Scaling the Huaca: Constructing Space, Time, and Identity at the Late Moche Ceremonial Centre of Huaca Colorada, Jequetepaque Valley, Peru

by

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A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy

Department of Anthropology

University of Toronto

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Abstract

This dissertation examines how the ritual architecture of the Moche site of Huaca Colorada served as a form of symbolic technology that unified communities across the Jequetepeque Valley of Peru during the Late Moche (650-800) and Transitional Periods (ca AD 750-950). An investigation of the construction history of the ceremonial precinct at Huaca Colorada has identified ritualized acts of renovation that encoded a particular cosmology that materialized sociopolitical transformations through time. The analysis provides an opportunity to interpret shifts in Moche traditions as a reaction to increasing influence from distant highland communities associated with the foundation of Tecapa.

An objective of the dissertation is to present a detailed diachronic study of an expression of Late Moche politico-religious ideology through the analysis of the construction and occupation
sequence of a single ceremonial monument. I thus present the architectonic history of the site of Huaca Colorada in the form of two dialectically interrelated biographies, the biography of the architecture itself, and the biography of a larger political community materialized and emplaced in the landscape through rituals of architectural renovation. These two biographies reveal how the powerful ideology responsible for the creation and maintenance of this structure was grounded in explicit strategies of place-making that changed over time.

Ultimately, my research at Huaca Colorada provides an empirically rich case study of how architecture and representations of place were variably wielded to “construct” and contest an imagined Moche community. Across the ancient Andes, acts of place-making relied upon the conflation of social actors, ancestors, and the built environment through cycles of renovation of sacred architecture. I argue that the creation of the Huaca Colorada religious community was realized through cyclical acts of architectural construction and renewal within the ceremonial precinct. My interpretations are based on a comparison of three-dimensional models and spatial analysis of this uniquely preserved ritual setting in relation to the material residues of practice associated with each phase of renovation.

In the end, my dissertation combines phenomenological, semiotic and quantitative approaches in order to shed original light on Moche ontology, conceptions of time, and constructions of home, memory, and identity.
Acknowledgments

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Previous research of public rituals amongst the Moche of the North Coast of Peru has followed a long line of interpretation of ancient Andean ceremonial spaces as performative locales (Inomata and Coben 2006, Moore 1996, Swenson 2011). Archaeologists thus commonly interpret monumental built spaces as didactic forums in which religious and political ideologies were presented to communities inhabiting centralized nodes of power. In such perspectives, ceremonial architecture is reduced to pulpits for the communication of norms to targeted audiences. However, the content and meaning of the message is thought to remain beyond the reach of archaeological interpretation.

Despite the tendency among archaeologists to reduce ritual space to its cynical political functions, scholars have pieced together a partial approximation of the religious cosmos of the Moche through the study of architectural symbolism as well as art historical analysis of painted and modelled scenes on ceramics and a small number of surviving murals. Such representations have been documented at a number of different Moche political centers over a six-hundred-year period (Benson 2012, Bourget 2016, Jackson 2008, Quilter 1997, 2001, Trever 2013, 2017). Although there is some consensus regarding the enduring importance of these narratives that underwrote a coherent Moche worldview, historical variations in Moche ideology have become an important topic of research in Andean archaeology. Excavations of Moche religious sites beginning in the 1980’s and extending to the present have established a more nuanced understanding of the settings in which these cosmological narratives were presented and experienced.

This dissertation examines how the ritual architecture of the Moche site of Huaca Colorada served as a form of symbolic technology that unified communities across the southern Jequetepeque Valley of Northern Peru during the Late Moche (650-800) and Transitional periods (ca AD 750-950). An investigation of the construction history of the central ceremonial precinct
at Huaca Colorada has identified ritualized acts of architectural renovation that encoded a particular cosmology but also materialized sociopolitical transformations through time. Examination of phases of construction, destruction and renewal over a relatively short time frame provides a unique opportunity to interpret the process of transformation of long-standing Moche traditions as a reaction to increasing influence from distant highland communities, as evidenced by the foundation of the highland centre of Tecapa adjacent to Huaca Colorada around AD 750.

An important objective of the dissertation is to present the results of a detailed diachronic study of a particular expression of Late Moche politico-religious ideology through the analysis of the construction and occupation sequence of a single ceremonial monument. I thus present the architectonic history of the site of Huaca Colorada in the form of two dialectically interrelated biographies, the biography of the architecture itself, and the biography of a larger political community materialized and emplaced in the landscape through rituals of architectural renovation (Ashmore 2009, Barrett 1999, Bradley 1987, Brett-Smith 2001, Brück 2006). These two inextricable biographies reveal how the powerful ideology responsible for the creation and maintenance of this important structure was grounded in explicit strategies of place-making that changed over time.

Ultimately, my research at Huaca Colorada provides an empirically rich case study of how architecture and representations of place were variably wielded to “construct” and contest an imagined Moche community (Anderson 1983, Swenson 2012). Across the ancient Andes, acts of place-making relied upon the conflation of social actors, ancestors, and the built environment through cycles of renovation of sacred architecture (Uceda 2001, Swenson and Jennings 2018). I argue that the construction of the Huaca Colorada religious community, grounded in a creative reworking of Moche religious ideology, was also realized through cyclical acts of Architectural construction, destruction and renewal within the ceremonial precinct of the site. My interpretations are based on a comparison of three-dimensional reconstructions and spatial analysis of this uniquely preserved ritual setting in relation to the material residues of practice associated with each phase of renovation. In the end, my dissertation combines phenomenological, semiotic and quantitative approaches in order to shed original light on Moche ideologies of space, time and memory.
An analysis of the materialization of Moche cosmology thus permits interpretation of the perceptions of place and history held by the specific community of Huaca Colorada. Such an approach highlights the nature of the relationship between individuals and the landscape as equal components of an animated environment. A fundamental objective of my dissertation is to interpret the creation and affective experience of history within the site during an era of cultural transformation. Built during the Late Moche Period, the construction and remodeling of Huaca Colorada continued into the Transitional Period, an era defined by sweeping political and religious change brought about by increased interactions with encroaching highland communities. The multigenerational construction and maintenance of this site speak to the interconnections between members of this community across time. In sum, this thesis explores how material and ritual practices synchronized the social rhythms of people and place by fusing lived realities and identities within a powerful landscape.

1.1 Implications of the Study and Broader Contributions of Research

As a member of the Proyecto Arqueologico Jatana-Huaca Colorada under the co-direction of Edward Swenson, John Warner, Jorge Chiguala and Francisco Seoane, I contributed to an interdisciplinary program of archaeological research at Huaca Colorada for six of the seven excavation seasons between 2009 and 2018. Extensive excavations within distinct ceremonial, domestic and craft production areas have produced a great wealth of information regarding the structure and use of space at this site. My contributions to this ongoing research have focused mainly on a complex of elaborate precincts located at the very peak of the huaca. My study has uncovered the material residues of ritual feasting and high-status craft production activities along with the discovery of fourteen human burials of sacrificed individuals that confirm the religious importance of this sector (Swenson et al. 2009, 2010, 2011, 2012, 2014, 2016).

My study of the form, orientation and distinct construction sequence of this particular site has formed the foundation of my research. A recurrent aspect of Moche ceremonial traditions entailed the intentional ritual “killings” and “burials” of rooms, ceremonial platforms and other architectural features, often punctuated by human sacrifice and recurrent renovations of huaca structures (Velásquez 2015, Prieto Burmester 2008, Swenson 2011, 2012 Uceda 2001a, 2001b).
argue that the sequential and repeated renovations of architectural phases at Huaca Colorada intended to mark the passage of time, renew the cosmos and agricultural cycle, and reinforce community solidarity and social memory as forged in the collective “home” of an apical Moche huaca or sacred locale. However, I argue that the establishment of the highland colony of Tecapa adjacent to the huaca led to a major reconfiguration of ceremonial space and political and religious ideologies at Huaca Colorada. By tracing both the continuities and changes of the ceremonial core over a period of four major phases of renovation, each architectural iteration expressed variations on central ideological tenets specific to this particular community. The transformation of Huaca Colorada throughout each phase of its architectural biography directly reflects major social changes during the understudied Late Middle Horizon Period on the North Coast of Peru. From this perspective, the architectural history of Huaca Colorada provides a unique opportunity to investigate the nature of cultural transition from the Late Moche Period into the subsequent Transitional and Lambayeque or Sican periods that followed.

Therefore, excavations at Huaca Colorada have significantly advanced our understanding of how political and ideological institutions of the Late Moche Period in the Jequetepeque region endured and eventually transformed, especially when compared to the rich iconography of the Moche that depicts cosmic themes and ritual practices. The exceptional preservation of the architectural features at Huaca Colorada permitted the creation of three-dimensional digital reconstructions of each phase of the entire ceremonial complex. These reconstructions of Huaca Colorada permitted a quantitative spatial visibility analyses of changes in the emplacement and orchestration of ritual practices. I investigated the variable activities that occurred within this particular space by comparing the changing architectural configuration of the huaca to the enormous wealth of ceramic, zooarchaeological and paleobotanical evidence that we have collected from each phase of occupation.

1.2 Context of the study

Huaca Colorada is the largest Late Moche settlement on the southern bank of the Jequetepeque Valley and is located at the base of Cerro Cañoncillo within the arid Pampa de Mojucape, approximately 100 km north of the major centre of Huacas de Moche in the Moche Valley.
Surrounded by a settlement covering approximately 24 hectares, Huaca Colorada consists of an elongated adobe brick platform structure built over a modified sand dune. The main complex measures approximately 390m by 140m and rises nearly 20m at its highest point. Differentiated into three distinct sectors, the centrally located ceremonial precinct is located at the peak of the structure above two manufacturing and residential areas on the lower tiers situated to the north and south. Serving as ceremonial and political headquarters of a powerful polity, Huaca Colorada drew pilgrims and artisans from throughout the region who visited the site to venerate and pay homage to a powerful huaca associated with the nearby mountain of Cerro Cañoncillo that form the foothills of the Andes (Swenson and Warner 2016). Most visitors lived in seasonal encampments in the lower domestic zone and were feted with prodigious quantities of seafood, camelid meat, and chicha corn beer. Along with San José de Moro, the cult of the priestess on the north side of the Jequetepeque Valley, Huaca Colorada constituted one of the most important religious and political centres in Jequetepeque during the Late Moche Period, attracting highland caravans and petty craftsmen.

The principal religious constructions of the monumental core of Huaca Colorada, an important focus of my dissertation research, consist of eight daises or altars, all of which were ritually interred under floors or construction fill. A curated pair of connected ceremonial arenas constituted the earliest phase of this architectural palimpsest, each containing a central stepped platform or dais that served as stages for ritual performance. This dyadic ceremonial space consisted of an internal platform within a private sunken chamber to the west that mirrored a public terrace in the east visible from an open plaza at the foot of the pyramid. Both the public East Terrace and more private Western Chamber were renovated in tandem during each phase of construction (Swenson et al 2010, 2011, 2012, 2014, 2016). In later phases, the dyadic precincts were ritually decommissioned and subsequent platforms were constructed almost exclusively on the East Terrace into the Transitional Period. Chapter 4 outlines the biography and construction history of the site and my interpretations follow in subsequent chapters.

In order to reconstruct how architectural renovations reified history and materialized identity, I designed my research to understand transformations in the architectural prescription of ritual performance at Huaca Colorada as related to fluctuations in the spatial interrelationship of spectators and ceremonial performers. My investigations suggest that large audiences (most likely derived from agricultural and fishing communities of the southern Jequetepeque region)
witnessed sacrificial rites conducted on the summit of the monument from the plaza below, but that a number of congregants could also access the monumental core and participate directly in rites. However, as described in Chapter 5, access to and movement within the site changed dramatically during the Transitional Period, defined by the foundation of the highland centre of Tecapa that co-opted and reconfigured the cult at Huaca Colorada.

### 1.3 Architecture as Technology of Being

The first thesis of my dissertation posits that rituals of architectural renovations at Huaca Colorada reproduced deep-seated ontological dispositions. Recently, advances have been made in moving beyond Moche ideology as falling simply in the domain of symbols, representation, and the legitimation of an elite ideology. Scholars are now taking seriously the material and even ontological claims at stake in the practice and embodied experience of Moche religion (Swenson 2012, 2015). The great wealth of ethnographic, ethnohistoric and archaeological scholarship exploring aspects of Andean ontology consistently stress the complex and indivisible relationship among human subjects and objects (Bastien 1978, Salomon and Urioste 1991, Sillar 2009, Swenson and Warner 2012). The simultaneous subjectification of objects and objectification of subjects suggests that the Cartesian separation of the physical and conceptual is blurred, if not absent in the Andes. For contemporary and ancient Andean communities, the animating essence that connects people, places, and objects along a continuum of being reveals that the animate and material were indivisible in many Amerindian ontologies (Allen 1997, 2014a, 2014b, Bray 2009).

Following Phillipe Descola’s “modes of identification”, Astrid Stensrud has recently argued that Andean ontology can be understood as a combination of animism and analogism that establishes strong, intrinsic intersubjective relationships among humans, objects and places, while simultaneously creating a hierarchical scale based on the properties of each interpenetrating entity (Bird-David 2017, Descola 1996, Stensrud 2010, Vivieros de Castro 1998). Within such an animistic-analogical framework, Andean place-making and aesthetic production often relied on mimetic processes of simulation and transformation that served to animate, revitalize, subvert, and channel cosmic and social life-forces (Taussig 1993). Moche religious constructions of
space accord well with Stensrud’s analogical-animism, and the interpretation of the spatial negotiation of both local and Moche identity must acknowledge this fundamental ontological continuum between peoples, buildings, and things. As I demonstrate in Chapter 5, this interconnection of various states of animacy was reflected in the interrelationship of architectural renovations with human burials that defined each phase of Huaca Colorada’s complex biography.

1.4 Moche Place-Making in the Construction of Time and History

Until only recently, archaeological investigations of architecture have ignored how time and history are congealed in built forms (but see Bailey 2007, Boivin 2003, Lucas 2005, Olivier 2004, 2011, Swenson and Roddick 2018). For instance, methods of analysis that attempt to quantify the experience of architecture, such as space syntax, rely on ranked relations of access within built environments as a means to interpret the organization of space as reflective of social, economic and cultural conditions (Hillier and Hanson 1984, Hillier 2007) (see Chapter 2). Despite the breadth of its application in archaeological investigations (Fisher 2007, 2009, Letesson 2009, 2014, Moore 1996), such studies often limit their interpretations to defining degrees of social inequality. However, this technique can become much more effective when culturally particular factors of time and social memory are considered. In addition, space-syntax analysis must combine phenomenological interpretations informed by existing artistic depictions of architectural spaces in the Moche and wider Andean canon.

In reconstructing the particular ontology specific to adherents of Moche religion in the Southern Jequetepeque Valley (thesis one), the second thesis of this dissertation contends that place-making at Huaca Colorada encoded specific spatial and temporal ideologies that can be compared to historically and ethnographically documented indigenous societies of the Andes. I argue that time was conceived as inherently material, relying on synecdochal ontologies that only took on meaningful form in ritual practices. I support this thesis through a comparative analysis of the history of architectural construction at Huaca Colorada and other Moche sites with representations of built spaces in various artistic media in two and three dimensions. The methods of this comparison will borrow elements of quantitative and qualitative spatial analyses
stemming from space syntax, access analysis and phenomenology in a manner that does not privilege one epistemological stance over the other as detailed in Chapter 2. I historicize these modes of analysis through a diachronic study of the huaca, combining the strengths of each interpretive framework to create a more accurate description of the life history of this ceremonial structure.

I argue in turn that architectural interventions served as explicit historical media for the elites and celebrants of Huaca Colorada (Parmentier 1985). As a medium of communication, this ceremonial stage controlled spectator-actor interactions through careful management of visibility and access during highly curated and controlled rituals that punctuated the religious calendar. The synecdochal and nested design of the huaca—in which microcosm was enfolded in macrocosm—explains how the monument acted as a technology of time and memory in the creation of community and Moche political subjects. My study of the architectural regulation of time and creation of history will prove highly relevant for the study of buildings as historical instruments amongst the Moche and other societies in the Andes and beyond.

In interpreting Huaca Colorada as an instrument of historical production and a well-spring of social identity, I read the built environment of Huaca Colorada as a set of material symbols that not only carried meaning but were generative of meaning in and of themselves. I compare the sequence, meaning, and changing sociopolitical context of the cyclical ceremonial reconstructions documented at the site with exceptional ceramic architectural models of ceremonial constructions excavated at the contemporaneous site of San José de Moro (Castillo et al 2011, McClelland 2010). This center, associated with the famed priestess cult, served as the premier ritual and funerary center in the Jequetepeque Valley, located only 25 kilometers north of Huaca Colorada. As detailed in Chapter 3, Huaca Colorada formed the southern ceremonial hub of the region, and it clearly formed part of a larger religious network with San José de Moro. My analysis of the ritualized renovations of Huaca Colorada in comparison with Moche miniature representations of architectural space permits a characterization of Moche sacred spaces as locations that encoded ontological dispositions that can be understood from within analogical-animistic framework that holds the importance of nested, synecdochal relations between distinct scales of objects, ideas and persons (Spence-Morrow 2017, Wiersema 2010, 2011, 2015a, 2015b). These unique scalar condensations of distinct ideologies serve as a fundamental key to understanding how Late Moche conceptions of time and space in the
Jequetepeque Valley. Examination of the relationship between ontologies of spatial scale and the mimetic properties of miniaturization suggests that architectural representations of this kind served as important actors in rituals of transformation and markers of continuous acts of symbolic compression. It is suggested that these inextricably intertwined ideas were ritually materialized through acts of architectural reconstruction on two scales, the lived space of the built environment and instantiated in portable media such as maquetas. These unique scalar condensations of distinct ideologies serve as a fundamental key to understanding how Late Moche conceptions of time and space were enacted in the Jequetepeque Valley.

1.5 The Transitional Period and Changing Ideologies of Place at Huaca Colorada

The third thesis of this dissertation posits that the Transitional Period witnessed a major transformation in the experience and perception of space that accompanied the establishment of the highland centre of Tecapa. Huaca Colorada provides an opportunity to investigate transformations in ritual practice and the configuration of ceremonial space between two distinct archaeological periods. I discuss the shift in orientation and use of this space in detail in Chapter 4 and then interpret the meaning of these changes in Chapter 5. I thus interpret both continuities and changes in the spatial ideologies at Huaca Colorada following the foundation of Tecapa as one centered on maintaining the symbolic meaning of the ceremonial locale as a collective “house” to which the local community belonged. I argue that communal acts of construction, ritual participation and celebration created a “theatre of memory” that established, reified and repeatedly concretized the relationship between community members and the landscape (Watkins 2004). Despite cultural changes at play during the terminal occupation of Huaca Colorada, tracing continuities in practice across time between the Moche to Transitional periods demonstrates the enduring importance this ceremonial structure to the creation and maintenance of community in this specific location.

My interpretations of the transformations underwriting the Transitional Period were based on a series of interrelated questions: Did the ceremonial core become more inclusive or restricted through time as manifested in the shifting access patterns of the huaca in different phases of
renovation? What do shifts in exclusivity, accessibility, and the nature of renovation reveal about the changing political history and social makeup of the huaca community?

The sheer size of the structure would have had a considerable effect on the viewer from a distance but, considering the visually concealed nature of the interior western ceremonial chamber, it is clear that the spatial creation of participating “publics” was tightly controlled and contingent on the rites orchestrated and the different status of celebrants. I reconstructed the architectural sequence of the ceremonial precinct in order to interpret the meaning of changes in visual and spatial access in terms of both interior and exterior frames of reference and at various locations in and around Huaca Colorada. This method proved critical to reconstructing how transformations in the perception and experience of the site underwrote fundamental realignments of identity and reflected the changing political fortunes of the site during the Transitional Period. In the earlier Late Moche phase, the physical movement of individuals within the labyrinthine interior of the monument powerfully created subjects through the effective interplay of restricted and exclusive space. In fact, the data suggest that a large segment of the community accessed the internal sanctum of the temple, an experience that afforded spiritual and physical renewal and created a potent sense of belonging to a larger religious community loosely founded on Moche religious values. However, in the Transitional period, despite certain continuities in feasting practices and architectural termination rites, the phenomenology of ritual changed notably and much of the huaca was reduced to a stage for large public displays. Thus, the direct participation of individuals was curtailed with the establishment of Tecapa and the reformation of the cult but the symbolic role of the monument as a central unifying “house” for the community appears to have been maintained.

