cases of decapitation can be confirmed on the basis of cut mark location and patterning,” (Verano 2008: 198), which correlates with Moche iconography of human sacrifice (Verano 2001a, b, c). Furthermore, there is evidence of skull fractures associated with eight victims at Plazas 3A and one from 3C that were perimortem (Verano 2008) Bourget (2001a) proposed that a wooden club that is typically depicted in some Moche hunting scenes and combat inflicted some of the bludgeonings. A discovery was made of a club that revealed a dark stain on the surface, which reacted with human antiserum, meaning that dried human blood covered the wooden club (Bourget and Newman 1998; Verano 2008). In addition, other skull fractures in Plaza 3A were a result of a star-headed mace-like weapon, which is also seen to be

carried by Moche warriors, due to the evidence of trauma along the broken margins (Donnan 1978; Verano 2008).

The true meaning of why some of the victims from the plazas were clubbed remains ambiguous, although, Moche warriors were known to struck captives to induce nose bleeding in iconography, but scenes of victims being bludgeoned to death are unknown (Verano 2008). Further analysis reveals that some of the victims with skull fractures, whose cervical vertebrae is still attached, also shows cut marks of a standard throat slice that is common with the majority of the victims (Verano 2008). Hence the indication of victims of bludgeoning was not an alternate modus operandi of human sacrifice or execution, "but perhaps an embellishment reserved for a select few" (Verano 2008: 200-201). Three of the victims with blunt force trauma to the skull were observed in close proximity to each other, which supports the above statement (Bourget 1998).

This evidence mentioned above does not fit with Model A, because if it were staged ritual combat within the Moche society, then the victims would have only been sacrificed through the traditional performance of having their throats slit in a religious ceremony (Figure 4) and not have been bludgeoned. Models B or C may reflect why only a select few were bludgeoned and had their throats slit. These examples of bludgeoning can also be an interpretation of capital punishment (see Capital Punishment or Human Sacrifice). There is an unusual case of a skull fracture in Plaza 3C due to intentional postmortem skull modification, which was missing the upper vault of the skull (Verano 2008). Undoubtedly, this was intended to acquire entry of the brain, which is similar to the modified human skulls mentioned earlier (Verano 2008).

It should be noted that one individual from both plazas reveals a penetrating wound which was a cause by a sharp pointed weapon, most likely an atlatl dart. The injury associated

with the victim from Plaza 3A is located on the anterior surface of the sternum, whereas the victim from Plaza 3C reveals multiple lesions on several bones located on the lower cervical vertebra and thoracic cage (Tufinio n.d.). These wounds are similar to some of the sacrificed victims from the mass burial located at Pacatanamú (Verano 1986, 2008).

There is a form of ignominy between the proposed sacrificed victims and the elite due to the sacrificed individuals were not only left out on the surface to decompose under natural elements, but they revealed signs of intentional postmortem flaying of fleshed bodies and disarticulation of skeletons. Whereas the elite and locals of Moche are typically interred in a supine position and buried with grave goods (Verano 2001a, b, c). Hocquenghem posits an interpretation of the tortured victims "would have been transgressors of the ancestral order" (2008: 35) The reason being of why the flayed victims were displayed and left out to the elements was to deprive these individuals "funerary rites that would have assured the circulation of vital force between life and death" (Hocquenghem 2008: 35).

This act of sacrificial expiation was intended to placate the deities of the Moche and to elude ramification. In addition to the degradation correlated with the victims of Plaza 3A and 3C, shattered ceramic vessels of seated prisoners with ropes tied around their neck were found in situ with the unburied remains (Bourget 2001; Verano 2008). Hocquenghem proposes that the interred shattered ceramic vessels were a form of harassment instead of physical torture (2008: 40). The treatment of the sacrificial tends to support Models B and C.

Conceptualizing the Origins of the Huaca de la Luna Human Sacrifices

The research conducted by Sutter and Cortez tested the three models to the Plaza 3A victims by examining the archaeological context and "biodistance data on genetically influenced dental traits for eight prehistoric mortuary populations" and samples from the Moche and

Jequetepeque Valleys (2005: 522). In fact, this particular study allowed Sutter and Verano (2007) to conduct their research on the victims from Plaza 3C. The benefit of using this type of research provides further insight into reconstructing "genetic relations among both prehistoric and living populations" (Sutter and Cortez 2005: 528). By calculating biodistance traits, Sutter and Cortez utilized the matrix correlation method and mean measure of divergence to determine that the victims of Plaza 3A vary significantly when compared to the mortuary samples from the Moche and Jequetepeque Valleys (2005). The variability in biodistance traits allows the researchers to interpret the victims from Plaza 3A originated from different valley populations but not from the local Moche Valley population (Sutter and Cortez 2005).

It should be noted in Sutter and Cortez (2005) that the elite from the Huaca de la Luna platforms is similar, however not significantly, to the Pacatnamú samples than the local Moche samples and should be further analyzed. As a result, the research supports Model C, warfare among rivaling Moche polities, rather than Model A, staged religious combat, which is supported by the "biological, archaeological, and iconographic data" and is "consistent with iconographic depictions of Moche-on-Moche combat and with the lack of respect" (Sutter and Cortez 2005: 532). Preceding arguments of the capture and parading of nude warriors as well as the treatment of the uninterred remains are not considered disrespectful (Shimada and Corruccini 2005). It is also possible that the two skulls modified into drinking vessels, as well as the decapitated heads at Huaca Dos Cabezas, are not considered as a form of disgrace. However, when compared to similar ethnohistoric accounts from the Inca, Sutter and Cortez conclude that Model C gains more support from their data (2005).

Sutter and Verano utilized the same matrix correlation method mentioned above. Their research evaluates "epigenetic tooth root and cusp trait variability for the Huaca de la Luna Plaza

3C sample and compare to data for eight previously reported Early Intermediate Period and early Middle Horizon ([CE] 200-750) samples from the north coast of Peru" (Sutter and Verano 2007: 197). One sample from a Moche cemetery consists of 31 individuals from Pacatnamú in Jequetepeque Valley. The following four samples are located in Cerro Oreja from the Moche Valley which are: 65 specimens from the Salinar Phase (800-20 BCE), 128 from the early Gallinazo occupation, 93 specimens from the middle Gallinazo occupation, and 76 specimens from the recent Gallinazo occupation (Sutter and Verano 2007). Another sample originates from the elite urban sector at Huacas de Moche which consists of 37 specimens along with 63 specimens who were interred within Platforms I and II at Huaca de la Luna. The last two samples are from 42 specimens from the Plaza 3A sacrificial victims and 24 specimens from the Plaza 3C sacrificial victims (Sutter and Verano 2007).

By using the mean measure of divergence (MMD) and other matrices for biodistance measure, Sutter and Verano were able to determine the Plaza 3C sacrificial victims represent "adult male warriors taken in combat with nearby competing polities (Moche or Gallinazo or both)" which would support Models B and C (2007: 2007). They explain how the results do not support Model A because the sacrificial victims are not closely related to those who were interred at the urban sector and the platforms from Huacas de Moche. Alternatively, the sacrificial victims from Plaza 3C were placed in a separate cluster along with the victims from Plaza 3A, although, Sutter and Verano were unable to determine the exact origins of the sacrificed individuals, they concluded that their data does not support Model A (2007).

Toyne et al. attempted to reconstruct the origins of the Moche individuals from the Huaca de la Luna urban tomb and the sacrificial victims from the site by using "phosphate oxygen isotope compositions of tooth enamel and bone" (2014: 15). Additionally, this research utilized

the regional baseline water sources from the north coast of Peru to elucidate the human oxygen isotope values (Toyne et al. 2014). The results represent a single role of the Huaca de la Luna site and a patrilocal breeding method, which follows:

> Men with positions of power and who were interred on the Huaca de la Luna platform were locally born and raised. Some of the other males might have lived part of their adult lives in different locations but shortly before or after death returned or were returned to Huacas de Moche for internment. Females demonstrate more lifetime-based mobility, moving to the site after a childhood elsewhere (Toyne et al. 2014: 25-26).

These results may represent the evolution of "inter-regional social ties and shared postmarital residence practices among elites to unify social and political alliances among nearby Moche site" (Toyne et al. 2014: 26). Toyne et al. continue to explain that evidence of iconographic representation and skeletal trauma patterning remains nonexistent (2014). The sacrificial contexts represent unconnected ritual sacrificial traditions where the choice of the sacrificed victims altered over time from more native inhabitants in Plaza 3C to Plaza 3A victims from more distant and local valleys. Some of the individuals from Plaza 3A may have relocated to Huaca de la Luna, although, the dental morphology and oxygen isotope values reveal non-local origins (Toyne et al. 2014). Toyne et al. offer the possibility that the victims were captured for several years from distant valleys as "controlled labor" or as slaves (2014: 25). "[I]t is impossible to determine the social or political reasons for their long-term presence at Huaca de la Luna or their relationship with the Moche rulers at the site" (Toyne et al. 2014: 26).