In the end, this thesis reconstructs Moche conceptions of place, time, and the built environment, and how rituals of place-making mediated identity politics in the Jequetepeque region during the Middle Horizon Period, an era of social change that was ushered in by major political disruptions associated with increased contact with highland communities.
1.6 Structure of the Thesis

In the following chapters, I will examine the architectural setting of the ceremonial core of Huaca Colorada from the perspective that the built environment plays a direct and active role in the construction and maintenance of sociopolitical relations. I argue that the reproduction of social systems was achieved through ceremonial regulation of temporal frames linked to kinship structures centered on specific “home” huacas. As detailed in Chapter 2, this approach is based on an explicit recognition that architecture is more than simply a physical location but encodes meanings, such as those associated with power, that structure human interactions. Chapter 2 presents the theoretical and methodological framing of my research concerned with the interrelationship between architecture and the exercise of sociopolitical power. More specifically, I demonstrate that the configuration and aesthetics of built environments structure social interaction, shaping and maintaining identities based on shared understandings of memory and history. I thus contend that archaeologists have the potential to interpret religious monuments beyond their role in legitimizing elite ideology. Instead, my architectural analysis permits an approximation of how place-making structured ontological dispositions, perceptions of space, and experiences of time and memory. I then discuss how my methodological program, based on space syntax, nonverbal communication, and viewshed analysis permits an analysis of relationships between architectural design and the development and maintenance of social relations and collective memory.

In Chapter 3, I briefly outline the history of archaeological analysis of the emergence of sociopolitical complexity within the Jequetepeque Valley from the Early Formative to the Moche cultural period. Following a review of the geographic and natural setting of the region, I trace the transformation of the region from the Archaic and Pre-ceramic Periods (12000-1800BCE) to the Middle Horizon (600-1000AD) to highlight the development of the complex system of production and external contacts that supported a powerful, emerging elite within the Late Moche Period. I focus on the changing nature of the built environment in this region and its role in the sociopolitical, ideological and economic developments of the Late Moche Period. I will describe how large-scale surveys and excavation projects throughout the 1950’s-1980’s paved the way for the current state of Moche research across the north coast of Peru, and discusses previous research undertaken in the Cañoncillo region of the Jequetepeque Valley.
Chapter 4 introduces the site of Huaca Colorada and provides a full description of the fieldwork conducted over seven excavation seasons between 2009-2018 with a focus on the excavations in the ceremonial sector of the site. I will then describe the architectural construction sequence of the central ritual precinct, which I divide into six functional sectors. Chapter 4 closes with a presentation of a final architectural sequence of the ceremonial core of Huaca Colorada, and I compare each phase of renovation to radiocarbon dates and the ceramic assemblages associated with each occupation. In order to synthesize the results of my spatial analyses, this chapter will define the observed patterns in spatial organization of each of the construction phases of Huaca Colorada through changes in visibility patterns within each iteration. I frame the rest of the synthesis in terms of how Late Moche monumental buildings were places of interaction and performance through a comparison of three-dimensional reconstructions of each phase. I address first the role of symbolically important architectural elements in the form of gabled roof structures built on top of monumental *huacas*. I then then explain how these places were used as performative forums for highly controlled social interaction through a discussion of various ritual activities, including feasts and public and private cultic practices that are known to have occurred on these important ceremonial platforms.

In Chapter 5, I present my interpretations of the complex architectural history of this structure to support my three principal theses. First, I present the mereological foundations Huaca Colorada as comparable to an analogical-animistic ontology. I then investigate how the huaca served as engine of time, history, and identity within the Late Moche period. Finally, through an analysis of the endurance of centralized communal ideas of the “house” I present how these attitudes appear to have changed during the post-Moche Period of the Transitional.

Chapter 6 begins with a brief summary of my results including general conclusions that arise from the analysis of the building phases of Huaca Colorada. I then address the implications of the research by examining the role of the monumental architecture within the context of changing sociopolitical dynamics over the course of the Late Moche and Transitional periods. I conclude by proposing a number of future directions research might take in order to expand its scope and more effectively investigate the social aspects of ancient ceremonial architecture in the Andes.
Chapter 2

Theoretical and Methodological Considerations: Place-Making as Technologies of Time, Identity, and Authority

2.1 Introduction:

In this chapter I present my theoretical approach that place-making constitutes a fundamental instrument in the exercise of power and a vital technology for the creation of past political subjects (Lefebvre 1991, Smith 2006, Swenson and Jennings 2018). In particular, I explore how architecture actively materialized communities bound to specific locales. I demonstrate that the configuration and aesthetics of built environments structure social interaction, shaping, forging and maintaining identities based on shared understandings of memory and history. I then highlight the merits of applying analytical approaches based on space syntax, nonverbal communication, and viewshed analysis to the study of the role of architecture in the development and maintenance of social relations and collective memory. As a corollary, this chapter reviews previous attempts to analyze and interpret Andean architecture and argues in turn that new approaches are needed that acknowledge the role of ceremonial buildings as “theatres of memory” that effectively socialized individuals and forged community identity (Watkins 2004). In Chapters 4 and 5, I will apply my interpretation of buildings as technologies of time, memory and identity to the case study of Huaca Colorada. In these chapters, I argue that the acts of renovation that marked and reified time served to materialize individual and corporate identities through the active historicization of the relationship between members of a community and their place on the landscape. Spatial analysis of each phase of construction at Huaca Colorada during the Late Moche and subsequent Transitional Period occupations reflect both marked changes and notable continuities. The interplay of these differences demonstrates how ideologies based on a particular analogical-animistic ontology underwriting the construction of this monument were expressed at this site during a period of significant sociopolitical change.
2.2 Emplacing Identity: Archaeological Approaches to the Built Environment

Place-making and the institutional production of space is central to the construction of personhood, community, and identity (Ashmore 2002, 2014, Basso 1996, Bowser and Zedeño 2009, Smith 2003, Swenson and Jennings 2018). Indeed, the creation and manipulation of memory and the media of its transmission are foundational to identity politics (Assmann 2011, Alcock and Van Dyke 2003, Connerton 1989, Mills and Walker 2008, Meskell 2003, Smith 2006). Landscape, architecture and place have often been interpreted as the most enduring and powerful media for the inculcation of habitual dispositions and more explicit ideologies of social and political affiliation (Swenson 2017, Van Dyke 2008). The spatial construction of memory and power should not be approached simply as a theoretical abstraction—the purview of philosophers and architects—for it clearly played a central role in ancient Andean political projects (Swenson and Jennings 2018).

Archaeologists have often interpreted evidence of ritualized architectural renovation in the Andes as the material manifestation of ‘dedication and termination rites’ (Burger 1992, Couture 2003, Dillehay 2004, Janusek 2003, 2004, Kolata 1993, Mackey 2006, Moore 1996, Nash and Williams 2005, Sapp 2002, Silverman 1993, Swenson 2011). Largely based on comparisons to the well documented cosmological-temporal principles of destruction and regeneration linked to calendrical cycles and dynastic succession in ancient Mesoamerica, architectural renewal in Andean contexts is considered to have been a highly ritualized act (Boteler Mock 1998, Coe 1959, 1980, Inomata et al 2001, Manzanilla 2002, Sugiyama 1989.) In a similar manner, the sequential spatial reductions of the ceremonial precinct at Huaca Colorada coincided with dedicatory acts of human and animal sacrifice (see Chapter 4). I argue that such architectural renovations intended to maintain the original configuration of this particular ritual setting while marking the passage of time and the renewal of social order (Hocquenghem 2008, Spence-Morrow 2018, Swenson 2011, 2018). In Chapter 5, I will elaborate on the nature of how Moche ritual space was perceived, experienced, and remembered in relation to both real architectural places and their representation in other media.

The theoretical framework and methods deployed to interpret architectural remains are as diverse as the past building traditions themselves, ranging from individual dwellings and neighborhood
units to larger urban settlement plans (Kent 1990, Cutting 2003, Hillier 1996). Because architecture is usually considered a relatively conservative element of culture (Parker-Pearson and Richards, 1994: 62), it is perceived as a container of sorts, sheltering and preserving more ephemeral elements of material culture. At the same time, the design of built environments serves as testament to the historically specific worldview and technologies of architects and occupants alike. Pronounced changes in architectural design often signal shifts in other aspects of social order, creating clearly discernible horizons amenable to archaeological interpretation (Van Gijseghem and Vaughn 2008: 136).

Despite the variety of approaches, the dialectical relationship between societies and the spaces they inhabit forms a core problem of study. Following a long tradition of scholarship, from Durkheim and Mauss to Lévi-Strauss and Bourdieu, Anthony Giddens’ (1984) structuration theory makes explicit the role of architecture in shaping social interaction in recurrent patterns, thereby giving form to social structure. Inspired by Martin Heidegger, Giddens also suggests that social action within a space occurs within at least three intersecting “planes of temporality”. These include the rhythms of daily routines, the biography or lifecycle of the individual, and the inheritance or *longue durée* of social institutions (Giddens 1979: 198, Braudel 1969, Heidegger 1962). Archaeologists have much to offer in analyzing the rhythmic sedimentation of socially mediated lifeways. These collective and often unconscious temporal practices generate diverse material expressions in the archaeological record as manifested especially in architecture (Eliade 1959, Ingold 2000, Swenson 2017).

The architectural pre-figuration of interaction and prescription of movement not only shapes practices and taken-for-granted everyday actions, but the resulting structures can also serve as complex symbols that can evoke emotional affects (Hillier and Hanson 1984). Often a symbol of an eternal social order, archaeologists have interpreted buildings on a monumental scale as a direct denial of change and as an expression of “…the fear of the passage of time, and anxiety about death, into splendour” (Lefebvre 1991: 121, Wheatley 1971, Tuan 1977). Architecture often functions as a “symbolic technology” with a vast array of applications and an equal number of intended impacts (Parker Pearson and Richards 1994: 3). Of course, as a symbolic technology, archaeologists must take into consideration indigenous theories of place and materiality, and the obsessive need to renovate Huaca Colorada might suggest that the Moche did not perceive monuments as timeless and static edifices (Swenson 2018). Indeed, monumental
and ceremonial architecture often materializes the closest approximation of a given polity’s ideological framework (whether entailing mystification or reification). As Lefebvre makes explicit: “Space commands bodies, prescribing or proscribing gestures, routes and distances to be covered... monumentality always embodies and imposes a clearly intelligible message... buildings mask the will to power and the arbitrariness of power beneath signs and surfaces which claim to express collective will and collective thought” (Lefebvre 1991: 143). As a point of departure, I interpret Moche ritual architecture in this particular framework. Even though there is evidence of considerable regional variation, current scholarship stresses fundamental similarities in material media that communicated a particular core cosmology. However, modes of communication must be properly historicized, and I demonstrate that Moche value systems were propagated through powerful intersubjective bonds that merged specific objects, spaces, peoples, and actions.

Places of worship such as Huaca Colorada resist convenient dichotomization into mental and material components in which the latter over-determines the former. Marcoulatos suggests that symbolic and value-laden architecture, such as places of worship, tend to

“...materialize a whole way of relating the world, not as if it were first conceived as a world view (i.e. a system of ideas) and then conveyed into another ontological medium (i.e. architectural form), but rather as if both aspects – roughly speaking, the textual and the objectified – of the specific sociohistorical manner of relating to the world co-emerged in the process of reciprocal formation.” (Marcoulatos 2003: 254).

Indeed, the nested relationship of specific ideologies and the places where they are created, performed and reified resist separation.

The study of the social structure and function of ritual space has generated an extensive theoretical literature. Scholars have recently shown that the built environment does not simply reflect conscious belief and social structure in the spirit of Durkheim (1959, 1965), Wheatley (1971) and others, nor is it merely an arena in which social life unfolds. Rather it serves as a medium through which social relations are produced and reproduced, and the organization of any architectural space, from quotidian domestic settings to highly controlled ritual locales, constitutes a powerful tool of socialization re-creating elements of unconscious and invisible social structure (Gregory and Urry 1985: 3). The divisions and arrangements of physical barriers
within an architectural space can set up hierarchical relationships among people, objects, and activities. The affordances and boundaries in built space formed by walls, doors, furniture and lighting convert social relationships into a material form, in turn, the physicality of the built environment reinforces prevailing social values as they relate to “action possibilities” that can be quantified and compared through spatial analysis (Gibson 1977, 1979).

Inspired by structuralist, post-structuralist and behavioural perspectives, a number of researchers argue that unconscious social norms that shape and are shaped by the built environment are akin to linguistic rules (Ankerl 1981, Alexander 1977, Ferguson 1996, Hall 1966, 1972, Rapoport 1961, 1982). As such, spatial organization can be compared to a “morphic language” which abides by a distinct and observable form of grammatical structure and syntax (Hillier and Hanson 1984, Hodder and Preucel 1996). From this somewhat reductive perspective, patterns in architecture can be read as a text that constitute the traces of direct action, and, in turn, one can decipher the rules that govern the syntactic arrangement of this architectural ‘language’ to understand the overall spatial organizational rules of a given culture (Hillier and Hanson, 1984, Hillier 1996, Hanson 1998). In Chapter 4, elements of these methods are applied to analyze the construction phases of the ceremonial precinct of Huaca Colorada, showcasing a great deal of continuity in spatial layout and visibility despite significant renovations over time. Given this conservatism of form, in Chapter 5, I examine the ritual space at Huaca Colorada and its relationship to representations of similar architecture in various other media as a materialized semiotic ideology (Keane 2018). I follow the triadic framework of Signs, Objects and Interpretants as proposed by C.S. Peirce (Peirce 2000). Architectural models or simple depictions of idealized ceremonial spaces served as indexical icons that instantiated the affective, physical, social and psychological reality brought into play by the ceremonial spaces they reference.

R.J. Parmentier (1985) employs elements of C.S. Peirce’s sign theory to relate ever more monumental classes of material objects to distinct levels of social structure and temporal modalities in the Micronesian archipelago of Palau. He argues that two classes of ‘historical signs’ meaningfully describe the pragmatics of temporality. Distinguishing “signs of history” from “signs in history” as two hierarchically linked modes of semiosis, Parmentier defines the former as symbols that represent the past (e.g. a monument, a name, a historical painting) and the latter as symbols that become token players in the dynamics of social life because of the first representational function. When considering the relationship between architectural depictions
and ceremonial edifices from this perspective, it becomes clear that these two concepts do not form an exclusive binarism, as all signs in history are first signs of history (Parmentier 1987, 2007). Following this line of thought, acts of renovation at Huaca Colorada served to mutate architectural space from a sign in history (perhaps even of a particular event) into a sign of history, one that becomes invisible save for its representation in other media, although embedded in and foundational to the resulting space. Determining the relationship between such sign modalities that foster identification with peoples and places, meaning laden places such as Huaca Colorada require a reconsideration of the interdependent components of the built environment as a unified entity.

2.3 Parts of the Whole: Towards a Moche Mereology

In this section, I turn to the theoretical considerations framing the first objective of this dissertation to demonstrate how the architecture of Huaca Colorada encodes a particular ontological order best described as analogical-animism. From this perspective, an interpretation of architecture to infer past worldviews, including deep ontological orders, must start with an analysis of the component parts of the built environment to understand how these elements are arranged in relation to each other. Of course, individual bricks or posts alone cannot account for the value systems of the builders; we can only approximate the motivations, conceptual schemes, and even the underlying ontologies of place through an examination of a larger “structure” comprised of the meaningful collection of architectural elements. Accordingly, the definition of these fundamental component parts is entirely dependent on the context at hand, as directly related to the scale of the objects and settings themselves, from the domestic to the monumental. In this light, scholars have recently argued that archaeological research largely operates according to principles of mereological reasoning, a framework of interpretation in which partial perspectives sum up to a more complete understanding of a whole (Nativ 2017, 2018, Spence Morrow 2019, Strathern 2010: 175, Webmoor 2013: 107, Webmoor 2014: 473).

As a branch of philosophy, mereology (the study of parts and wholes and their relationship to one another) is seldom compared to the ontologies of contemporary and ancient peoples (Casati and Varzi 1999, Descola 2013, Viveiros de Castro 2004). In his recent ethnographic work on
mereological cosmovisions among Carib-speaking groups in Venezuela and Colombia, Ernst Halbmayer stresses this paradox, suggesting that the contemporary anthropological obsession with ontologies would benefit from efforts to reconsider the parthood relations of the components comprising larger ideological structures (Halbmayer 2012: 110). This particular mode of interpretation would proceed by playing off ethnographic and archaeological data in order to rethink our own analytical concepts (Halbmayer 2012:104, Carrithers et al 2010, Zeitlyn 2009). In relating parts to wholes, archaeological interpretation relies upon the accumulated knowledge of variably delimited and interrelated components of both the material record and established theories used to reconstruct past social realities. In order to approximate past behaviour through an analysis of the diverse traces of action, archaeological research can only proceed by arranging parts to form a whole, and conversely to deconstruct wholes through an analysis of their parts.

Archaeological interpretation thus entails a constant process of splitting and division through which the unity of the “site” is physically deconstructed into numerous parts followed by a conceptual reassembly as a multilevel parts-whole structure. The varied integrations and changing parthood of archaeological objects and their referents are determined by the form and style of the objects as well as the meaning and intentions we impart to them in light of their location and distribution in space (Casati and Varzi 1999, Halbmayer 2012). In examining the relations among wholes, parts, parts of parts, and the boundaries between parts, philosophers Roberto Casati and Achille C. Varzi (1999) developed the theoretical framework of mereotopology in which mereology and topology are combined. The latter term refers to the ways constituent parts are interrelated and (re)arranged. The formal logic of mereotopology effectively captures how archaeological method is grounded in the analysis of parts, wholes, and the boundaries and connectivity of parthood relations. This mereological or mereotopological framework extends to the consideration of the built environment, as archaeologists tend to focus on the relationship between sequences and phases of a structure’s development as expressions of changing social circumstances. At this particular scale of analysis, archaeologists attempt to read ideology through mereological modes of definition and deconstruction of inferred spatial patterns as materialized in stone, brick, and wood.

Stressing the archaeological method as inherently mereological is particularly relevant to this argument given that certain ontological orders were predicated on similar principles across the
ancient Andes. This is not to say that contemporary archaeologists and the Moche of this case study thought identically or built worlds following the same logic or procedures. Instead, I emphasize that Moche ritual interventions in space permit an archaeological reconstruction of their underlying conceptions of space given the parallel structures underling Moche ritual semiosis and archaeological interpretation. The parallels between archaeological interpretation and Moche ritualism lies in the realm of seeking and making order through the interplay of part and whole, but the analogy obviously ends here. Indeed, the underlying ontologies are obviously different for the Moche understood part and whole as enlivened and materially co-constitutive. This idea will be further discussed in Chapter 5 through an investigation of the mereological relationship between human bodies and the spaces they constructed as constituent parts of an integrated whole. More specifically, this discussion examines how human bodies and buildings constituted intertwined and enfolded actors in Moche spatial ideologies through communal acts of construction and sacrifice.

Detailed architectural analysis of the construction sequence of the Late Moche ceremonial center of Huaca Colorada presented in Chapter 4 demonstrates that the site was characterized by cycles of ritualized architectural renovation that coincided with human and animal sacrifices. These findings provide interesting insights on Moche philosophies of embodiment and space that appear to have been grounded in deep-seated dispositions on the nature and interrelationships of beings (Descola 2013: 274). These often unquestioned orientations are commonly equated with “ontology” in recent archaeological research (Alberti 2016), but they no doubt were shaped by religious discourse and political ideologies. As Butler admonishes: “power often dissimulates as ontology” and the ability to define what is real and to forge relationships between beings confers considerable authority (Butler 2004: 215, also see Govindrajan 2018: 12). In considering the ontological underpinnings of Moche worldviews, the data strongly suggest that the Moche perceived architecture as an animate, changing and metabolizing body, the life history of which paralleled the trajectory of different biological entities (human, divine, environmental) (Swenson 2012, 2015, Swenson and Warner 2016, Swenson 2018a). The joint sacrifice of architectural and living beings provides important data on Moche worldview as it pertains to constructions of place and personhood in the Jequetepeque Valley during the Middle Horizon Period. Ultimately, an investigation of the maintenance, renovation, and ritual treatment of architecture at Huaca Colorada and other Moche sites offers a means to interpret Moche ideologies of life, death, and
vitality as founded on corporeal interdependencies—and nested part-whole interchanges-between individuals and the spaces that they produced.

2.4 Synecdochal Ontologies in the Andes

Comparable to social theories documented in Andean ethnographic materials, Moche conceptions of being and life appear to have been predicated on reciprocally propelled rites of consumption that forged bonds and interdependencies between ontological others: As Catherine Allen notes:

“That the human body could serve as a conduit transmitting material sustenance at a distance to different categories of being implies understandings of body and soul, mind and matter, animate and inanimate objects that are very different from ‘western’ thinking. Taking this animistic attitude seriously requires in the words of Eduardo Vivieros de Castro, an ‘ethnographically-based reshuffling of basic conceptual themes’” (Allen 2014:74, Viveiros de Castro 1998:470).