Capital Punishment or Human Sacrifice

Were the victims from Plazas 3A and 3C a part of ritual sacrifice as depicted on iconography, or could it be capital punishment of some kind? There has been some interpretation of capital punishment presented in Moche iconography. For instance, one ceramic illustrates dismemberment and a form of lapidation of prisoners (Hocquenghem 2008: 32). Figure 8

illustrates a scene of the practice of dismemberment. The individual in the middle is clearly a prisoner being held by two characters on the opposite end of his arms. Dismembered arms, legs, and a head tied with rope surround the prisoner, while to the right of the scene, a seated figure sits beneath a structure with ceramic vessels placed in front. This scene could represent human sacrifice, which could explain the disarticulation of the sacrificial skeletal remains in Plaza 3A. Since decapitation is a known practice by the Moche (see the Decapitation Motif), the severed head could be potentially viewed as a trophy head. However, this scene could also be interpreted as capital punishment.

Figure 8. Rollout drawing of a prisoner held by two figures surrounded by a dismembered boy. Image Courtesy of the Christopher B. Donnan and Donna McClelland Moche Archive, Image Collections and Fieldwork Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.

Another ceramic vessel reveals the physical remains of an individual tied to a tree while a vulture pecks at the remains (Hocquenghem 2008: 32). Could this be a form of sacrifice or capital punishment? Perhaps the latter can be accepted for some instances. The archaeological record does not provide sufficient confirmation of capital punishment and only allows room for interpretation of iconography. It could very well be possible that some victims from the community were among those who were sacrificed from elsewhere, were put to death for a

punishment of some kind. If Model B or C of rival nonlocal Moche or non-Moche polities being sacrificed holds true, then it may be both punishment and sacrifice, yet the end result is indistinguishable. There could also be a misinterpretation of capital punishment being human sacrifices and vice versa; however, it is widely accepted by nearly all the scholars cited in this paper agree that it is human sacrifices. The topic and interpretation of capital punishment will need to be explored further.

CONCLUSION

Model C, religious or secular warfare among rivaling Moche polities in neighboring valleys in the north coast of Peru, is supported by the extensive research mentioned above. As discussed in Sutter and Cortez (2005) and Sutter and Verano (2007), when applied to Model C, the sacrificial victims from Plazas 3A and 3C is consistent with the current knowledge of the militaristic and expansionist southern Moche polity and a loose confederation of northern Moche polities of similar culture and ideologies (Bourget, 2004; Chapdelaine, 2004; Millaire, 2004; Shimada, 2004). In Uceda (2008), the archaeology of Huacas de Moche affirms a "significant chronological shift in power from religious specialists to more overt secular-like political control" (Toyne et al. 2014: 25). Shimada (2004) posits that southern Moche's expansion of territory did not transpire over a single campaign but alternatively enacted in several campaigns throughout hundreds of years; utilizing both non-military and military tactics that most likely included alliance formation in the south and in the north (Sutter and Verano 2007). The isotopic data in Toyne et al. (2014) supports the previous statement by revealing "significant population movement across" the coastal river valleys of the north coast of Peru, and "female individuals interred at Huacas de Moche originated from northern regions creating potential socio-political alliances to these distant locations" (25).

Undoubtedly, the Moche heavily invested in and commonly practiced their ideologies, one of Mann's four sources of power, which can be seen in their iconography and the construction of their major power centers throughout the northern and southern valleys (Mann 1986). I believe the Moche utilized their iconography as an archaic form of propaganda (e.g., warfare, captured prisoners, the Sacrifice Ceremony, and decapitation theme) to spread their

religious and sociopolitical ideologies as different expressions and methods of material culture (e.g., polychrome reliefs, murals, ceramic vessels, and metallurgy). The Moche elites were able to spread their materialization of ideology through "verbal communication among elite social strata through redistribution of ritual objects and horizontal communication among the highest-status elites through exchange of the most elaborate symbolic and exotic objects" (DeMarrais et al 1996: 23).

As argued in this research, evidence reported in the osteological and archaeological data does not support Model A, the Moche elite voluntarily engaging in one-on-one religious combat. However, perhaps this was a "motive" for the southern Moche during their early expansion campaigns but gradually evolved into secular warfare with competing Moche polities in neighboring valleys. This claim would support Models B and C, religious or secular warfare with non-local or non-Moche rival polities. Verano, argues that "all warfare has ritual elements, and any attempts dichotomize 'ritual' versus 'real' combat is a futile exercise" (2014: 301). As mentioned before, I argue that the Moche did utilize not only military and non-military tactics but also used human sacrifice to affirm their religious and political ideologies as seen in Moche power centers such as: Sipán, San José de Moro, Huaca El Brujo, and Huacas de Moche. This model of sociopolitical control through human sacrifice is also supported by John Verano (2001, 2014). Human sacrifice is an integral part of the religious aspect of the Moche as seen in the iconography and archeological context. The purpose of human sacrifice will continue to be a topic of debate and interpretation among Moche scholars. Cognizance of Moche human sacrifice and their sociopolitical structure continues to evolve as new archaeological sites are unearthed and researched; unraveling the missing stories of the Moche.

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