Allen argues that contemporary Andean ritual practice is based on the idea that all beings (animate or otherwise) are interconnected through *ayni*, the fundamental reciprocal “give-and-take” that controls and circulates vitality between interconnected agents. As a cosmology that does not separate between mind and matter, material objects could become animate and agentive. This reciprocal consubstantiality between people, places, animals, and things also relies on a sense of envelopment or synecdoche, with parts standing for the whole, and the whole standing for the part (see also Spence Morrow 2018, Swenson 2015, Swenson and Warner 2016). She argues that the synecdochal exchangeability of the whole and part act more as a figure of thought and mode of practice as opposed to a figure of speech. Allen notes (1997: 81):

“*Synecdochal thinking comprehends the world in terms of mutually enveloping homologous structures that act upon each other: ayllus [Andean lineages] are contained within ayllus, places are contained within places, every potato field contains its own vertical ecology, thus every microcosm energizes its macrocosm and vice-versa.*”

As mentioned above, just such a material and reciprocal interpenetration of whole and part was materialized in the recurrent architectural reconstructions documented at Huaca Colorada. Human and architectural bodies were comingled as nested components of each other at this
powerful ritual locale, exemplifying a worldview predicated on the mereotopological relationality between parts and wholes. From this perspective, a Moche synecdochal corporeality is thus expressed in the material interactions between human and architectural actors. The incorporation or even ingestion of human bodies into the adobe fabric of the structure points to a particular synecdochal ontology in which humans and buildings could alternate between subject and object, as well as serve as representative parts that engendered and vitalized the whole (Spence-Morrow 2017, Spence-Morrow and Swenson 2019). This intimate relationship is repeated at a number of interconnected scales, from macrocosm of the landscape, the mesocosm of the inhabited built environment, through to the microcosm of miniature architectural models in two and three dimensions. These interdependencies will be explored at length in an extended discussion of miniaturization and mimesis in Andean ontology in Chapter 5, focusing in particular on the role of architectural models in Moche ritual practice.

2.5 Andean and Moche Monuments as Cosmograms and Instruments of Political Control

This spatial and temporal relationship of the elements that compose the ritual spaces at Huaca Colorada requires a close consideration of the mereological and synecdochal foundation of this structure. This interpretation is informed by the growing appreciation of Moche spatial ideology that has been gleaned from those sites and settlements that have been excavated thus far, in relation to representations of ritual spaces in the form of portable artifacts. The research presented in Chapter 5 applies phenomenological and semiotic approaches in order to shed new light on Moche ideologies of space and time. There is no doubt that Moche spatial organization was based on cosmologies that perdured at least in part in later Andean history (Bauer 1991, Urton 1993). Scholars have interpreted important monumental sites such as Tiwanaku, Cuzco and the Huacas de Moche as encoding the cosmos and ideal social order. In this perspective, the cultural construction of time and history, including ideologically laden concepts of cosmogony, astronomy, periodization and calendrical systems lean heavily on traditions of astronomical observation (Kolata 1993, Parmentier 2007, Seone 2011, Urton 1981). Based on the ethnographic work in the region, it is clear that contemporary Andean communities continue to
strive to harmonize the landscape with the celestial sphere as interrelated elements of the natural world (Bastien 1978, Urton 1981).

Processual and Marxist archaeological interpretations of ancient Andean monumental architecture view the built environment as direct reflections of political control over ancient populations, enacting authority through coercive manual labour and conspicuous consumption (Haas 1985, Shimada 1994, Trigger 1990). In this perspective, the control of physical access and communication within architectural space organizes social structure such that sacred spaces and public places actively embody ideas of differential inclusion or exclusion (Moore 1996, Czwarno 1989).

Jerry Moore’s oft-cited body of scholarship on the built environment of the ancient Andes has proved indispensable in archaeological interpretation of ancient architectural spaces (Moore 1992, 1995, 1996a, 1996b, 2003, 2005). Moore’s examination of the relationship between public architecture, authority, ritual activity, and social organization in the varied cultural landscapes of the ancient Andes effectively integrates theories on the architectural prescription of communication and perception with ethnographic, ethnohistoric and archaeological data. Despite the utility of Moore’s approach, it is dangerous to only consider the complex relationship between people and the built environment from the ahistorical perspective of political control and coercion alone (Swenson and Jennings 2018: 21). A nuanced understanding of place based upon a diachronic investigation of a particular location such as Huaca Colorada allows for a much richer interpretation of the meaning of architecture, not simply as an imposed order, but as a changing, intergenerational development.

According to Moore in his consideration of Andean plaza spaces: “Ritual concepts are expressed and created via paralinguistic, verbal and non-verbal modes of human communication. Because of the innate properties of human perception, spatial thresholds structure the ability to communicate over distance, and consequently, the architectural modes of ritual communication that occurred in those spaces” (Moore 1996b: 789). Paralinguistic communication refers to the non-verbal vocalizations, pauses and tonal properties that provide an underlying context for speech. Archaeologists can effectively interpret the gestural and visual elements of nonverbal modes of communication as materialized in ancient ceremonial spaces. For instance, Moore’s work on the degree of visibility as one approaches Andean mound structures relies on human
sightlines or ‘isovists’ and has permitted interpretations of monumental architecture as symbolic
technologies that actively impose particular messages, ideologies and dispositions. Use of
isovists examine structures in terms of what is visible from three crucial angles (18, 27 and 45
degrees) and thus the potential visual and psychological affordances of a structure from different
locales (Moore 1996a: 113, Letesson and Vansteenhuyse 2006). I directly apply viewshed and
isovist reconstructions of ritual space at Huaca Colorada in Chapter 4 to compare the various
phases of Moche construction to the spatial and conceptual reconfigurations of the central
ceremonial core. I then compare these patterns to the distinct reconfiguration of the ceremonial
precinct during the following Transitional Period as evidence of particular ideological
continuities in relation to the use of the monument.

Moore’s work is fundamentally concerned with how monumental architecture reflects and
transmits ideology in efforts to construct and control social order in the ancient Andes (Moore
1996a, 1996b). Ranging from the open performative spaces of Inca plazas at Cuzco to the spatial
grammar of the restrictive layouts found in the complex internal spaces of the ciudadelas of the
Chimu at Chan, Moore’s analysis of Andean spatial ideology has formed an important
comparative basis for scholars across the discipline. Elements of this approach are also applied
in this dissertation, but on the much more focused and intimate scale of the central ceremonial
platform complex of Huaca Colorada. As the architectural setting that materialized and
disseminated Moche religious values, the acts of construction and renovation constituted ritual
processes in and of themselves. Ritual renovation also created place through a materialized
manipulation of the passage of time. The architectonic and artifactual residues of these
meaningful actions are analyzed as vital and symbolically charged liminal ceremonies,
intentional pauses that required participants to physically engage in the creation of Huaca
Colorada as a meaningful place.

2.6 Spatial Analysis, Space Syntax and Visibility Analysis of Huaca
Colorada and Architectural Representations

Both quantitative and qualitative methods have proved useful in interpreting the meaning,
function, and experience of past architectural traditions. My investigation of the architectural
biography of Huaca Colorada relies in part on the quantitative methods of space syntax and visibility analysis of the various reinventions of this ritual locale over time.

Developed by sociologists Bill Hillier and Julienne Hanson, the space syntax method of analysis considers that the organization of architectural space may reflect social, economic and cultural characteristics of a society (Hillier and Hanson, 1984, Hillier, 1996). Space syntax analysis quantifies and compares the internal organization of built environments in a more unbiased manner than by visual comparison and interpretation alone (Bafna 2003). By mapping distinct points in space on structural floor plans, the relative interconnectedness, depth, and the ease of movement between rooms or distinct areas of a structure can be modeled, creating an access pattern plan amenable to comparison with other similarly mapped structures (Letesson 2009).


Theoretically, space syntax analysis is a valuable tool with potential to clarify the internal organization, experience, and political instrumentality of ancient built environments. However, the computational nature of this technique runs the risk of drawing too heavily on culturally normative assumptions about how people interact with space. Although this is a major concern for any practical application of these methods, the information generated provides a convenient starting point for comparison and constitutes a viable tool to guide and inform interpretation. I apply this method in the comparative multi-scalar investigation of the sequence of platform chamber complexes at Huaca Colorada as iterative ritual spaces in Chapter 4.
2.7 Visibility analysis in fully three-dimensional spaces:

In order to properly build the three-dimensional models of the ceremonial architecture at Huaca Colorada, I systematically collected and processed spatial information through topographic and photogrammetric survey. Previously used to rectify site plans, record elevations and topographic features, I have expanded this spatial dataset to serve as the framework for the three-dimensional reconstruction of the architectural history of Huaca Colorada. Following this modeling process, the use of three-dimensional spatial models allows for the reconstruction of visibility vectors within architectural structures in order to elucidate and compare shifts in the physical perception of architectural space at Huaca Colorada. This new method stands to revolutionize the architectural analysis of archaeological remains (Paliou 2009). The unique state of preservation of ceremonial architecture at Huaca Colorada allows for the creation of three-dimensional digital reconstructions, including the incorporation of not only the basic architectural features required by spatial analysis such as the position of thresholds and corridors, but a considerable amount of information about wall dimensions and surface treatment. A virtual reconstruction of the ceremonial chambers and surrounding precincts permits an interpretation of how the platforms were visually apprehended from strategic viewpoints in and around the central ceremonial core of Huaca Colorada. However, an observation and comparison of numerous computer-generated images by mere visual inspection alone often proves very difficult to achieve and may be of little interpretive value. Fortunately, Paliou’s recently proposed method of visibility analysis in three-dimensional digital spaces makes possible the quantification of visual information incorporated in view-dependent rendered images corresponding to all observer locations within a study area, allowing a comprehensive and methodical investigation of visual experience within a virtual environment (Paliou 2009, 2011, 2013, 2018, Paliou and Knight 2013, Paliou and Wheatley 2007, Paliou et al. 2011, 2014).

These novel methods were used to overcome the representational and practical limitations of two-dimensional computational visibility analyses, namely GIS-based viewshed analysis, isovist and Visibility Graph Analysis (VGA). GIS-based visibility models do not make use of three independent axes (x, y, z) as the third dimension is merely an attribute in GIS data structure that prohibits the representation and analysis of complex built forms using GIS (Wheatley and
Isovist and Visibility Graph Analysis (VGA) rely upon similarly limited spatial representations (Turner et al. 2001). Both techniques are standard procedures in DepthMapX, a computer program developed at the University College London and recently employed in archaeological studies (Stöger 2009, Letesson 2009, Spence-Morrow 2009). The isovist, the basic unit of isovist analysis, is a 2D slice of space at the eye level of the viewer showing the visible area from a certain observer location (Benedikt 1979). On the other hand, VGA aims to examine visual connectivity in built spaces using graph representations and measures (Turner et al. 2001). Although both methodologies have their merits for building analysis, neither is sufficient to describe the visibility/non-visibility of partially concealed vertical wall surfaces that are placed above the eye level of the observer. Analyses performed upon two-dimensional plans and elevations that often conceive the target object as a point in space are equally inadequate for this purpose (Moore 1996, Letesson and Vansteenhuysse 2006). As such, any investigation of the complex sequence of changes in floor height, entrance points, ramps, stairs and internal walls defining the renovations in the ceremonial precinct at Huaca Colorada must be analyzed with the limitations of presently available and widely used two-dimensional analysis of access and visibility in mind.

Viewshed analysis of 3D spaces (Earl 2005, Paliou and Wheatley 2007, Paliou 2009, Paliou et al. 2011) entails the illumination of a 3D digital environment with a single light source that emits rays in all directions; illuminated and non-illuminated parts of the model will correspond to visible and non-visible surfaces respectively. The workflow of the analysis involves the following steps: first, the created 3D model of the study area and the locations an observer could occupy are sampled in equal intervals using a grid. A light source then animates each grid centroid (viewpoint) at the eye level of the onlooker, and the texture of the target wall surface, which incorporates information on illuminated and non-illuminated areas (e.g. visible and non-visible respectively), is extracted for each defined observer location. Finally, textures (raster) are imported in a GIS program, where information on visible area (pixel count) is extracted and mapped back upon the corresponding observer locations following the use of scripts and batch processes (Paliou 2009). In this way, distributions of continuous spatial data are produced that illustrate the changes in the visible area (measured in pixel count or percentage) of the target object through space. Such maps can indicate the changes in the reception of the target object that could occur in the course of the observer’s movement.
I will make use of a modified version of this form of viewshed analysis of 3D spaces at Huaca Colorada in order to examine variations of the multiple phases of use of the ceremonial chamber in terms of where a viewer was likely directed to stand. I will investigate in turn the likely intended impact of a reconstructed sightlines and physical encounters and how they changed through time. The application of this method will prove especially critical to my analysis of changes in access patterns and the experience of space between the Moche and Transitional phases (see Chapter 4).

In Chapter 4 I argue that the different phases of renovations created major shifts in how the space was perceived, significantly changing the embodied experience of the Huaca while clearly maintaining the quintessential performative properties of the space. In order to shed further light on how each architectural phase was experienced, in Chapter 5 I compare the three-dimensional reconstructions of the central ceremonial core with ceramic models that appear to represent these spaces. This comparison serves to elucidate possible site-dependent ideologies of place and time held by the Moche that rely on the creation of mimetic relationships between various scales of experience and memory within the built environment (see Chapter 5).

It must be noted that this procedure can be computationally expensive and time-consuming, yet it is worthwhile, since viewshed analysis in three-dimensional spaces has two important benefits over previously proposed two-dimensional analyses: first, it can represent the real shape and details of architectural features, including wooden posts, baffled entries, steps and stairs and vertical wall surfaces. At the same time, it is capable of taking into account the physiology of the human body and the limits of visual perception. For example, it could allow for a visual cone or ellipse, as well as visual angles that determine changes in visual perception and the ease with which an object is seen. According to Dreyfuss’ (1959) data on human vision, an object can be viewed just with eye movements if it is located up to 25 degrees above the horizon of the viewer. Conversely, if the object is placed beyond this angle, the observer needs to make additional head and body movements and exert more effort as a consequence. In a densely populated environment, such as a crowded public plaza or room, looking high above the horizontal might interrupt or halt pedestrian movement (Higuchi 1983: 46). The act of ‘looking up’ also presupposes an interest and a conscious intention to observe someone or something. If the focus
of interest was conveniently located within an observer’s natural field of view (e.g. no more than 25 degrees above stationary eye level), the ease of visual access suggests a much more direct line of sight indicative of more intimate and direct relations on a single plane. Thus, examining the vertical angle (angle of elevation) from an area of interest elucidates the communicative potential and impact of the location of ceremonial platforms at Huaca Colorada, and how that experience varied over time.

As indicated by a sequence of exterior ceremonial platforms on the eastern façade, I argue that individuals approaching Huaca Colorada would have had their gaze entrained by the towering monument, its surface embellishments and of course any ceremonial activities or performances that took place in view of the eastern plaza. This highly controlled position within the plaza would have guided ritual participants into a particular physical location in relation to the ceremonial chambers atop the structure. Here the gaze of celebrants would have then been directed towards the central platforms and associated elites and ritual specialists. As discussed in detail in Chapter 4, the relationship between the viewing public and the ritual participants on the summit of Huaca Colorada changed notably throughout the life history of the monument. I argue that the original Late Moche Period design of the internal ceremonial chambers suggests a much more accessible layout that would likely have been experienced by ritual participants moving through the ramps, staircases, corridors and intimate chambers of the ritual core. In contrast, intentional destruction and remodeling in the Transitional Period reduced this formerly interactive space to a singular public platform.

Although it is impossible to determine the precise meaning of the public performances at Huaca Colorada during Late Moche and Transitional Periods, it is clear that the central ceremonial core of this structure was a result of considerable and enduring social effort, both in the creation of the monument itself and the participation in the festive gatherings in the lower domestic areas and plaza situated on the desert *pampa* below. As will be made clear in the coming chapters, the changing architectural form of this important ritual stage was mediated by the sociopolitical and religious messages disseminated from this privileged position. By replicating the traditional form of ceremonial presentation familiar to the community that worshipped at Huaca Colorada, the Transitional Period use and manipulation of this ceremonial locale as a “theatre of memory” reified and reiterated elements of the religious or political ideology that had been important during the Late Moche Period. Before presenting the full architectural history of the site, the
following chapter will trace the cultural trajectory of the Jequetepueque Valley leading to and including the Late Moche Period occupation of Huaca Colorada.
Chapter 3

The Moche of the Jequetepeque Valley in Historical Context

3.1 Introduction:

In order to situate the occupation and construction history of Huaca Colorada within the Moche sphere of influence on the North Coast of Peru, this chapter examines the ecological and cultural history of the Jequetepeque Valley as reflected in the changing distribution of centralized ceremonial locales. Without question, the overwhelming majority of archaeological research in this region has focused on the study of these monumental sites. Despite the growing call to shift investigations towards the relatively understudied quotidian lifeways of ancient populations (Dillehay 2001, Duke 2017, Johnson 2008, Swenson 2004), the detailed analysis of architectural monuments provides a vital baseline on which these studies of the everyday are reliant. Civic and ceremonial centres such as Huaca Colorada served as clear nodes of identity and lynchpins of larger economic and religious systems that no doubt conditioned in part the lives of communities living in smaller often seasonal villages. The various scales and strategies of construction and use of these structures reflect the changing nature of social and political interaction over time across the North Coast of Peru.

3.2 Environmental and Economic Context:

Bounded in the east by the foothills of the Andes, the broad desert plain extending from the shore is punctuated by a series of river valleys distinguished by high agricultural productivity. Modern hamlets, towns and major cities such as Trujillo and Chiclayo thrive in these valleys, relying on similar irrigation infrastructures first established in antiquity. The occupational history of these coastal valleys extends from the early Archaic and Paleoindian period (~12000 BCE) with archaeological evidence of very early and ongoing interconnections with the adjacent highlands.
and the Amazonian jungle on the far eastern slopes of the Andes (Bawden 1996, Chauchat 2008, Castillo 2012, Dillehay 2017, Donnan 1992, Pozorski and Pozorski 1979, Shimada 1982, Swenson 2004). These river valleys served as important points of interaction, natural thoroughfares that connected coastal populations to neighbouring communities through exchange of resources and ideas during all periods of occupation. The availability of rich marine resources supported considerable population densities on the coast from the earliest periods of occupation. The subsequent construction of vast irrigation systems permitted intensive agriculture across the lower valley plains (Sandweiss et al. 1989).

Figure 3.1: Map of Peru highlighting modern cities in relation to the Province of La Libertad
The ecological settings of the northern coastal valleys of Peru are largely determined by the Humboldt current which brings cold, nutrient rich waters north from Antarctica up to equatorial regions (Coker 1908:337, Howe 1914:2, Shimada et al. 1991:256). Cold waters flow along this narrow current (50-100 km wide) that well-up nutrients and phytoplankton as it moves north from Antarctica, creating one of the richest fisheries in the world. Native peoples exploited the abundance of anchovies, sardines, sea bass, and other seafood, and this important source of surplus protein supported high population densities and complex societies along the littoral as early as 3000 BCE. This massive upwelling of cold water is responsible for both the extraordinary richness of the marine resources as well as the intense aridity of the narrow coastal plain. On meeting the frigid waters of the north-moving current, southerly and westerly winds are chilled thus retaining moisture. However, the air rapidly warms as it moves east across the landmass, and rain falls over the highlands leaving the coast without appreciable precipitation (rarely more than 25 mm annually). Much of the rainwater collects into the Eastern Amazonian catchment, but the mountain rivers that flow to the west and drain into the Pacific Ocean form more than fifty oasis-like river valleys that bisect thousands of kilometers of coastline.

Accordingly, the only water available to agricultural communities in this region comes from the rivers fed from highland drainage basins on the western-facing slopes of the Andean cordillera to the east. Faced with such a limited water supply, the development and control of extensive irrigation systems was crucial to the development of agricultural communities along the coast (see Billman 2002, and for Jequetepeque see Eling 1986, 1987, Warner 2010). The large populations of the region allowed the construction and maintenance of increasingly complex irrigation networks, which in turn supported the nutritional demands of growing communities.

The relationship between these densely settled sites and the complex irrigation and agricultural infrastructures on which they were reliant was held in a delicate balance. During periods of ocean warming that occur during recurrent El Niño-Southern Oscillations (ENSO) events, the redirection of warm waters from Southeastern Pacific had profound and often devastating effects for ancient communities across the Pacific coast, disruptive climatic events that continue to the modern day (Cane 1983, 1986, Dillehay 2001:278, Johnson and Zori 2011:3, Sandweiss and Quilter 2008, Shimada et al. 1991:256). The warming of the ocean currents leads to the displacement of cold-water marine species by warm-water species, a phenomenon that necessitated significant changes in fishing and marine resource collection strategies. This shift is
so pronounced that the presence of particular species of fish and mollusks in archaeological contexts has been interpreted as evidence of ENSO events (Billman and Huckleberry 2008, Johnson and Zori 2011:3, Maasch 2008).

Warming of ocean temperatures during ENSO periods also amplifies the hydrological cycle to devastating effect, as atypical rainfall over the coast generates catastrophic flash floods. Recent ENSO related flooding in 2017 caused by excessive rains overwhelmed irrigation infrastructure, destroyed riverine settlements and washed away large segments of the Panamerican highway. The impact of such rain events in antiquity would have been equally if not more severe. Violent floods would have eroded and destroyed adobe constructed canals leading to the inundation of agricultural land and the subsequent stripping of topsoil from fields (Billman and Huckleberry 2008, Johnson and Zori 2011:3, McClelland 1997, Moseley and Deeds 1982, Moore 1991, Shimada et al. 1991). The scale of recovery and reconstruction efforts from such catastrophic events would have put enormous pressures on coastal communities and afforded others opportunities as some authors have noted (Moore 1991, Weismantel 2018). Subsequent periods of drought in the highlands would have exacerbated the loss of agricultural capacity, resulting possibly in devastating periods of famine. Analysis of ice-core records from the Quelccaya glacier in highland Peru suggest that three periods of lower than usual annual precipitation in the sixth century AD would have resulted in protracted periods of drought. Water scarcity during the AD 506-512, 524-540 and 562-594 periods would have shifted irrigation strategies in many coastal valleys, leading to abandonment of previously productive areas (Dillehay and Kolata 2004:4325, Jennings 2008, Moseley 1992:29, Moseley et al. 2008, Shimada et al. 1991:261). As land lay fallow and irrigation infrastructure was left unattended for significant periods of time, aeolian deposits of sand brought inland by relentless coastal winds left agricultural fields deeply dunated that forced segments of the population to resettle closer to remaining irrigable lands in the valley necks (Shimada et al 1991: 262, Swenson 2007a: 258).

Despite ample evidence of extreme climatic fluctuations, it proves difficult to directly correlate particular environmental events to archaeologically detectable religious and political transformations in each river valley over time. Archaeologists have argued that climatic pressures and resulting periods of drought and famine may have destabilized political power in the Jequetepeque valley that led to the balkanization of polities in the region during the droughts
of the sixth century (Dillehay and Kolata 2004:4330, Swenson 2004). Of course, sociopolitical transformation results from a complex series of historical factors. Nevertheless, the cyclical nature of ENSO events played a central role in North Coast adaptations and political realignments. Steven Bourget, Justin Jennings and Mary Weismantel have argued that these cycles become embedded in political and religious ideology expressed in ceremonial activity at numerous monumental centres, including the Jequetepeque valley (Bourget 2016, Jennings 2008, Weismantel 2018). Considering that at least five major ENSO events are known to have occurred over the Late Moche Period, the close analysis of specific monuments constructed during this era offers a unique opportunity to trace the cultural trajectory of a singular community (Shimada 1991). A close consideration of the construction history of Huaca Colorada in the following chapters explores the response of Moche communities to significant political changes in the Late Moche Period (AD 650-900).

### 3.3 Defining the Moche

Originally thought to represent an early expansive state centered in the eponymous Moche Valley, current research now suggests that Moche influence across the North Coast represents an expanding influence of a particular set of religious and artistic traditions rather than the centralized rule of a unitary state (Bourget 2006, Castillo 2012, Millaire 2010, Quilter 2010, Quilter and Koons 2012). The Moche sphere of influence has been documented along 600km of the Pacific coast extending to the Piura Valley in the north and the Huarmey Valley in the south. (FIG X). This long, narrow band of territory is divided into northern and southern regions by the Pampa de Paiján, a vast barren plain of largely uninhabitable desert. This broad and mostly unirrigated pampa appears to have stood as a natural buffer between two distinct realms of Moche occupation. Research at Moche sites in the valleys south of the Pampa de Paiján (Chicama to Huarmey) have led many scholars to suggest that this southern expanse was more centrally unified as a confederated collection of communities (Billman 2002, Castillo et al. 2008, Chapdelaine 2010, Shimada 1999). In contrast, sites investigated in the valleys north of this buffer zone (Jequetepeque to Piura) show evidence of notable political decentralization based upon considerable variation between and even within each region. Donnan has argued that
different royal dynasties presided over each river valley or even subregions within specific drainages (Castillo and Donnan 1994, Castillo and Quilter 2010, Koons 2012, Koons and Alex 2014, Shimada 2010).

Figure 3.2: Map of North Coast of Peru highlighting major sites and the spheres of Moche occupation.

3.4 Jequetepéque before the Late Moche Period

Of course, the Moche period occupations built upon preceding cultural developments, and I provide a very brief overview of these earlier traditions predating the Late Moche Period in order
to place Huaca Colorada within the larger context of the history of the Jequetepeque Valley (for a more complete prehistory of this region see Johnson and Zori 2011).

Archaeological survey and excavation in the Jequetepeque valley have documented evidence of a long sequence of human occupation as early as the Archaic and extending into the Preceramic and the Early Formative/Initial Periods (Alva 1986, Chauchat 1992, Donnan 2007, Nesbitt 2012, Park 2010, Ravines 1985, Tellenbach 1986, Tsurumi 2008). Populations and settlements generally increased, reaching their apex in the later Chimú and Inka periods when the region was subjected to imperial control (Cutright 2009, 2011, 2015, Hahn 2014, Gumerman 1991, Johnson and Zori 2011). Archaeologists have documented domestic structures consisting of cobble foundations and lithic scatters dating to the Archaic period. Indeed, characteristic fish tail Paiján points are numerous in the southern valley (11,000-8,000 years ago) and as Dillehay notes, the Late Paiján Period of the North Coast of Peru was “distinguished by semi-sedentary to sedentary logistical lifeways” (Dillehay 2008b: 38). Settlements with circular architectural structures, multi-phase occupations, and notable artifact densities became increasingly common as the climate improved during the late Pleistocene and the beginning of the early Holocene. The Pampa de Cupisnique (and the famed “Pampa de los fosiles”) witnessed especially intense occupation in the Archaic and Formative Periods, as demonstrated by the profusion of lithic scatters and early sites and by the later development of a fine ceramic tradition in the early Formative period (Chauchat 1998, 2008, Maggard 2010, Stackelbeck 2008). Indeed, Cupisnique gives its name to an epoch and artistic style of the North Coast Initial Period and Early Horizon.

Survey and rescue excavations undertaken by Rogger Ravines in the 1980s recorded over 36 Formative Period sites in in the middle valley region of Pampa de las Hamacas (near the modern town of Tembladera), including the monumental ceremonial centre of Montegrande. This sizeable site is distinguished by terraces and sunken plazas pointing to highland influences (Ravines 1985:131). More recent analysis of the ceremonial platforms of the Hamacas area by Eisei Tsurumi has refined the Formative occupation sequence of the Jequetepeque valley into three distinct eras: the Hamacas Phase (1500-1250 cal BC), the Tembladera Phase (1250-800 cal BC) and the Lechuzas Phase (800-550 cal BC) (Tsurumi 2008).

Partly contemporaneous with the later Formative Period settlements of the middle valley, the two major sites of Limoncarro and Puémape in the lower Jequetepeque conform to the
aforementioned Cupisnique cultural tradition (ca. 1500-300BCE). Cupisnique denotes a local style famed for its colonnaded architecture, sizeable adobe friezes and characteristic reduced and elaborately molded ceramics that influenced the distinctive art of the highland ceremonial centre of Chavín de Huantar (Johnson and Zori 2011, Nesbitt 2012, Park 2010). The Cupisinque are famed for the shamanistic basis of their religion that made use of San Pedro cactus, feline-centric religious iconography, and fanged deities that would considerably influence later Moche religious mythology.

The site of Puémape is located south of the Jequetepeque River near the coast, while the ceremonial centre of Limoncarro is located 20km inland on the north side of the river (Sakai and Martinez 2008). Puémape covers an area of approximately 20 hectares and is known for its ceremonial architecture and a large cemetery with considerable evidence of exploitation of both marine and agricultural resources. (Eléa 1994, Swenson 2004). While the U-shaped platforms and sunken plaza of Limoncarro appear to be abandoned by approximately 1000 BCE, the occupation of Puémape continued beyond the Cupisnique period and into the Late Formative or Salinar phase (500 BCE-100 AD). Occupation at Puémape appears to have ended following a major flooding event that witnessed a shift of settlement further away from the coast (Eléa and Pinilla 1990, Eléa et al. 1992, Shimada 1994:63).

As populations moved inland during the Late Formative Period, Jatanca (500BCE-100AD) became the largest ceremonial site in this era. It is located approximately 16 km northeast of Puémape in the Pampa de Mojucape near Cerro Cañoncillo and only 1.5km southwest of Huaca Colorada. Jatanca forms the earliest occupation of the Cañoncillo archaeological complex. Covering an area of approximately 25 hectares, Jatanca is composed of a sequence of seven monumental ceremonial compounds that are surrounded by a dense residential area (Warner 2006, 2010). The horizontally configured compounds contain a mass of rectilinear chambers, patios, corridors and large plazas delineated by solid walls built of poured adobe (called tapia). Contemporaneous canals have been mapped across the immediate area meandering between the principal complexes. They not only supplied the agricultural needs of the community but also provided the significant volumes of water required to prepare and construct the tapia walls of the settlement (Eling 1987, Warner 2006). John Warner’s seminal study was the first to systematically map and interpret Jatanca’s elaborate spatial layout, and subsequent research directed by Edward Swenson, Jorge Chiguala and Warner represents the first-large scale
excavation of the settlement (Swenson et al. 2008, 2009, 2010, 2011, 2012, 2014). The compounds of Jatanca follow a strict architectural canon characterized by northern plazas, central ramps, long corridors, baffled entries and multiple quadrilateral rooms that controlled movement between spaces. The replication of iconic ceremonial plazas containing opposed ceremonial platforms within each compound suggests that ritualized activities within these spaces followed a distinct and formalized spatial and temporal sequence, traditions that persisted over the entire occupation of the site.

3.5 Moche Religious Ecumene and Spatial Ideologies

Following the abandonment of Jatanca towards the end of the Late Formative Period, the Early Intermediate Period (AD 100-600) occupation of the Jequetepeque valley encompasses both the Early Moche (AD 200-400) and Middle Moche (AD 400-600) Periods noted in other valleys on the North Coast (Johnson and Zori 2011). The political and religious ideology at the core of Moche culture persisted with some notable changes into Late Moche Period during the first centuries of the Andean Middle Horizon (AD 600-800) (Bawden 1996, Quilter and Castillo 2010, Shimada 1994, Uceda and Mujica 1994, 2003). Despite the variable nature of its expression, the Moche cultural complex is considered to represent one of the earliest state-level polities in the Americas. Moche society was defined by a highly stratified social structure with numerous major centres distributed across the series of coastal valleys outlined above. (Bawden 1996, Billman 2002, Shimada 1994). Iconographic analysis of the rich Moche artistic corpus has led scholars to interpret religious ideology and power structures as strongly linked to highly formalized public rituals, usually focused on interactions between individuals of clearly elevated status that are often seated beneath simple roofed structures (Benson 1972, 2012, Hocquenghem 1987, Jackson 2008, Wiersema 2010). Elaborate narrative scenes depicting recognizable mythic events and a standard sequence of acts carried out by the same cast of divine or semi-divine characters affirm the religious and ritual foundation of Moche art. With such titles as the “Sacrifice Ceremony”, the “Presentation Theme” and the “Burial Theme”, there are clear indications that the known suite of Moche narratives was re-enacted by elite ritual practitioners who were subsequently buried in their regalia and accompanied by the same status symbols depicted in the iconography (Alva and Donnan, 1993, Golte 2009, Quilter 1997). The elaborate
tombs at the sites of Sipan, San José de Moro, Huaca de la Cruz and Ucupe have been interpreted as clear instances of this particular tradition. At each of these important sites, the fact that this process was repeated over many generations suggests that the act of burying deified elites in this manner was an enduring and vital component of maintaining and legitimizing royal lineages (Klaus et al 2018).

Defined by cycles of warfare, prisoner capture, and human sacrifice, the depicted activities likely served to legitimate religious authority. However, the relationship between Moche political theology and cosmogonic myths remains poorly understood and the subject of considerable debate (Alva and Donnan 1993, Benson 2012, Bourget 2006, 2016, Donnan 1978, Golte 2009, Hill 1998, Swenson 2003, Trever 2013). For the Moche, it has been argued that death and regeneration were reciprocally balanced through the ritual control of human life. In this worldview, destruction enabled creation, a belief that applied as viscerally to the built environment as it did to human subjects. (Bourget 2006, 2016, Hill 1998, Swenson 2003, 2012, 2018). The transformation of the human body and architectural space through sacrifice was the generative force of life, cosmos, time, authority and ultimately place itself. In other words, death as a liminal and necessary phase was perceived as a process vital to continued creation and becoming. This sacrificial ontology appears to have persisted across the Moche sphere, with dedication and termination rites at Moche centres indicating that Moche conceptions of place clearly considered architectural spaces as vital, living entities in their own right (Spence-Morrow 2018, Swenson 2016, 2018).

The Moche are famed for their uniquely expressive, naturalistic, and conceptually nuanced sculptural and painted ceramic traditions. Ceramics that depict the particular architectural setting of a stepped ceremonial platform in both two and three dimensions hold special importance to the present study as discussed in Chapter 5 (Wiersema 2010, 2011, Castillo 2011). The ubiquity of these representations strongly suggests the central importance of these structures in Moche religious ideology, a hypothesis corroborated by the archaeological investigation of huacas (enlivened temple buildings), the numerous monumental adobe brick pyramids common across the north coast of Peru. Chambers or areas that contain some variation of the same stepped ceremonial platforms represented in the ceramic corpus are a common feature of many of the investigated temples (Castillo and Muro Ynoñán 2016, Franco et al 1998, Uceda 2001a, 2001b). Excavations in the ritual precinct in the ceremonial sector of Huaca Colorada has provided a

The pyramid mound or huaca form has been interpreted as a mimetic simulation or miniaturization of the nearby mountains that form the foothills of the Andes along the Pacific coast, closely in keeping with the pan-Andean veneration of mountain peaks as both deified ancestors and locus of supernatural and generative power (Bastien 1978, Bawden 1996, Gose 1994, Kolata 1993, Uceda 2001, Swenson and Warner 2016). For instance, Huaca de la Luna, the primary religious edifice for the urban settlement in the toponymic Moche Valley, was constructed in close proximity to the base of the coastal massif known as Cerro Blanco during the earliest phases of occupation of the site (Bawden 1996, Uceda 2010). The ongoing excavations of this monumental complex have provided critical information on how Moche religious and political ideology was tied closely to the veneration of this coastal mountain, serving as the conceptual and physical foundation on which the monument was built (Uceda 2001a, 2001b, Benson 2012, Bourget 2016).

The northern facade of Huaca de la Luna was elaborated with tiers of brightly painted high-relief adobe friezes depicting fanged deities, predatory animals, spiders, warriors, captured prisoners and cosmic landscapes. Quilter and Jackson argue that the spatial arrangement of these friezes present a distinct hierarchical relationship between cosmological entities (Jackson 2008, 2012, Quilter 2001). Multiple layers of similar decoration have been found below the latest visible surface, highlighting the enduring importance of maintaining the content and meaning embedded within these highly visible mural courses. Ongoing excavations have shown that the entire monument was renovated and renewed during six construction cycles that carefully encased and reiterated with some variation the ideological messages presented by earlier phases, perhaps existing as a living timepiece, a chronotopic space that kept time in motion (Bakhtin 1981, Swenson 2012). Above the friezes, a series of elevated interior chambers and platforms occupy the highest eminence of Huaca de la Luna. These chambers served as central stages for the sacrificial rituals performed within view of expansive open plazas, acts that no doubt underwrote the theocratic ideologies of Moche polities (Benson 2012, Bourget 2001, 2016, Swenson 2012).
Benson and Galvez argue that the Huacas of the Moche Valley served as a template for the construction of numerous satellite centres south and north of the Huacas de Moche. The near identical duplication of the architecture and iconography of Huaca de la Luna at the contemporaneous site of Huaca Cao Viejo in the Chicama Valley has been interpreted as evidence of territorial expansion of Moche religious and political ideology (Benson 2012, Franco et al 1998). However, by repeating the canon of symbolically charged visual art, architecture and action so closely, this reiteration may only highlight the importance of a particularly powerful architectural tradition in this era rather than a sign of domination or conquest. Despite similarities in religious iconography, monumental architecture, and material culture, recent investigations have questioned the existence of a territorial Moche state, and it seems increasingly apparent that Moche political organization varied considerably from area to area, with different valleys exhibiting unique variation on central ideological themes (Castillo and Donnan 1994a, 1994b, Klaus et al 2018, Quilter 2002, Quilter and Castillo 2010, Quilter and Koons 2012).

Ushered in by social and environmental upheavals, the Late Moche (Moche V) period (ca. AD 600-800) has left us with considerable evidence of major transformations in Moche society. During the transition from the Middle to Late Moche Periods (ca. AD 550-600) as mentioned earlier, analysis of the Quelccaya glacier ice cores indicate that a particularly severe drought associated with El Niño-Southern Oscillation (ENSO) events occurred between AD 562 and 594 (Shimada et al. 1991). In his work on Huaca de la Luna in the Moche Valley, Steve Bourget has made a convincing argument that relates the presence of sacrificial ceremonies within two important ritual plazas to increased social stress and instability related to disruptive ENSO related rains (Bourget 2001:91, 2016). Climatic and social pressures resulted in demographic and ideological reconstitution in the Late Moche Period that witnessed a diversification and popularization of Moche religious culture in new territories across the region, especially in the Jequetepeque Valley, while Moche culture contracted in the southern valleys by the close of the Middle Moche (Moche IV) period that corresponds to the end Early Intermediate Period (Bawden 1982, Dillehay 2001, Dillehay and Kolata 2004, Dillehay et al 2009, Swenson 2004, 2006, 2007).
During this period of radical reorganization, the importance of the Huacas de Moche as the seat of a regional authority appears to have waned. However, the urban population actually increased, and an orthogonal settlement plan was adopted in the Middle Horizon. This period also witnessed the continuation of Moche IV ceramics in the lower valley, while the geometric patterns of Moche V finewares were adopted in the mid-valley of Moche in the valleys to the north (Chicama, Jequetepeque, and Lambayeque). Urban reorganization in the 7th century at Huacas de Moche also coincided with the decommissioning of Huaca de la Luna and the construction of the New Temple immediately to the northeast on the slopes of Cerro Blanco, the mountain that overlooks the city. The great 40 m tall Huaca del Sol was also significantly expanded in the later phase, and recent excavations here have confirmed the Middle Horizon florescence of this great monument—a theory first proposed by Max Uhle at the end of the 19th century (Uhle 1915, 2014). Excavations have yielded Cajamarca ceramics demonstrating the contemporaneity of this great edifice with Huaca Colorada in the Jequetepeque Valley.

Figure 3.3: North Coast chronology highlighting occupation period of Huaca Colorada
Interestingly, these sweeping changes and the demographic growth of Huacas de Moche corresponded with the emergence of Galindo in the mid-valley, a new and perhaps competing centre of authority in the Moche Valley (Bawden 1982, 1986). The urban site of Galindo was located 20km inland from the Huacas de Moche and covered an area of over 6 square kilometers. It is situated at the juncture of the upper and lower courses of the Moche river at the base of two large hills, Cerro Galindo and Cerro Muerto. The urban sector of Galindo consists of large residential areas located on both the lower slopes of the adjacent hillside and the alluvial plain below associated with numerous ceremonial enclosures and small adobe huacas. Recent research indicates that Galindo was occupied well into the 8th century AD and overlapped with the late occupations of Huacas de Moche coinciding with the construction of Huaca del Sol (Lockard 2009).

While Galindo is thought to have assumed an important role in the Moche Valley during the Moche V Period, by far the largest contemporaneous site of this period was Pampa Grande, a major urban settlement established over a short period of time in the Lambayeque Valley beginning around 600AD (Johnson 2010, Shimada 1994). In terms of the density of its residential zones, the formal planning of the enormous corporate centre and the scale of its monumental architecture, Pampa Grande exceeded any other known Late Moche settlements outside of Huacas de Moche (Shimada 1994: 135). Pampa Grande was long considered the capital of a ‘reconstituted’ Moche state following the decline of Huacas de Moche (Bawden, 1996:291, 1982: 287). However, in light of recent analysis discussed above, the sites are now known to be contemporaneous both reaching their demographic heights in the 7th and 8th centuries. Outside of Huacas de Moche, the ideological reconstitution is evident in the material record of the Late Moche Period (Phase V) as reflected in the “diminished repertoire and use of traditional religious iconography, new ceramic forms...[and a shift] in ritual activities and paraphernalia” (Shimada et al. 1991:253).

Surrounded by workshops that produced prestige goods, the central monument of Huaca Fortaleza dominates the site of Pampa Grande (Shimada, 1994:143). Standing over 38 meters high and covering an area of 270 by 180 meters, this monument anchored the religious raison d’être of the site (Bawden, 1996: 294). Huaca Fortaleza and its 290-meter-long ramp fixed the longitudinal axis of the roughly triangular settlement and occupied the central and highest ridge of the site. Its construction predetermined the relative position of the other major architecture as
well as the urban workshops and administrative compounds of the city (Shimada, 1994: 147).
Izumi Shimada has interpreted a concentric cline of inferred social classes and functions in the
four districts of the sites that he identified. Prestige and high status increased along this
concentric gradient as one moved toward the centre of the site and its towering huaca (Shimada

Constructed in only two building phases, the building of Huaca Fortaleza demanded an
enormous and highly organized workforce (Shimada, 1994: 179). The platforms of the huaca
were built using a ‘chamber-and-fill’ construction method involving a honeycomb of rectangular
walls filled with rubble, thereby reducing the overall number of adobe bricks and the labour
required for their manufacture (Shimada, 1994:160). The highest platforms are uniform in style
and contrast with the numerous and calendrically regulated construction phases that characterize
the Huaca del Sol and Huaca de la Luna in the Moche Valley, Huaca Cao Viejo in the Chicama
Valley and at Huaca Rajada in the Reque Valley (Bawden 1996:294, Uceda 2001, Franco et al
1998, Quilter 2001). Distinct “checkpoints” controlled access along the extended ramp that led
from the base of the pyramid to this colonnaded and hypothesized residence or “palace”.
Surveillance and the control of movement also appear to have underwritten the design of the
manufacturing compounds surrounding Huaca Fortaleza. According to Shimada, then, the urban
population appears to have been subjected to intense regulation and surveillance.

Similar Moche V ceramics and iconography characterize both Pampa Grande and Huaca
Colorada; Cajamarca ceramics, platform ollas, depictions of female goddesses, and faceneck
serving jars point to shared religious values at both settlements. Moro style ceramics are also
present but in much fewer quantities at Pampa Grande. However, Huaca Colorada appears to
have been more open and inviting. Assembled pilgrims from different social classes and
backgrounds partook in great parties and feasts at Huaca Colorada. This scenario contrasts with
the segregation and restricted access of different populations at Pampa Grande (including— in
Shimada’s interpretations—a subaltern and ostracized group of ethnically distinct Gallinazo—
but see Johnson 2010). In sum, the Late Moche Period was characterized by remarkable
diversity in settlement, monumental construction, and social relations despite generally shared
artistic media and religious observances. This diversity extends to the Jequetepeque region as
well, the subject of the following section.
3.6 The Moche of the Jequetepeque Valley

Evidence of Moche period occupation in the Jequetepeque valley spans from approximately AD 300 to 850, following a considerable expansion of irrigation infrastructure and the subsequent elaboration of urbanized settlements across the region. Bounded by the Zaña river valley to the north and the barren desert of the Pampa de Paiján to the south, the Jequetepeque Valley serves as both the southern frontier of the northern Moche region as well as an important access corridor to the Cajamarca highlands where the source of the Jequetepeque watershed originates. It is in the upper valley that multiple tributaries in the region coalesce to form the Jequetepeque River proper, serving as the only significant source of water for the communities living in the lower valley over the past 2000 years (Eling 1986, 1987, Ravines 1982, Warner 2010). The recently constructed Gallito Ciego reservoir and hydroelectric dam near Tembladera currently harnesses the significant water flow to provide power to most of the contemporary towns and cities in the Jequetepeque valley. From Tembladera to the coast, the lower valley portion of the Jequetepeque River is diverted by way of irrigation canals into three distinct productive agricultural zones within the otherwise barren desert plain north and south of the natural course of the river.

The heavily looted sites of La Mina, Masanca and Dos Cabezas have provided some of the earliest evidence of Moche occupation in the region, with dates placing their initial construction to around AD 300 (Johnson and Zori 2011: 10). Located on the south side of the Jequetepeque River, the mortuary sites of La Mina and Masanca are considered to be largely contemporaneous. Rescue excavations at La Mina uncovered the remains of a high-status chamber tomb containing five individuals along with a considerable quantity of prestige grave goods including fine ceramic vessels as well as gold and silver ornaments (Donnan 1990, Narváez 1994). Ceramic offerings associated with 21 commoner burials at Masanca chronologically tie this site to the great centre of Dos Cabezas and the tombs at La Mina. However, Colleen Zori’s comparative analysis of burial orientations at Masanca with other mortuary sites in the area suggests that this cemetery was used by the local farming community to legitimize ownership of the surrounding agricultural lands (Donnan 2006, Zori 2011).
Located on the south bank of the Jequetepeque River delta, the monumental ceremonial site of Dos Cabezas spanned both the Early and Middle Moche periods (Donnan 2007). Donnan argues that the ceremonial core of Dos Cabezas formed the centre of a large urban settlement that spanned more than one square kilometer (Donnan 2014, Moseley et al 2008). Composed of a large adobe huaca surrounded by plazas and residential structures, excavations at Dos Cabezas have uncovered elaborate elite tombs and evidence of violent rituals of human sacrifice that involved ceremonial decapitation. Eighteen human crania bearing cut-marks on the cervical vertebrae were found at the base of the main pyramid, and one of the chamber tombs contained an elite individual who was buried holding a crescent-shaped tumi knife, identical to numerous depictions of sacrifice in the Moche iconographic corpus (Donnan 2007, 2014). Other tombs found at Dos Cabezas contained the remains of unusually tall men dressed in warrior’s regalia interred with beautiful vessels in Moche I style, gilded copper masks, weapons and shields. Of particular relevance to the present thesis, these elaborate burials also contained mimetic miniature versions of the full-size tombs, including copper figurines of the deceased buried with exact scalar representations of the tomb contents (Donnan 2001, 2007). Dos Cabezas was abandoned in approximately AD 600 likely as the result of a period of sustained drought and increased dation, corresponding to the shift from the Middle Moche to Late Moche Period (Moseley et al 2008). The onset of the Middle Horizon following the abandonment of Dos Cabezas further witnessed the intensification of irrigation infrastructure on the north side of the Jequetepeque River (Castillo 2010, Donnan 2007, Johnson and Zori 2011).

These shifts in irrigation infrastructure during the Middle Moche Period coincided in turn with the rise of the sites of Pacatnamú and San José de Moro as the largest ceremonial centres in the valley that continued to thrive during the Late Moche and subsequent Transitional and Lambayeque eras (Donnan 2007, Donnan and Cock 1997). Pacatnamú is located on a coastal promontory overlooking the remains of Dos Cabezas and is composed of a complex of over 40 adobe huacas, ceremonial plazas, residential architecture and a high density of both elite and commoner burials (Donnan and McClelland 1979, Zori 2011). The proximity of Pacatnamú to the abandoned ruins of Dos Cabezas, likely explains the site’s enduring importance as a centre of pilgrimage and mortuary rites, effectively extending the power of the cult established in this part of the valley into later periods.
Figure 3.4: Map of the lower Jequetepeque Valley showing sites and major drainages and canals

The important mortuary site of San José de Moro is located 22 km northeast of Pacatnamú in the Chamán drainage inland of the coastal Catalina mountains within the irrigated plain north of the Jequetepeque river. The intensive and ongoing archaeological investigations at San José de Moro have focused on the extensive funerary remains found throughout a broad plaza at the base of a sequence of heavily eroded adobe huacas (Castillo 2010, Castillo and Muro Ynoñán 2016). As intensive agricultural development in the area has destroyed any evidence of residential settlement surrounding this important centre, since the early 1990s research has focused on the numerous elaborate chamber tombs constructed for elite members of Moche society as well as
large quantities of commoner burials (Castillo and Donnan 1994, Johnson and Zori 2011, see Chapter 5). Amongst the highest status burials at this site are the so-called “Priestesses”, elite female leaders buried in the regalia of an important character seen in the iconographic depictions of many Late Moche fine line ceramics (Donnan 1978). The presence of multiple generations of these Priestess burials suggests that dynastic female leadership in the Jequetepeque Valley was a fundamental component to the cult of the region that represented a significant shift from earlier male-dominated Moche lineages (Swenson 2012b). The excavations further demonstrate that funerary rites involved the large-scale production of corn beer or *chica*, and San José de Moro clearly served as an important site of pilgrimage and exchange for both local inhabitants of the Jequetepeque valley and members of more distant polities (Castillo 2001, 2003, Nelson 1998, Swenson 2012). The presence of fine ceramics from the distant coastal Nivería culture as well as the highland polities of Cajamarca and Wari in the elite tombs of San José de Moro reveal sustained political and economic ties between this important Moche centre and far-flung societies (Donnan and Castillo 1994, Castillo 2010). Similar to Pacatnamú, San José de Moro was intimately associated with death and mortuary ritual, and thousands of peoples of different social classes were interred around the eroded pyramids and the great tombs of the priestesses. Archaeologists have excavated more burials at Moro than any other site in Peru, including Paracas and Pachacamac.

Located just 4km south of San José de Moro, excavations of the contemporaneous hilltop fortified site of Cerro Chepén have also yielded a significant amount of imported highland influenced stone architecture and Cajamarca fineware (Rosas Rintel 2007, 2010). This urban-scale settlement consists of a monumental centre of niched, multistory, rectangular stone structures and ramped platforms associated with highland artifacts and Cajamarca pottery (Cusicanqui 2011, 2012). This elevated core is surrounded by vast systems of terraces on the steep slopes of the massif that housed lower class populations that made use of Moche fineline and decorated ceramics. Rosas Rintel argues that this occupation represents more than a small political or economic outpost. Instead, Cerro Chepén was founded as the result of a major relocation of populations from the highlands (Rosas Rintel 2010: 816). The presence of the same distinctive white kaolin ceramics in the feasting middens at Huaca Colorada further speaks to the increasing influence of highland polities and the intensity of interregional interaction during the

Although many of the significant sites in the Jequetpeque Valley during the Late Moche Period were in relatively close proximity, it has been argued that this era was characterized by an increasingly decentralized political organization, with different communities exercising a certain degree of autonomy (Johnson 2008, 2011, Swenson 2004). In the northern portion of the valley, numerous hinterland settlements such as Portachuelo de Char cape (Johnson 2008, 2011), Cerro Chepén (Rosas Rintel 2010), San Ildefonso (Swenson 2004, 2008), Wasi Huachuma (Duke 2017) and many other smaller sites (Swenson 2004) maintained connections with larger ceremonial centres while developing economically and ritually self-sufficient institutions (Castillo 2010). The increase in sling stone piles and fortification walls at a number of hinterland sites further points to increased conflict and local investments in defensive infrastructures. Swenson’s extensive survey of numerous northern valley settlements of this period presents a direct connection between increasing political instability with a rise in the adoption and popularization of Moche religion (Swenson 2004, 2014). As a response to major sociopolitical realignments in the valley, the seeming paradox of increased decentralization coinciding with the widespread adoption of Moche religion values by non-elite communities may also reflect new anxieties fostered by increased contact with highland polities from the Cajamarca region.

When combined with the impacts of climatic instability and internal political turbulence, these external cultural influences are thought to have had a considerable influence on the reformulation of the Moche tradition across the north coast from 600-800AD (Quilter and Koons 2012, Shimada et al 1991). Although the trajectory of this decline varied drastically in each coastal valley, within the Jequetpeque valley, the Moche Period was followed by the Transitional Period (AD 800-950), considered to be concurrent to the rise of the Early Sicán (Lambayeque) culture centered in the Lambayeque valley to the north (Castillo 2001, Dillehay 2001, Dillehay et al. 2004, Johnson 2008, 2011, Swenson 2007a, 2008a). The Sicán or Lambayeque period is marked by a distinct shift in stylistic traditions that build upon Moche religious values and political institutions while incorporating a number of influences from both the nearby highlands of Cajamarca as well as from the much more distant Wari culture based in the southern highland

During the Transitional Period, major Moche sites along the North Coast were rapidly abandoned, including Galindo in the Moche Valley, or violently destroyed, as exemplified by the targeted burning of administrative and elite sectors at the major centre of Pampa Grande in the Lambayeque Valley (Bawden 1996, Shimada 1994). The sudden demise of these centres along with Huacas de Moche at the same time indicates that political upheaval and major demographic shifts underwrote the rejection of Moche religious value and the eventual consolidation of Lambayeque polities and its accompanying style (Johnson and Zori 2011). In contrast, in the Jequetepeque Valley, the excavations of Transitional Period tombs at San José de Moro demonstrate that this site continued to be occupied throughout this turbulent period (Mauricio and Castro 2008). A combination of Moche, highland Cajamarca, Wari and Early Sican blackware ceramics interred within elite female “Priestess” burials dating to the Transitional period indicates that this particular cult lasted beyond the Late Moche era and was not as dramatically affected by the widespread sociopolitical transformations defining the end of the Middle Horizon. The presence of Cajamarca bowls, spoons and imported polychrome drinking cups or *keros* in Transitional funerary assemblages at San José de Moro also illustrates the continued importance of contacts with highland communities. At the same time, the funerary rituals and tomb offerings attest to significant continuities in Moche inspired religious practices (Rosas Rintel 2010: 816-821).

The demographic changes in the Jequetepeque Valley during the Transitional period do not reflect the influences of a singular political or cultural force entering the valley en masse, but rather a continued balkanization of communities that intensified their connections to distant polities (Bernuy and Bernal 2008, Prieto Burmester 2009, 2010). The expansion of defensive or fortified settlements including Cerro Chepén attest to the increased political tensions during this period, strategic elements that were not seen as widely in earlier Moche period occupations in the valley (Cusicanqui 2011, 2012). As mentioned, the Jequetepeque Valley forms a natural conduit between the highlands and the coast, and local communities during the Transitional Period maintained an important network of trade first established during the Late Moche Period. Accordingly, depending on their position within this network, each settlement appears to have become aligned with a variety of distant polities, either as a point of interaction and interchange.
such as at San José de Moro, or as a dedicated outpost for a specific community such as at Cerro Chepén. It is from this perspective that the nature of later occupation phases of Huaca Colorada come into focus, as this era is now clearly associated with the construction of the Transitional Period site of Tecapa as discussed below (and see Chapters 4 and 5).

3.7 Southern Jequetepeque and previous work in the Cañoncillo Archaeological Complex:

Located on the Southern bank of Jequetepeque Valley, the site of the Cañoncillo archaeological complex is characterized by a vast stretch of sand dunes, an extensive *algarroba* or carob/mesquite forest punctuated by a series of seasonal oasis-like lakes, and an extensive network of prehispanic canals (Eling 1986, Warner 2006 Swenson et al 2008, 2009, 2010, 2011 and 2012). This site was occupied by settled populations between the years 11,000 BCE and 1500 AD covering a large portion of the Pampa de Mojucape, an area of more than 25.7 km² containing significant domestic scatters, agricultural fields, large scale irrigation systems, fortifications, small dispersed religious structures, and major ceremonial and administrative centres such as Jatanca, Huaca Colorada and Tecapa (Maggard 2010, Swenson 2012a, 2014, 2015, Swenson et al 2010, Warner 2010).

Before the current archaeological research at Huaca Colorada directed by Edward Swenson, Francisco Seoane, Jorge Chiguala and John Warner, early reconnaissance and excavations in the Cañoncillo region were conducted by Heinrich Ubbelohde-Döering, Wolfgang and Gisela Hecker, Herb Eling and Christopher Donnan (Donnan 1997, Eling 1987, Hecker and Hecker 1990: 25-27, Ubbelohde-Döering, 1951, 1957, 1960, 1967). The most recent investigations build upon the many years of invaluable research conducted by members of the Pacasmayo Project directed by Tom Dillehay and Alan Kolata from 1997-2001 and by John Warner who directed the Cañoncillo Project in 2004 and 2005 (Warner 2006). These studies focused on the extent of the agricultural landscape and the production of the urban system of the region, supplying important geomorphological information, and radiocarbon dates for the canal systems that allowed for interpretations of the changing relations between inhabitants and their environment (Dillehay and Kolata 2004a, 2004b, Dillehay et al 1998, 1999, 2009).
Using a Trimble GPS, Warner mapped the architectural configuration of numerous sites in the Cañoncillo area that allowed for identification and chronological classification of residential areas, ceremonial locales, dispersed villages, and ancient agricultural fields. Warner also created the first maps and plans of the ceremonial architecture of both Jatanca and Tecapa (Warner 2006). In addition, Warner’s initial test excavations within this Formative Period site were vital to determining the location of much larger excavations that took place at Jatanca in 2007-2012 and 2014. In summary, the macroscopic nature of the fieldwork conducted during the Pacasmayo Project that focused on the settlement and human ecology in the Cañoncillo region presented an exhaustive study of the long-term urban sociopolitical relations in the region. The excavations conducted by members of the earlier investigations in Cañoncillo and the later Pacasmayo Project were relatively limited to test trenches placed largely in canals, field systems, residential areas and monumental complexes (Dillehay et al 1998, 1999, Dillehay and Kolata 2004a, Ubbelohde-Döering 1967, Warner 2006, 2010). The recent excavations at Jatanca as directed by Edward Swenson, John Warner and Jorge Chiguala represented the first concerted effort to interpret the long-term political dynamics of the urban systems of Cañoncillo through an analysis of economic, ritual, spatial and domestic practices. The excavation seasons conducted in 2007-2012 and 2014 have revolutionized the understanding of the organization of the ceremonial and residential spaces of the urban core of Jatanca (Swenson et al 2008, 2009, 2010, 2011, 2015).

3.8 Recent Excavations of the Jatanca-Huaca Colorada-Tecapa Archaeological Project:

The Jatanca-Huaca Colorada-Tecapa Archaeological Project (Proyecto de Investigacion Arqueologica Jatanca - Huaca Colorada - Tecapa - PIAJHCT) began in 2007 and represented the first systematic analysis of the ceremonial and residential architecture from the Formative Period occupation of the Jequetepeque Valley through to the Late Moche and Transitional periods. The research has increased our understanding of the development of the long-term sociopolitical structures in the region. As mentioned, Huaca Colorada represents the largest Late Moche site in the Southern Jequetepeque Valley and the study of this complex has been imperative to the understanding of Moche political relations in the region. It is significant, for example, that much of the ritual construction at Jatanca includes double platforms with central ramps with views over monumental plazas that closely resemble the later ceremonial architecture of the Late Moche period in the rural areas of the valley intensively studied by Swenson (Swenson 2004, 2006, 2007a, 2012b). Prior to Warner and Swenson’s seminal work at Jatanca, this site was commonly misinterpreted as dating from the Late Intermediate period (Hecker and Hecker 1990:27), and this analysis was critical in the interpretation of the ritual construction of social memory, ritual innovation, and the local appropriation of foreign values. Ultimately, the investigations at Huaca Colorada and Jatanca are of great value to the reconstruction of the cultural history of the Jequetepeque region while advancing our theoretical understanding of the urban social relations and identity politics that mediated spatial production through ritual activity for the communities in this region of ancient Peru.

As will be discussed at length in the following chapter, the current study of Huaca Colorada presents a unique opportunity to consider how the terminal phase of the Late Moche Period experienced a combination of internal political fluctuations and new external pressures that led to the transformation and collapse of Moche culture sometime after 800AD. Radiocarbon dates from the final phases of Huaca Colorada indicate that the site was occupied into the Transitional period with the rise of the site of Tecapa located immediately west of Huaca Colorada (Swenson et al 2017, 2019, see chapter 4). The high adobe walls and narrow corridor-like range rooms surrounding the compounds of Tecapa are so distinct from Moche architecture that this component of the Cañoncillo archaeological complex was once thought to represent a much later
Inka period occupation. However, recent excavations conducted by Edward Swenson and Stephen Berquist have clarified that the initial construction of Tecapa falls firmly within the late Middle Horizon, straddling the Late Moche and Transitional Periods (Swenson et al 2017, 2019). Based upon similarities to compound architecture found in the highlands and the presence of kaolin ceramics similar to the findings of Marco Rosas Rintel at Cerro Chepén, there is increasing evidence that Tecapa may have served as an outpost of a Cajamarca polity during the Late Moche and possibly Transitional periods (Rosas Rintel 2007, 2010).

As has been outlined in this chapter, the construction of Huaca Colorada took place over a period of waning influence of Moche artistic traditions, ceremonial customs and sociopolitical structures that emerged from the cultural continuum specific to the Jequetepeque Valley. Built at the frontier of a new era of increasing cosmopolitanism related to the influx of highland cultural influences, the construction history of Huaca Colorada stands as a testament to these changes. This architectural biography presented in the following chapter will allow for a nuanced examination of how this specific community developed strategies of building and maintaining a locally emplaced identity during a period marked by significant political change, climatic stress and social reformation.
Chapter 4

The Architectonic Biography of Huaca Colorada

The following chapter synthesizes the fieldwork conducted at Huaca Colorada over the seven seasons of excavation that took place between 2009-2018 and will present the complete architectural biography of Sector B, the ceremonial core of the site at the very peak of the monument. My thorough analysis of the excavations has allowed me to divide the central ritual precinct into five functional sectors based on distinct architectural features and the activities they afforded throughout the occupation history of the site. Chapter 4 presents a final architectural sequence of the ceremonial core of Huaca Colorada and relates each phase of renovation with a suite of radiocarbon dates. This chapter will define the overarching spatial grammar of each construction phase of Huaca Colorada through changes in access patterns and visibility graph analysis in each phase of occupation. I frame the rest of the synthesis in terms of how Late Moche monumental buildings were places of interaction and performance through a comparison of three-dimensional reconstructions of each phase. These digital models are compared through analysis of the degree of visibility to and from specific locations within and between the ceremonial platforms and the public plazas at the base of the monument. I address first the role of symbolically charged architectural elements in the form of gabled roof structures built on top of monumental *huacas*, and then explain how these places were used for social interaction through various ritual activities, including feasts and public and private cultic practices.

4.1 Setting of Huaca Colorada

The Late Moche urban sector of Huaca Colorada is located approximately 1.5 km northeast of the Late Formative period site of Jatanca and immediately west of the Transitional Period site of Tecapa and the western flank of Cerro Cañoncillo (Figure 4.1). The core of Huaca Colorada consists of a long elevated platform thought to be constructed atop a natural hill or stable sand
dune. The peak of this platform, known as Sector B, rises to an altitude of 23m above the surrounding desert and consists of elaborate superimposed constructions built of adobe bricks covering an area of 100m by 85m (Swenson 2012a, 2014, 2015, Swenson et al 2009, 2010, 2012, 2013, 2015, 2017). The following description will focus on the orientation and use of the corridors, internal patios, monumental post emplacements, rooms and multiple platforms or altars that characterize each phase of construction in the central ceremonial precinct of this monument. Prior to the intensive excavations directed by Edward Swenson between 2009-2018, the first formal investigation of Huaca Colorada by the present team of researchers was conducted in 2008. This initial investigation revealed fragments of painted murals and incised graffiti representing Moche religious iconography, and the extremely high concentration of fragmentary ceramic vessels and marine mollusks (which gave this site its name Huaca Colorada or “Red Coloured Huaca”). This dense surface debris pointed to large-scale feasting events, a hypothesis confirmed by subsequent excavations (Swenson et al 2008).

The monument was established on a large stationary sand dune that had formed in the area prior to initial construction. Differing from the mobile barchans dunes that cover the Pampa de Mojucape described above, stationary sand dunes predominate in the northern limits of the desert plain near Huaca Colorada, where vegetation and algarroba trees are denser, a particularity of the topography of the plain immediately below Cerro Cañoncillo (Figure 4.2). Over time, these drought resistant hardwood trees trap wind-blown sand in their complex root systems and allow the accumulation of deposits to a significant depth. In fact, due to the arid environment in which the genus Prospis thrives, of which algarroba is a member, these trees have one of the deepest and most laterally extensive root systems of any species worldwide. The root networks span two to three times the diameter of the crown, reaching depths of over 25m to access water tables (Beresford-Jones 2011: 207). As sand builds around the bases of these trees, new growth emerges above the increasing elevation of the surrounding dunes while the lower growth is buried below creating the substratum on which the next generation of vegetation develops (Beresford-Jones 2011: 135). In areas of such stationary accumulation, as has been documented immediately northeast of Huaca Colorada, tree-covered dunes rise up to heights of 30 to 40m,
Figure 4.1: Location of the Cañoncillo Archaeological Complex in the Jequetepeque Valley
rising well above the upper elevation of the monument itself. As documented in our excavations at Huaca Colorada, the clear permanence and height of the stationary sand dune provided a natural foundation for the construction of adobe brick retaining walls and compact clay floors. By further stabilizing the dune on which it was built, this construction tradition proved to be an exceptionally economic means of building an elevated, towering pyramid. In comparison, most Moche huacas are built entirely of solid courses of tightly mortared adobe bricks, with some sites such as the Huaca del Sol in the Moche Valley estimated to have required the production of over 140 million individual bricks (Hastings and Moseley 1975).

4.2 Sectors of Huaca Colorada

Surrounded by a settlement covering approximately 24 ha, Huaca Colorada consists of an elongated adobe brick platform built atop one of the more prominent stationary sand dunes that dominate the northeastern limits of the Pampa de Mojucape. The main monument complex measures approximately 390m north - south by 140m east - west and rises nearly 20m at its highest point. Significant retaining walls are visible in numerous locations where sand is less deeply deposited, and they clearly encased all sides of the structure. The actual foundation of Huaca Colorada has never been identified since a massive deposit of sand has inundated the monument, including the perimeter walls of the complex. Many of the major long-term excavations of other Moche ceremonial sites such as Huaca de la Luna, Huaca Cao Viejo, and Dos Cabezas have actively targeted the clearing of the base of the structures, however the relatively remote nature of the Cañoncillo archaeological complex in a massive dune field has not allowed for excavations on a similar scale. Excavations have largely focused on the upper areas of the structure where surface survey, geophysical prospection and the presence of partially exposed architectural remains have guided the placement of all excavation areas so far investigated.

The main structure of Huaca Colorada is differentiated into three distinct sectors, with the centrally located ceremonial precinct of Sector B the focus of my dissertation. Sector B is located at the peak of the structure above two manufacturing and residential areas on the lower tiers situated to the north and south—Sectors A and C respectively (Figure 4.3). The northernmost
area of the main temple, known as Sector A, covers an area of approximately 150m from north to south and 110m from east to west with abundant evidence of food preparation and an accumulation of domestic waste, as well as signs of copper production as evidenced by the discovery of copper prills, artifacts and an abundance of charcoal related in part to smelting activities. Most of Sectors C and A are characterized by much more informal and ephemeral residential constructions than the more permanent architecture of Sectors B and C to the south (Swenson et al 2015). However, recent excavations have also exposed a sequence of ritual platforms in the western edge of Sector A. The two main platforms recently discovered in this lower zone share many features in common with the daises of Sector B, including form and history of renovation. However, these peripheral altars appear to have staged specialized rituals related to children, mortuary rites, and possibly production activities, and future research is required to understand how these platforms relate to the main sequence of architectural construction I have identified in Sector B (Swenson et al 2017 and 2019).

As detailed below, five principal zones define the ceremonial architecture in the elevated area of Sector B. Each one of these areas staged elaborate rituals consistent with Moche religious traditions known from other huaca sites and the wealth of iconographic information gleaned from ceramic depictions of ritual activity. Each of these zones consists of a sequence of superimposed ceremonial platforms or altars associated with offerings of human sacrifices, animal remains and metal objects. We have argued that these platforms were themselves sacrificed or terminated following a ceremonial calendar (Swenson 2012a, 2014, 2015, Swenson and Warner 2015, 2016, Spence-Morrow 2017; see Chapter 5). In fact, large refuse middens filled with high concentrations of highland Cajamarca ceramics, animal bone and fine ceramics from the Late Moche and Transitional periods surround the western and northern façades of the ceremonial core. Extravagant feasts that entailed the consumption of prodigious quantities of animal protein and corn beer created the middens in question. I argue that these feasting events commemorated the closing of the final phases of occupation. The uppermost strata of these refuse middens contain the highest concentrations of later Transitional ceramics, our first indication of a significant post-Moche occupation of the site (Swenson et al 2011, 2012, 2017).
Figure 4.2: Location of the Cañoncillo Archaeological Complex in the Jequetepéque Valley

The northern, western and southern façades delimiting the platforms of the central ceremonial precinct at Huaca Colorada are dominated by elaborate entrance terraces, open food production areas and more enclosed spaces interpreted as kitchen and brewing installations that directly underwrote the ritual economy of the site. Evidently, this uppermost sector of Huaca Colorada anchored the religious and political epicentre of the largest Late Moche settlement in the southern Jequetepéque Valley. A monumental wall that spans the entire 140m width of Huaca
Colorada is located immediately south of the ceremonial core, serving as a clear division of Sector B from the lower slopes of the southern domestic area of Sector C.

This southernmost sector of the site (Sector C) covered an area of 130m (n-s) by 45m (e-w) and served as considerable domestic area for residents or pilgrims visiting the ceremonial centre. The presence of copper residue on the surface and within the excavation units in this area indicates that metallurgical workshops were maintained in Sector C (Swenson and Warner 2012). Although most of Sector C consisted of impermanent dwellings and workshops that appear to have been occupied on a seasonal basis, the southeast quadrant of this zone consisted of broad terraces and possibly specialized storage facilities. However, on the whole, the architectural variability documented in Sector A is absent in Sector C, and Cajamarca and Transitional ceramics were also notably rare in the southern domestic zone (unlike areas of Sectors A and B).

Finally, the areas of Sector D and E are located on the desert plain at the base of Huaca Colorada. Sector D (250m north-south by 275m east-west) is located on the south-western side of the huaca, and consists of two cemeteries, a dispersed domestic area, an adobe perimeter wall that delineates the southern limit of the site, and a small platform. Sector E covers an area of 100m (n-s) by 80m (e-w) and is located at the base of the huaca mound immediately to the east of the main elevated platforms of Sector B. It is bordered on its east side by the westernmost walls of the Transitional Period site of Tecapa. Within Sector E numerous adobe brick walls segments are visible at the surface where exposed, however this area is thought to have functioned mainly as a plaza to allow groups to witness the ceremonial activities taking place atop the eastern façade of the huaca both in the Moche and subsequent Transitional periods. Only one test excavation was conducted within Sector E to differentiate possible prepared floors within the plaza from the natural desert pan, while Sector D has not been investigated beyond initial surface survey and collection.
Figure 4.3: Map of Sectors of Huaca Colorada in relation to excavated areas
4.3 Methodology

4.3.1 Excavation strategy, architectural mapping and recording methods

In order to investigate the standing architecture of Huaca Colorada properly, all excavations were conducted in broad horizontal units averaging 6m by 6m in area, with some variation based upon the particularities of the zone under investigation and the changing research questions guiding analysis (See Figure 4.4). In total, the excavations in Sector B alone covered a nearly contiguous area of 1371.9m$^2$ of the surface of the Huaca in 33 distinct units over seven seasons of excavation. Initially, each of these excavation units were placed in relation to visible remnants of standing architecture, with major dividing walls often acting as initial guides to the placement of excavation boundaries. Excavations were placed within the limits of architectural features to effectively ground our investigations in delimited functional areas within the complex architecture of this structure, and to maximize the conservation of surviving features. Due to the excellent preservation of the extant architecture, the relatively unambiguous sequences of construction often aided in the meaningful separation and definition of distinct contexts, with floor and fill events often serving as natural stratigraphic levels. Contexts were split into arbitrary levels in more complex, mixed strata within deeply deposited fill events or middens. Within “Levels”, singular elements deemed worthy of more intensive description were recorded as “Features” that vary in size from singular artifacts or concentrations of material, to entire architectural elements found within the excavation area. As mentioned, most excavation in Sector B took place entirely within or in close proximity to the standing architecture. For internal consistency within the field notes of each excavation unit, the extant adobe brick walls found in each area were named alphabetically in sequence of discovery (Wall A-Wall Z). These alphabetical designations will not be used in this chapter in reference to architectural boundaries. Instead, I will only reference major continuous walls that separate sectors spatially in order to synthesize the relationships of these walls within each of the five functional areas of Sector B.
4.3.2 Surface Survey

Prior to initial excavations in 2009, a general surface survey was conducted across the entirety of Huaca Colorada during the 2008 expedition. In total, 9 survey transects were set up across the three main sectors of the mound, with surface collection of a representative sample of diagnostic ceramics and records made of the location of visible walls. Survey transects of 30-50m in length were spaced 20-60m apart, resulting in the collection of 300 diagnostic ceramic artifacts that dated almost exclusively to the Late Moche period, with initial evidence of Cajamarca ceramics found in Sector B (Swenson et al 2008: 139). The higher concentrations of serving wares known as cántaros in Sectors A and B were reported as evidence of feasting activities, whereas the density of storage vessels known as tinajas in Sector C indicated that this southern limit may have held a more domestic function. Broadly speaking, the initial interpretations of Sectors A, B and C that resulted from this early survey have largely persisted, although significantly developed upon through the intensive excavations conducted in subsequent years.

No other systematic survey of the entire structure has since been conducted at Huaca Colorada; however, a surface collection within the area of each excavation unit was conducted as a preliminary stage of investigation. As mentioned, the overwhelming concentration of ceramics, bone, shell and various lithics present across the entire surface of Huaca Colorada makes distinction of use areas based upon artifact density almost impossible. Due to the high winds described above, a certain degree of contextual mixing is assumed across the entire site within the uppermost strata. As sand forms the matrix of most stratigraphic contexts encountered on the huaca, over time the high winds strip the more fugitive sand fraction from mixed strata. This leaves the heavier artifacts previously suspended in the matrix in place on the surface, a process of ‘deflation’ that artificially increases artifact density and destroys contextual information of all portable artifacts visible on the surface. Accordingly, materials recovered from the surface of excavation units were not considered as coming from a secure context and recorded only as an indication of potential intensity of occupation of a given area.

Another confounding factor to the security of contexts across Huaca Colorada is the use of sand fill between construction levels in antiquity. In order to raise the elevation of the occupation surfaces, the Moche builders of Huaca Colorada clearly used the readily available sandy surface overburden nearby as an expedient fill, material that often contained high concentrations of
organic refuse, fragmentary ceramics, shell and bone. As will be abundantly clear in the description of the construction sequences in the following sections, the use of artifact-rich sand as fill events between renovations phases in antiquity is a potential issue in the interpretation of assigning temporal phases based upon ceramic typology alone. Accordingly, the relationship between the artifactual assemblages and associated architectural spaces must be carefully considered in each case. As this thesis focuses on the architectural sequence at Huaca Colorada more holistically, the association of artifacts to specific phases of occupation requires careful contextualization. In cases where there is evidence of intentional deposition of artifacts such as ritual offerings within or between construction events, the association is fairly clear. This is also true of well-stratified middens or abandonments in situ within clearly contextualized features assigned to particular and unambiguous architectural phases. On the other hand, the presence of any material from either surface overburden or fill events is not considered to be highly meaningful to final interpretations of these contexts as directly pertaining to particular phases.

4.3.3 Geophysical Prospection:

During the second season of excavation at Huaca Colorada in 2010, limited geophysical surveys were conducted in Sectors A, B, C and E by Dr. Carl-Georg Bank and Mubeen Muhtar of the Department of Earth Sciences at the University of Toronto (Swenson et al 2011: Appendix 3). Utilizing both a magnetometer and ground penetrating radar, the geophysical surveys in all four of these sectors returned mixed results due to the nature of the contexts surveyed, providing only minimal indications of possible buried features. Due to the depth of the sandy overburden in Sectors A and C, the geophysical surveys in both of these areas were quite inconclusive. However, the analysis revealed some possible alignments or anomalies loosely suggestive of architectural features. Similarly, inconclusive results were found for Sector E, where an approximately 50m by 100m area was surveyed with both instruments in the western side of the eastern plaza at the base of the Huaca. Analysis of the data from this area indicated that there were a number of anomalies that may represent orthogonally arranged features. However, due to the similarity in density and magnetic signature of adobe bricks and the surrounding desert floor, the resolution was very poor. In contrast to the other areas surveyed, the results from Sector B did appear to follow the trends discovered in subsequent excavation. Analysis of the surveys
conducted over the Western Chamber of the central ceremonial precinct appeared to show the presence of anomalies in areas where two burials were eventually found north of the principal ceremonial platform. Although the methods proved to be of value in this singular case, the utility of these methods was questionable at best given the nature of the contexts.

4.3.4 Photography and Photogrammetric Documentation:

As is the case with any complex archaeological site excavated over multiple years, maintaining a complete database of searchable photographs is of vital importance to proper archaeological recording, subsequent interpretation and the presentation of findings. Traditional photographic documentation of all excavated contexts was a fundamental component of the excavation records made over all years of investigation at Huaca Colorada. However, the advent of photogrammetric processing of photographic images represented a paradigmatic shift in our methodology as it has across the discipline. The ability to produce fully interactive three-dimensional models of excavated contexts and artifacts significantly changed both the amount and quality of the spatial data collected in the field. By georeferencing the resulting digital models to accurate topographic data gathered through the use of a Leica total station, multiple years of excavation data could be accurately compared. This technique has been of critical importance in the interpretation of the site history of Huaca Colorada as the photogrammetric models were constantly referenced to align stratigraphic relationships between the complex sequence of architectural phases within and between the five functional sectors of Sector B. These diachronic three-dimensional excavation data were then combined with photogrammetric models of the entire monument produced through the use of an unmanned aerial vehicle (UAV) to create a fully immersive representation of the site and the surrounding region. When possible, I made orthographic projections of specific views within these three-dimensional models to create both plans and profiles for each excavation unit that was photogrammetrically recorded. This process not only produced much more accurate representations of the often complex excavation contexts but also allowed for rapid documentation. Although we also employed traditional drawing techniques in the field as an important component of the interpretive process, the photogrammetric recording of every phase of excavation has become a vital and mandatory element of site documentation.
Prior to the full description of each of the functional areas of Sector B, the next section presents a briefly summary of the goals and results of each excavation season to clarify the process by which Sector B was investigated.

4.4 Excavations at Huaca Colorada

4.4.1 Summary of Excavation Campaigns in Sector B of Huaca Colorada between 2008-2018:

Although the descriptive section of this chapter that follows collects and synthesizes all years of excavation into a singular narrative based on the above-mentioned functional zones, I reference specific excavation units throughout the remainder of this chapter. As such, the following section provides a chronological synopsis of the excavation process within the bounds of Sector B in order to provide the needed context for each excavation unit. The formal unit designations consist of a unit number and the last two digits of the year of excavation. For instance, “U3-18” refers to Unit 3 of the 2018 excavation season. Detailed descriptions of each excavation unit are available within the publicly available site reports submitted to the Peruvian Ministry of Culture (Swenson et al 2009, 2010, 2011, 2012, 2013, 2015, 2017, 2019). (Figure 4.4)

2008:

In 2008, the inaugural year of research, we made a full topographic map of the area and conducted a surface collection of diagnostic ceramics from the three principal sectors of the monument and the eastern plaza (Swenson 2009). This survey clarified the political and ritual importance of the site in the Late Moche Period, elaborating on the observations of previous survey investigations conducted by Wolfgang and Gisela Hecker in the late 1980s (Hecker and Hecker 1990) and some preliminary and poorly recorded excavations conducted by Richard Schaedel in the late 1970s (Schaedel et al 1978). During the 2008 surface survey, three transects were placed in each of the three principal sector of Huaca Colorada for a total of 12 lines of systematic collection that crossed the monumental plaza (Sector E), the elevated ceremonial area (Sector B), and the lower domestic and production zones (Sectors A and C).
2009:

Excavations in 2009 entailed: initial excavations in Sector B immediately south of the Interior Western Platform Complex (U2-09, U3-09); minimal surface clearing on the north end of the Eastern Façade (U1C-09, 1B-09); and two units identified the uppermost contexts of the northern limits of the Eastern Terrace Platform Complex (U1-09 and U5-09) (Swenson et al 2010). In total, 139.5m$^2$ of Sector B was excavated over the course of the 2009 expedition.

2010:

In 2010, we conducted the first intensive excavation of the ceremonial core including the discovery of the Interior Western Chamber Complex (U2-10 and U3-10). Excavation of a central section of Western Terrace Platform Complex exposed a Transitional period feasting midden associated with the final phases of occupation (U4-10). This excavation season also saw the initial intensive excavation of the entire western section of the Eastern Terrace Platform Complex exposing a sequence of overlaid floors and formal post emplacements used to support the significant roof that was present through all phases of occupation (U1-10 and U5-10) (Swenson et al 2011). In total, 228.4m$^2$ of Sector B was excavated over the course of the 2010 expedition.

2011:

In 2011, we undertook intensive excavations of the northern extension of the Interior Western Chamber Complex to determine earliest phases of construction that reduced the area of the Western Chamber over time (U1-11/U9-11). We also cleared the northern limits of the Western Façade to determine the extent of the Transitional period feasting middens (Western half of U9-11). Intensive excavations of the southern limits of the Western Façade further exposed a sequence of ramps and access points into the Western Chamber through northern and south-western entrances into the ceremonial space (U2-11 and U8-11). The excavation team also began to expose the central portion of the upper limits of the southern section of the Eastern Terrace Platform Complex (U6-11) and the western limits of the Southern Façade Preparation Area (U3-
11) (Swenson et al 2012). In total, 266m$^2$ of Sector B was excavated over the course of the 2011 expedition.

2012:

In 2012, we undertook excavation of the northernmost segment of the Interior Western Chamber Complex to investigate the construction of the Northern Façade (U10-11). This was complemented by the complete excavation of the western half of the Northern Façade Kitchen Complex to expose the full extent of the food production area exterior to the ceremonial core (U5-12 and U6-12) (Swenson et al 2013). In total, 145m$^2$ of Sector B was excavated in 2012.

2014:

We excavated the western section of the Northern Façade Entrance Terrace to determine the sequence of overlaid walls and floors that provided access to the Eastern Terrace Platform Complex from the north (U1-14). We also investigated the southern limit of the Eastern Terrace Platform Complex to expose the upper tier of the original ramped platform that defined this public performative space (U2-14). The excavation of two broad horizontal units south of the Southern Façade (U3-14 and U4-14) identified the interface between the Eastern Terrace Platform Complex and the Southern Façade Residential Area. Finally, an exploratory unit was placed in the area that separates Sector B from Sector C as defined by the major east-west Transitional Period wall that extended from the east of Tecapa all the way across the entire width of Huaca Colorada (U5-14) (Swenson et al 2015). In total, 264m$^2$ of Sector B was excavated over the course of the 2014 expedition.

2016:

In 2016 we excavated the central portion of the eastern edge of the Eastern Terrace Platform Complex to define the lower tier and ramp associated the northern extension of the original public ceremonial platform and the sequence of overlaid ceremonial platforms built in the area in later phases of occupation (U4-16). Excavation of the far eastern extent of the northern façade clarified the sequence of overlaid walls and staircases of the Northern Façade Entrance Terrace (U3-16). A narrow excavation was also placed in the central section of the Western Terrace Platform Complex to explore the extent of the terrace immediately west of the northern entrance
into the Interior Western Chamber Complex (U5-16). Excavations exterior to the north-western corner of the formal ceremonial core defined the western limit of the Northern Façade Kitchen Complex and the northern limit of the Western Terrace Platform Complex (U6-16) (Swenson et al 2017). In total, 161m$^2$ of Sector B was excavated over the course of the 2016 expedition.

2018:

Excavations conducted in 2018 occurred exclusively in the western limits of the Western Façade Platform Complex. These units were situated in this area in order to determine the western extent of the section of the terrace initially exposed in 2016. These two excavation units (U2-18 and U3-18) clarified the sequence of the later phases of construction along the Western Façade and the changing nature of the space west of the formal western entrances into the Internal Western Chamber Complex (Swenson et al 2019). In total, 114m$^2$ of Sector B was excavated over the course of the 2018 expedition.
Figure 4.4: Excavations at Huca Colorada and Tecapa 2009-2018
4.4.2 Limits of Excavation within Sector B

As will be described in the following section, Sector B was divided into five broad functional areas based on the location and orientation of major structural walls and formal exterior façades. The ceremonial core of Sector B covered an area of 32m north to south by 25m from east to west. This central area was bounded by 2m high banked walls in the north and west and the steeply sloping façade of the Huaca itself in the east. Unlike the northern, western and eastern façades, the southern limit of the ceremonial core of Sector B is contained by a vertical boundary wall and a moderate slope towards its interface with Sector C where a later Transitional Period wall extends east from Tecapa. Excavations outside of this core area to the north, west and south covered a total area of 50m north-south by 37m east-west. With the exception of one unit placed south of this core area (U5-14) the overall excavation area of 1371.9m² represents nearly 75% of the 1850m² maximum area defining Sector B. Accordingly, the excavations undertaken in Sector B represent a nearly complete horizontal exposure of the entire area, with only the extreme northwestern and southwestern corners of the overall area left unexcavated. Both of these two areas may prove to be valuable targets for future research. However, they are both positioned in the lowest elevations along the base of Western Façade, and adjacent excavation units contained very shallow stratigraphy and lacked the substantial architectural features characteristic of the central core (Figures 4.5 and 4.6).

Considering the scale and complexity of the standing architecture of the ceremonial core of Sector B, the exposure of each functional area required excavation in stages over multiple excavation seasons. The details of each phase of excavation within these areas are available for consideration within the technical reports submitted to the Peruvian Ministry of Culture associated with each year of investigation. These reports provide detailed descriptions of every context and artifact assemblage encountered during the excavation of each unit. However, in light of new findings, many of the interpretations in the earliest reports demand revision. With nearly the complete exposure of the central ceremonial complex, I was able to separate the entire complex into five distinct functional areas, the descriptions presented in the following section will inform the remainder of this thesis to discuss the development of the entire structure over each phase of occupation and architectural reconstruction.
Figure 4.5: Huaca Colorada Sector B Excavations in relation to the walls of Tecapa.

Figure 4.6: Ceremonial core in relation to the walls of Tecapa.
4.4.3 Synopsis of the Functional Areas of Sector B

As mentioned above, the ceremonial core of Huaca Colorada (Sector B) was largely contained within a rectangular area formed by substantial walls built of adobe brick framing an area 32m north-south by 25 m east-west located in the centre of the platform complex. This central ceremonial core was divided into western and eastern sections by a substantial adobe brick wall running the entire length of the area (Figure 4.7). Excavations on either side of this central wall have shown that this architectural element stands not only as an important division between private and public ceremonial spaces, but also as part of the earliest phase of construction. Serving as a central “spine” running the length of the ceremonial core, this wall not only acted as a symbolic separation of exclusive and inclusive performative spaces, but also as a vital structural element in the initial building of the monument.

This major Central Dividing Wall (hereafter referred to as the CDW) clearly defined and divided the western and eastern functional areas. These western and eastern sectors were of unequal size, with the private internal western portion spanning an area approximately 10m (east-west) by 32m (north-south) and the public external eastern side spanning a larger 15m (east-west) by 32m (north-south) area. Within the bounds of the central ceremonial core, I have designated the entire area east of the CDW as the Eastern Terrace Platform Complex (ETPC) and the smaller precinct to the west as the Interior Western Chamber Complex (IWCC). As will be presented in the following sections of this chapter, these two intimately connected areas form the inner sanctum of the ceremonial core of Huaca Colorada housing the two most important formal ritual spaces excavated within Sector B. Accordingly, these two areas will be described in greatest detail and serve as the basis of the quantitative spatial analysis of the changing nature of ceremonialism over the occupation phases Huaca Colorada presented towards the end of this chapter.

The remaining three functional areas of Sector B are all located exterior to the central ceremonial core in the areas immediately north, west and south of the inner sanctum. To the west, the Western Terrace Platform Complex (WTPC) defines the western façade of the ceremonial core and served as a formal entrance into the space defined by a sequence of overlaid staircases and ramps that varied in form and orientation over the occupation sequence. Along the northern façade of the ceremonial core, two distinct and adjacent functional areas are described as the Northern Façade Kitchens and Entrance Terraces (NFKET). This northern area is divided by a
northern extension of the CDW into a western side dedicated to food production throughout all phases of use and the eastern side as a sequence of overlaid entrance staircases leading to the northern limits of the Eastern Terrace Platform Complex. I have designated the southern limit of the ceremonial core as the Southern Façade Residential Area (SFRA). This area is composed of a collection of walls that define a sequence of small enclosed spaces arranged on a broad terrace immediately south of the interior and exterior ceremonial platforms of the IWCC and ETPC respectively. The occupation of this area associated with a number of fineline Moche pot sherds likely served as a residential space for those involved in the ritual activities taking place within the ceremonial core to the north.

Figure 4.7: Functional areas of Sector B at Huaca Colorada.
4.5 Functional Areas of Sector B

The central ceremonial core is defined by substantial brick walls in the northern, western and southern limits, and in the east by a public facade that faces the plaza at the eastern base of Huaca Colorada. In the following section, each of the five functional areas of Sector B are described in relation to these boundary walls and the Central Dividing Wall (the CDW) that separates the ceremonial core into eastern and western sides. Each of these descriptions will focus upon the major architectural components found within each area that serve as indications of their meaning and use throughout all phases of occupation. Reference to these major architectural elements will be made in the detailed architectural biography of the seven major architectural phases of Huaca Colorada presented later in this chapter.

4.5.1 Interior Western Chamber Complex (IWCC):

The Interior Western Chamber Complex defines the entire western side of the ceremonial core west of the Central Dividing Wall (CDW). Bounded by the original northern, western and southern facade walls, the complete area of the IWCC covers an area of 28m (north-south) by 9m (east-west) and is composed of three distinct areas; the Western Chamber in the centre, a preparatory chamber in the south, and a series of structural walls forming a substantial architectural support of the ceremonial core in the northern limit. This northern 7m (n-s) by 9m (e-w) area formed the northwest corner of the entire ceremonial core and was composed of a deep deposit of sand fill and layers of adobe bricks arranged across the surface of the entire area. The fill of this area was contained within the 2m thick northern and western facade walls, while the original northernmost wall within the Western Chamber served as southern containment of this space. Considering the thickness and depth of the containment walls, this solid northern area of the IWCC served as structural buttress to support the north-western corner of the ceremonial core.

South of this structural element, the open area of the Western Chamber itself was renovated over a sequence of 3 major phases of reconstruction. The open space within the Western Chamber was reduced from 15m (n-s) x 9m (e-w) (135m²) in Phase 1 to a final dimension of 10m (n-s) x
9m (e-w) (90m$^2$) in Phase 4. The reduction of this space during each renovation phase took place through the construction of a new northern wall. Overall, a sequence of three superimposed northern walls were erected before the room was decommissioned in Phase 6 when the room was filled with $\sim$180m$^3$ of clean sand that beautifully preserved the space in its final state. These walls will be referred to as Northern Reduction Walls 1, 2 and 3 (Figure 4.8). The Western Chamber contained a finely made two-step ceremonial platform or altar located in the southern end of the room (Figure 4.9). Serving as a private enclosed ceremonial area, this ritual platform retained its position in the space throughout the first four occupation phases of Huaca Colorada. This platform measured 4.4m (e-w) by 1.7m (n-s) and was built with adobe brick walls that were finely finished with smooth clay plaster over the entire surface. When this platform was first discovered, the lower remains of two clay covered wooden posts were found preserved on the upper tier of this ceremonial altar, encased by the clean sand fill used to rapidly decommission the final iteration of the Western Chamber (Figure 4.9 and see figure 5.1 for encased posts).

Figure 4.8: Sequence of northern reduction walls within the IWCC, looking southeast.
There were five points of ingress into the Western Chamber in each phase of use, however the location of some of these entrances changed between phases. Access into the Western Chamber from the exterior Western Terrace took place through two doorways that will be referred to as the Northern Entrance and the Southern Entrance. The position of the Northern Entrance changed with the addition of each Northern Reduction Wall, while the Southern Entrance remained in the same position in each phase of renovation. The Southern Entrance led directly into a 9m (e-w) by 4m (n-s) preparatory room that formed the southern section of the IWCC immediately south of the ceremonial chamber. The northern wall of this preparatory room also formed the southern wall of the interior of the Western chamber and contained two doorways, one on either side of the ceremonial platform, and will be referred to as the South-western and South-eastern Entrances respectively. These two southern doors maintained their positions in all four of the occupation phases of the Western Chamber prior to decommissioning. The South-eastern Entrance continued to be used following the closure of the Western Chamber following the construction of a 1.5m wide by 6m long corridor along the eastern side of the chamber along
the CDW before the room was filled with sand (Figure 4.11). This narrow corridor led to the last in a sequence of four doors that were cut through the CDW that connected the Interior Western Chamber Complex and the Eastern Terrace Platform Complex. Each of these four doors are directly associated with each phase of reduction within the Western Chamber, and are referred to as CDW Door 1, 2, 3 and 4.

Figure 4.10: Plan of the final phase of use of the Western Chamber with location of human burials north of the stepped platform
The earliest and northernmost of these doorways, CDW Door 1 was open while Northern Reduction Walls 1 and 2 were in use in the first phase of occupation. The second entrance, CDW Door 2, was located 1m south of CDW Door 1 and connected the IWCC and ETPC while Northern Reduction Wall 3 formed the northern limit of the Western Chamber. The third entrance, CDW Door 3, was located 1.25m south of CDW Door 2 and connected the IWCC and ETPC, while the Northern Reduction Wall 4 formed the northern limit of the Western Chamber. The fourth entrance, CDW Door 4, was located 1.5m south of the CDW Door 3 and connected the IWCC and ETPC through the eastern corridor that was built along the CDW following the decommissioning of the Western Chamber that occurred between Phases 5 and 6 (Figure 4.12). As mentioned above, access into this corridor from the south was through the Southeastern Entrance with the CDW Door 4 in the north of this corridor serving as the primary access point onto the Eastern Terrace from the west for the remainder of the occupation history of Huaca Colorada associated with the later Transitional Period (see below).
Figure 4.12: Eastern profile of the Central Dividing Wall and location of CDW doors.
Figure 4.13: Three superimposed floors and clean sand fill that coincided with reductions of the Western Chamber.

Each of the three major northern reductions of the Western Chamber were synchronized with an increase in the elevation of the floor within the chamber through the intentional filling of the area with clean sand before a new smooth clay floor was laid across the entire space (see figure 4.13). As illustrated in the eastern profile of the IWCC (Figure 4.12), each northern wall is
associated with a combined “fill-and-floor” event, a construction technique used in nearly every renovation phase investigated at Huaca Colorada (Figure: Eastern profile of U1-11 Subunit A between Northern Reduction Walls 2 and 3). Accordingly, the first and second IWCC floor levels extended to the original Northern Wall and Northern Reduction Wall 1, the third floor extended only to the Northern Reduction Wall 2, and finally the fourth floor bonded with the later Northern Reduction Wall 3 that served as the final northern compression of space prior to decommissioning. Throughout the first three phases of use of the IWCC a short wall that ran across the space divided the room into an upper southern tier on which the ceremonial platform was built, and a lower patio in the northern area of the Western Chamber (Figure 4.9, 4.10). The difference in elevation between these two floor levels amounted to approximately 25cm, serving as simple step that spanned the width of the chamber. A series of five post holes were found along the south side of the low wall that separated the upper and lower tiers, suggesting that the upper tier of this space once supported the northern extension of the roof that covered the ceremonial platform. This two-tiered space within the IWCC was maintained throughout the first three phases of occupation that replicated the two steps of the ceremonial platform in the south of the Western Chamber.

Following the final compression of the IWCC with the construction of Northern Reduction Wall 4, the floor level across the entire ritual space was increased through a final renovation event that buried the two tiers of floor to create a single elevation throughout the Western Chamber. This final and higher floor also buried the bottom step of the ceremonial altar, reducing this important feature to a single platform rising above the new floor surface (Figure 4.14). This fill event of this final reduction also incorporated a number of important sacrificial offerings, including the burial of two adolescent women, a dog and a cache of unworked copper fragments (See Swenson et al 2011; Swenson and Warner 2012). The two young women were buried next to each other in a single grave cut through the penultimate floor just north of the bottom step of the ceremonial platform (see Figure 4.10). Both of their bodies were arranged in supine positions with their heads oriented to the south. Apart from some copper prills, remnants of textile covering their bodies and evidence of rope ligatures around their necks, no grave goods were found in direct association with their bodies. On the floor just west of the grave cut, the articulated remains of a small dog and a guinea pig were found buried as an additional ceremonial offering within the sand fill of the final flooring event that sealed this area.
Figure 4.14: Eastern face of IWCC platform showing seam of plaster at level of flooring event that sealed the bottom step.

Four additional human burials were found within the bounds of the IWCC. Each of the six burials were found in direct association with specific renovation phases and are considered to represent sacrificial offerings synchronized with each reduction of the Western Chamber. An adult female was found violently splayed within a fill of sand and adobe bricks in between the Northern Reductions Walls 2 and 3, and three additional adolescent women were found in the uppermost contexts of the preparatory room immediately south of the Western Chamber. The woman buried within the space of the Northern Reduction Walls was laid supine with her head oriented towards the east with a small collection of copper and shell beads found on her chest (this burial is discussed further in Chapter 5). We discovered the remaining three burials within the fill events of the southern preparatory space associated with the later phases of occupation of the IWCC. As all three of these burials were located in close proximity to one another in clearly separate grave cuts, their interment is thought to have taken place in a single event that follows the decommissioning of the Western Chamber.
Before moving on to the description of the Eastern Terrace Platform Complex in the next section, it is worth noting briefly that the walls of nearly every phase of occupation in the IWCC contained some evidence of rather crudely executed graffiti engraved into the surface of the yellow clay wall plaster (see Swenson 2018e for a complete discussion of these elements). The northern surfaces of Northern Reduction Walls 2 and 3 were by far the most extensively decorated, with depictions of figures carrying litters, lizards and geometric designs thought to represent the stepped facades and gabled roofs of the architecture of Huaca Colorada itself. Additional graffiti were found on the western surface of the CDW interior to the IWCC, bearing depictions of more stepped huacas as well as fish. Another collection of graffiti was also found on the eastern face of the CDW (see below). The ceremonial platform was also decorated with a small collection of images including an engraved pelican and sea lion painted in black pigment on the bottom step of the altar, as well as a tree-like graffiti on the clay that coated one of the wooden pillars found intact on the upper surface of the platform (Figure 4.15). In comparison to the fine polychrome decoration of many other Moche sites such as Huaca de la Luna, Cao Viejo or Pañamarca, the graffiti of Huaca Colorada appear to have been created rather expediently, perhaps as simple marks left by ritual participants moving through the space prior to the phases of renovation.

![Graffiti of pelican and painted scene of sea lion on IWCC platform.](image)

Figure 4.15: Graffiti of pelican and painted scene of sea lion on IWCC platform.
4.5.2 Eastern Terrace Platform Complex (ETPC):

In contrast to the private ritual space of the Western Chamber, the Eastern Terrace Platform Complex served as a stage for elaborate public ceremonial performances on a sequence of platforms that were fully visible from the open plaza at the base of the eastern side of Huaca Colorada. The ETPC is located in the area east of the Central Dividing Wall (CDW) and covers a total area of 28m (n-s) by 15m (e-w). This large terrace was entirely open along its eastern limit and bounded to the north and south by the exterior facade walls of the ceremonial core, while the CDW served as the western boundary and backdrop for the rituals performed in this space. As mentioned in the description of the IWCC, a sequence of four doors that were cut through the CDW served as the only point of access onto the Eastern Terrace from the Western Chamber. The construction and use of each of these four doors were directly synchronized with the four major phases of renovation within the IWCC described above. Mirroring the major reconstructions of the IWCC, the reconfiguration of the ETPC over time involved the ritualized termination and renewal of the entire terrace and the ceremonial architecture that it supported. Akin to the Western Chamber, these renovations were accomplished through the deposition of massive amounts of sand fill and rubble to increase the elevation of the area followed by the subsequent laying of clay floors.

The IWCC and ETPC were intimately connected in both form and function throughout every phase of occupation. Although they differed in terms of visibility and exclusivity as private versus public areas, both of these spaces were defined by the presence of ritual platforms that served as the foci of the ceremonial activities performed in these spaces. As described above, acts of renovation in both areas were synchronized on either side of the CDW, suggesting that the movement of ceremonial practitioners and participants between these two spaces was of fundamental importance to the ritual process. The fact that there is only one entrance into the ETPC suggests that participants would have entered the public terrace from the Western Chamber, perhaps as an act of revelation that required participants to emerge into view from within the private core of the IWCC. Although the size and orientation of the platforms on the Eastern Terrace changed throughout the phases of occupation described below, the general continuity of access patterns between the private and public spaces suggests a certain degree of conservatism in the nature of the ceremonies performed on this ritual stage.
Excavations in this area have revealed that the ETPC was constructed over six major phases of architectural renewal and continued to be used into the Transitional Period following the decommissioning of the IWCC as described in the previous section. The first phase of the ETPC saw the construction of a two-tiered space that replicated the general structure of the IWCC with an upper tier in the south of the terrace supporting a two stepped ceremonial platform and a larger lower tier covering the northern section of the space (Figure 4.16). These two levels were divided by a wall running across the entire width of the terrace from east to west, with the lower northern section measuring 19m (n-s) by 15m (e-w) (285m\(^2\)) and the southern upper level covering an area 9m (ns) by 15m (e-w) (135m\(^2\)). As the upper and lower tiers of this space were separated by a height difference of 54cm, these two elevations were connected by a 2m wide and 2.3m long wedge-shaped rectangular ramp (ramp visible in Figure 4.18). The upper edge of this ramp was located 5m north of the bottom step of the ceremonial platform found in the southern end of the ETPC. As they were arranged in perfect alignment to one another, it is evident that the ramp and stepped platform formed part of a single ceremonial structure, presenting a striking architectural ensemble commonly depicted in Moche iconography (discussed in Chapter 5).

Figure 4.16: Burnt surface of ETPC platform facing east.
Again, mirroring the IWCC, the first phase ETPC platform was almost identical in form to that found in the Western Chamber, as it was also composed of two steps and contained the remains of wooden posts that had once supported a gable roof. Whereas the IWCC platform contained only two posts on the upper tier, the ETPC platform contained a total of four posts with two post found in both the upper level and the bottom step. Inspection of a broken section of the western side of the platform indicated that this altar was constructed in two phases. This minor renovation involved the addition of a second layer of adobe bricks to the exterior of the original platform, increasing the width from 4m to 4.5m (e-w) while the depth of the platform remained 3m (n-s) in both phases. Excavations of the remainder of the southern tier immediately to the west and north of this platform proved that a substantial roof once covered this entire southern tier of the ETPC. Although the wooden posts themselves were not found in situ, the circular adobe lined sockets in which they were originally embedded were distributed across entire area. In total, 13 of these post emplacement bins were arranged in five rows that aligned with the four posts of the ceremonial platform (Figure 4.16, 4.17).
The ETPC platform area was buried by deep deposit of the burnt and fragmentary remains of the roof that once covered its highest landing in the south. This roofing material was composed of panels of cane that had been lashed together with twine and then covered in a 3-5cm thick layer of fine clay to seal the upper surface (see Figure 5.11). This roof had clearly been exposed to the extreme heat of a burning event, as the organic armature of this roofing system had been completely carbonized leaving negative impressions of the cane and twine within the remaining clay that had been fired to a bright red colour. Similar evidence of extensive burning was found across the entire surface of the first occupation phase of the ETPC, indicating that the original ramp and platform complex described above had been burnt down in a single termination event. Based upon the stratigraphic relationship of floors and the position of the CDW Door 2 that connects both sides of the ceremonial core, it appears that the destruction of the ETPC by fire is directly synchronized with the first major reduction of the IWCC between Phases 2 and 3.

Following the burning of the first occupation of the Eastern Terrace, the entire ETPC area was filled with over 170m³ of clean sand fill to a depth of 60cm across the northern tier of the space. While this enormous amount of sand was brought in to cover the ETPC, the ceremonial importance of this act of termination is underlined by the presence of three human burials that were found within this fill event. An adolescent female was found directly on the burnt floor at a distance of 1.8m west of the platform ramp with her head oriented to the south and her body positioned on her left side to face Cerro Cañoncillo. In the far north-western corner of the ETPC, another adolescent female and a 4-5 year old juvenile were also found within this fill event. These two burials were found 2.6 m apart from each other with the adolescent placed on their right side while the juvenile was positioned supine with both of these burials oriented with their heads to the south and facing Cerro Cañoncillo as well. Considering that the vast majority of the fill event in which these three burials were found was left unexcavated, the density of burials in the small area investigated may reflect a broader pattern of sacrificial offerings in this termination context throughout the ETPC. Future excavations are planned to confirm this possibility.
The substantial sand fill that buried the original ramp and platform complex elevated the entire EPTC and supported two new floor surfaces. This first renovation replicated the upper and lower tiers of the previous phase. However, the erection of a wall crossing the terrace from east to west reduced the broad open northern tier to an area of 16m (n-s) by 15m (e-w) (240m²) and the upper southern tier expanded to cover a total area of 11m(n-s) by 15m(e-w) (165m²) (visible in Figure 4.18). The additional floor added to the southern tier completely covered the original ETPC platform and ramp, however a series of 12 post emplacement bins found in four aligned rows indicates that this upper tier continued to be covered by a roof. A new north facing ceremonial platform was built onto the north face of the wall that separated the lower northern tier from the southern tier. This new platform was built as a single landing without a step that measured 40cm high. Thus, it was considerably smaller than the original north facing ETPC platform that it replaced measuring 3m (e-w) by 1.5m (n-s) at its base. All three of the facades of this dais were constructed with embanked surfaces covered with a very smooth yellow clay. The northern, western and eastern facades of this second ETPC platform all tapered steeply outwards at approximately 30 degrees from the vertical, differing significantly from the rectilinear construction of both the ETPC and IWCC stepped platforms. This ceremonial altar also contained a remarkable human burial that had been placed into the centre of the upper surface of the platform in a grave cut that was carefully plastered over to seal the body into the structure itself. This significant burial contained the remains of a young woman who had been pregnant at the time of her interment. Analysis of the fetal bones found in the area of her lower abdomen suggests that she was in the third trimester of her pregnancy. In distinction to the other burials found in earlier phases of the ETPC, the remains of this pregnant woman were supine with her head oriented to the east towards Cerro Cañoncillo. The significance of this particular burial will be discussed in detail in the interpretive discussion presented in Chapter 5 (Figure 4.18).
As mentioned, the construction of this second ETPC platform coincides with the first major northern reduction of the IWCC in Phase 3 as discussed later in this chapter. Accordingly, the entrance onto the floor of this second northern tier of the ETPC from the IWCC was through CDW Door 2 during this particular phase. The floor of this phase of occupation was composed of the same fine clay as the embanked platform itself. Although a relatively small area of this surface was exposed through excavation, a remarkable copper chisel-like *tumi* knife was found embedded into the floor excavation of this surface in the north-western corner of the ETPC. This 11cm long blade was decorated with an intricate engraved design of intertwined fish and condor heads on both sides and represents one of the finest metal objects recovered from the excavations at Huaca Colorada (Figure 4.19 and 5.3 for conserved view of both side of knife).

Figure 4.18: Pregnant woman buried within Phase 3 platform, Phase 1 ETPC ramp to right.

Figure 4.19: Decorated copper knife with interlocking bird and fish designs
The second major renovation (Phase 4) of the ETPC involved the deposition of 40cm of compacted adobe rubble over the entire northern tier in order to bring the elevation of the new floor up to the level of the upper surface of the north face of the second ceremonial platform associated with the pregnant woman described above. The use of clay rubble for this termination as opposed to sand fill appears to become the standard technique for all subsequent floor renovations of the ETPC.

Following the pattern of the previous renovation, the third occupation of the ETPC was synchronized with the fourth and final northern reduction of the IWCC that reduced the Western Chamber Platform to a single step. Accordingly, access onto the Eastern Terrace was shifted to CDW Door 3. Due to the increase in elevation of the ETPC floor, the difference in elevation between the IWCC and the Eastern Terrace required the construction of a narrow corridor parallel to the eastern side CDW. This corridor measured 8m long (n-s) and only 1m wide, with a small staircase in the northern end and a gentle ramp inclined upwards to the south leading to the southern tier of the ETPC (Figure 4.20). The northern staircase was composed of three steps constructed of fine clay. It led to the upper surface of an eastern facing ceremonial platform that extended east from the CDW (and this wall thus functioned as a backing to this platform).

This first east-facing platform, contemporaneous with the third north-facing platform to the south (see below), directly references the north facing ceremonial altar of the previous phase in both form and dimensions. Both were constructed of finely plastered and embanked faces. The sloping east facing façade of this altar was expeditiously decorated with engraved graffiti depicting a complex scene that resembles the act of fishing from an ocean-going boat (Figure 4.22).
Figure 4.20: Corridor east of the CDW with staircase to Phase 4 east facing platform.
Figure 4.21: View of profile showing superimposed north facing platforms of Phase 3 and 4

Figure 4.22: Graffiti of fishing scene on the eastern façade of the first east facing platform of the ETPC (Phase 4).
The fact that this ceremonial platform faces east is noteworthy, as this marks a significant change from the northern orientation of all previous platforms and represents the beginning of an easterly facing platform tradition that endures on the ETPC until the abandonment of Huaca Colorada. This first east-facing platform was renovated once through the addition of a finely plastered wall at the base of the northern sloping façade that extended to the north to meet the northern façade wall of the ETPC. This wall effectively encapsulated the first east-facing platform, turning the entire area north of the staircase into a broad east-facing platform 8m wide (n-s) by 2m deep (e-w). The expansion of this platform within the same architectural phase is suggestive of an increasing importance of the eastern facing tradition that continues into and intensifies during the final occupation of Huaca Colorada in the Transitional Period.

During this later part of the third phase of occupation of the Eastern Terrace, a second north-facing ceremonial platform was also constructed on the ETPC directly over and completely encapsulating the second north-facing platform in the southern end of the northern tier associated with the pregnant woman (Figure 4.21). The placement of this third north-facing ceremonial platform clearly references the previous generations of north-facing altars of the ETPC. Unlike the platform that it replaced, the single step of this third north-facing platform was considerably larger, measuring 4m wide (e-w) by 2.5m deep (n-s). This larger dais conforms to the rectilinear form of the earliest platforms with vertical rather than sloped eastern, western and northern facades.

The final major renovation of the ETPC was synchronized with the termination of the IWCC described in the previous section. As the Western Chamber was filled with sand and the corridor that ran along the western side of the CDW is built within the IWCC, the elevation of the ETPC floor is raised to its final level. Replicating the renovation technique of the previous termination event, the entire Eastern Terrace is covered with 40cm of compact adobe rubble, encasing the eastern and northern facing platforms under a single level clay floor. At this stage, with the entire ETPC raised to a single elevation, the Eastern Terrace covers an area of 28m (n-s) by 15m (e-w) and is accessed from the west through CDW Door 4. This southernmost access point represents the last point of access constructed between the IWCC and the ETPC. With the Western Chamber completely sealed and buried during this occupation phase, only the southern preparatory area of the IWCC was left accessible and was used as an intermediary space to allow access to the corridors on either side of the CDW that led to the ETPC. The corridor on the
eastern side of the CDW retained the northern staircase and a second layer ramped floor is added in the southern end of this narrow space to allow for continued access to the southern roofed area of the ETPC. The eastern wall of this eastern corridor also forms the backing wall of a new eastern-facing platform constructed on the final Eastern Terrace floor. This final eastern-facing platform measured 4m wide (n-s) by 2m deep (e-w) and was placed nearly in the center of the entire ETPC (Figure 4.23). One renovation of this central east-facing platform involved the expansion of the platform to a final dimension of 7m wide (n-s) by 4m deep (e-w) and included the incorporation of a sea lion cranium within the fill of the northern portion of the platform. The position and scale of this platform is retained for the remainder of the occupation phases at Huaca Colorada, clearly becoming the singular focus of ceremonial activity on the ETPC.

![Figure 4.23: Final east-facing platform of the ETPC.](image)

With this monolithic east-facing platform in place, no further major renovations took place on the ETPC. Only the floor of the corridor behind the final platform was increased in elevation to meet the final level of the ETPC floor to the east. One additional sacrificial offering of a juvenile
camelid was deposited in the final ETPC floor surface east of the base of the final east-facing platform and an unusual alignment of adobes placed on the final floor of the Eastern Terrace is particularly noteworthy. Constructed of nine worked adobe bricks, a curious diamond shaped construction was located in the northwestern portion of the ETPC and likely functioned as an astronomical or geographical gnomon (Figure 4.24). This feature constitutes a unique discovery at Huaca Colorada, and equivalents have never been documented at other Moche sites. Indeed, the low, diamond shaped installation clearly served a singular purpose.

Figure 4.24: Adobe brick alignment or “gnomon” found on last use surface of the ETPC

This feature is composed of 9 bricks of varying size which together form a roughly elongated, pentagonal shape (Figure 4.24). Three of the smaller bricks are exceptional in that they were carefully cut into pointed, diamond-shaped wedges. These particular bricks are positioned at the three “end points” of the larger pentagonal construction and are bonded to larger loaf-shaped adobes. The roughly south and open end of the installation is comprised of small polygonal bricks that flair outward from two larger adobes that are angled inward. The most prominent point of the construction, directly opposite the south opening of the feature, is oriented roughly
45 degrees east of north. Following this long axis, this adobe construction measures 1.42 m long and 1.18 m across its width and stood roughly 16-18 cm off the surface of the final ETPC floor. Interestingly, the three points of the feature align with peaks of the neighboring mountain ranges to the east and north of the huaca. Moreover, the northern point most likely aligns with the sunrise on a particular day of the year (possibly the winter solstice—June 21). The southeast point of this construction also forms a line of sight with the stone outcrop situated on the highest peak of Cerro Cañoncillo to the southeast. This outcrop was venerated as a huaca in antiquity (Swenson and Warner 2016). Finally, it deserves mention that the diamond-shaped adobe brick forming the east point of the feature is actually aligned with True North. The peculiar shape of the installation forming multiple lines of sight with prominent features of the surrounding topography strongly suggests that it functioned in rituals related to astronomy, time-reckoning, and sacred landscapes.

As mentioned in the previous section, some additional graffiti were also found on the eastern face of the CDW within the corridor behind the final east-facing platform. In contrast to those found in the IWCC, the graffiti of ETPC were both engraved into the clay of the wall plaster as well as few examples drawn in black and red pigment. Depictions of figures carrying litters were common, as well as warriors wielding clubs and two enigmatic cruciform symbols (Figure 4.25).

Figure 4.25: Graffiti found on the CDW corridor within the ETPC
4.5.3 Western Terrace Platform Complex (WTPC)

Beyond the western facade of the IWCC, the Western Terrace Platform Complex (WTPC) covered an area of 26m (n-s) by 10m (e-w) and comprises the monumental western access point anchored by a large platform that was subsequently converted into a sequence of superimposed north facing terraces that resemble a broad staircase ascending to the south. As discussed below, the architecture of the external western area reflects the changing nature of access into the ceremonial core from this side of Sector B. Each of the renovations described below were constructed in response to the increasing elevation of the central ceremonial core throughout the occupation sequences described above. In general, the WTPC served as the primary entrance into the ceremonial core through the Western Façade of the IWCC through two main entrances in the north and south of the chamber. As mentioned, the first was located in the northern section of the Western Chamber. The other was situated in the southern end of the Western Façade that provided access into the preparatory area and the Southwestern and Southeastern entrances that led into the Western Chamber. The earliest phases on the Western Terrace were at the same elevation as the first floors found in the IWCC, suggesting that movement into and out of the northern section of the western chamber occurred with little restriction. With the subsequent raising of the IWCC floor level with each renovation of the Western Chamber, a sequence of superimposed floors, staircases and ramps allowed access into the IWCC along the western façade through the two western entrances. Once the Western chamber was decommissioned, all movement was directed through the southern entrance, through the southern preparatory area of the IWCC and directly into the corridor west of the CDW to provide access to the ETPC.
The first modification of the WTPC is synchronized with the first reduction of the IWCC wherein a banked or inclined addition was made to the southern face of the original northern wall of the Western Chamber (Figure 4.26). At the same time that this first Northern Reduction Wall was added, two similar sections of inclined wall additions were added to the Western perimeter of the IWCC. These distinctive inclined walls were all constructed as a hollow chamber of well plastered external bricks that encased fill of sand and rubble. These distinctive wall additions served as structural buttresses to support the original internal walls of the IWCC based upon the angle of their construction marked by a flaring base that projects outwards at 30 degrees from the vertical. This technique of structural buttressing is also repeated across the northern façade as described later in the following section. As the entire ceremonial core was built upon the compact sand of a stationary dune, these considerable buttresses were required to support and retain the original walls as the interior of the IWCC/ ETPC core was filled with material with each phase of renovation. The construction of these inclined buttresses indicates that the builders of Huaca Colorada intended to renovate the huaca numerous times into the future, creating a stable base that would support the enormous amount of weight that would be added into the ceremonial core over time.
The initial occupation levels of the Western Terrace proved to contain a substantial amount of midden-like material consisting of a mixture of sand, food remains, domestic ceramic fragments and charcoal contained within a series of low walls built to retain the sandy surface found across the exterior. The presence of a large storage vessel or *paica* as well as high concentrations of ash within this midden level further support the interpretation that this area was originally used in a food production capacity. The presence of a partially disturbed human burial and the articulated remains of a dog found buried in this context suggests that the use of this area shifted in later phases to align more closely with the ceremonial importance of the site. This human burial was found in the northern limits of the WTPC at the base of a containment wall that was aligned with the original northern wall of the Western Chamber. This individual proved to be an adult male laid supine with his head oriented to the east. Three additional human burials were found within the WTPC, each of which repeated the same orientation. However, they are associated with later phases of occupation as described below. It is worth noting that three of the four burials found within the WTPC proved to be male, while 9 of the 10 burials found within the ceremonial core have been sexed as female with one juvenile who could not be assigned a gender. Accordingly, this burial pattern strongly suggests that the ceremonial core was a highly gendered space, an aspect that will be further discussed in the interpretive chapter that follows.

Throughout all four of the phases in which the Western Chamber was in use, the Western Terrace constituted a single open area that allowed access into the IWCC through the two western entrances described above. As the floor level of the Western Chamber increased with each renovation and reduction of the space, both the Northern and Southern Entrances through the Western Façade were synchronously elevated (Figures 4.26, 4.27). A platform-like bench was added to the base of the Northern Entrance, and a staircase was added to the Southern Entrance into the preparatory area south of the Western Chamber. Once the Western Chamber was decommissioned and the Northern Entrance was sealed, a ramp that ascended towards the Southern Entrance was built along the Western Façade in two phases, burying the earlier southern staircase that led into the IWCC (Figure 4.27).
Figure 4.27: Western embanked buttress wall with superimposed stairs and ramps.

A series of superimposed step-like platforms were added to the area west of the entrance ramp of the WTPC during the terminal occupation phases associated with the final transformation of the ETPC into a single east-facing platform. I refer to these as “platforms,” for they are wide, capacious landings that may have functioned in rituals that regulated movement in the ceremonial core in the last phases. However, during the final occupation as an ensemble they clearly formed a monumental stairway replacing the previous ramped entrance. In order to construct the first of these Western Terrace Platforms, a 4m long (n-s) section of wall was built along the southern end of the west side of the ramp, and the southern section of the ramp itself was buried with adobe rubble (visible in left side of Figure 4.27). The first Western Terrace was constructed in much the same manner as the inclined walls of the Western Façade, however the finely mortared sloped face of this first terrace was oriented towards the north. This initial platform measured 5m in length (n-s) by at least 6m wide (e-w) and its north buttress wall was conspicuously embanked repeating the architectural signature of “exteriority” expressed by the embanked walls that surround the western and northern exteriors of the ceremonial complex.
A sequence of three platforms were added to the northern face of this inclined wall, with each addition encasing the previous northern face of the preceding platform. As mentioned, each of these successive platforms were constructed at increasingly higher elevations as they extended to the north of the WTPC over time. In its final form, the descending terraces resembled a broad 6m wide (e-w) staircase that served as a monumental entrance into the ceremonial core. Although the westernmost section of this structure had collapsed down the slope, remnants of formal ramps along the western edge of the sequence of platforms indicates that access onto these landings in each phase of occupation was along the western side. The presence of a well-finished ramp ascending to the base of the lowest tier in the last phase of occupation clearly shows that the entire WTPC was accessed from a lower level to the west. This lower level to the west was beyond the limits of current excavations.

Figure 4.28: Isometric view of WTPC northern platform extensions.
Much like the stratigraphic sequences described for the IWCC and ETPC, each phase of construction of the WTPC was synchronized with an increase in the floor level over the entire area. In total, three occupation levels were found in the WTPC that coincided with the addition of each tier of the grand entrance staircase. The first of these levels was composed of the original midden-like substratum of the entire WTPC area. This first occupation surface is associated with the construction of the first north-facing inclined wall and associated platform and it contained patches of rough adobe mortar thought to represent remnants of the building materials used in the construction of this first phase. Two well-finished floors were laid atop this rough base, each built upon fill levels of clean sand used to elevate the area associated with the addition of tiered platforms to the north. Two human burials were found sealed under the first of these formal floors in the area directly north of the entrance staircase (Figures 2.29 and 4.30). As mentioned above, both of these individuals were sexed as young adult males and were both laid supine with their heads oriented to the east. As these two individuals were found in the same stratigraphic context and located only 2.5 away from each other, the timing of their burial was likely synchronized. The northernmost of these two burials was accompanied by the remains of three young camelids, while the southern individual was buried in a large shroud and that was tied around their body at the neck, knees and ankles. No other grave goods were associated with these two individuals.

Figure 4.29: Burial in relation to northernmost WTPC northern platform extension.
The last of the four burials found in the WTPC was found sealed under the floor of the first northern platform. The grave in which this adult female was buried was cut through the last use surface of the second tier and through two floor plastering events associated with the first two phases of renovation of this entrance structure. As such, the timing of this burial is confidently associated with the final phase of occupation. In differentiation to the three other burials found on the WTPC, this individual was sexed as female but followed the same pattern of eastern orientation as the others. The body of this individual was also laid supine in the grave cut (Figure 4.31). However, her left arm was slightly flexed inwards due the presence of the inclined face of the original northern platform that formed the southern side of the grave. No grave goods were associated with this interment, but her cranium was partially covered with bright red pigment that proved to be cinnabar following chemical analysis.
The final occupation of the WTPC was marked by the addition of a series of expediently constructed walls atop the final phase of construction of the monumental entrance structure. Composed of poorly built walls that used a distinctive granular yellow mortar, these late additions appear to have been laid to further alter the nature of western access into the ceremonial core. These final walls were built perpendicularly to the steps of the entrance platforms thus converting the uppermost tier into a small staircase that ascended to the east to provide access to the final levels of the ETPC.
This final phase of occupation is also marked by the presence of a deeply deposited midden of food remains and fine ceramics located on the platform found at the base of the ramp that ran along the Western Façade (Figure 4.32). Although the first deposits of the midden likely dated to the Late Moche Period when the IWCC was still in use, the upper strata may date to the Transitional Period. This extraordinary collection of mixed organic remains and exotic ceramics contained an extremely high concentration of fragments of imported Cajamarca bowls and a variety of nearly complete high-status Transitional Period blackware (Figures 4.33, 4.34, 4.35). This midden was found sealed under a section of wall that collapsed following abandonment of the site. Accordingly, part of this important context represents the final phase of occupation of the site into the Transitional Period that is associated with the construction of the site Tecapa at the base eastern flank of Huaca Colorada.
Figure 4.33: Examples of highland Cajamarca bowls and spoons found in feasting middens.
Figure 4.34: Examples of distinctive Transitional period blackware found in feasting middens.

Figure 4.35: Two views of a Transitional Period vessel found in feasting middens.
4.5.4 Northern Façade Kitchen and Entrance Terraces (NFKET):

The Northern Façade of the ceremonial core covered a span of 25m (e-w) and was divided into two distinct sections on either side of a northern extension to the CDW constructed in the later phases of occupation. The western 10 m span of the façade was a space for food production throughout all occupation phases, while the eastern 15m of this area contained a series of superimposed support walls and staircases that ascended to the south onto the ETPC. Accordingly, these two northern exterior areas are collectively referred to as the Northern Façade Kitchen and Entrance Terraces (NFKET). Both the eastern and western sections of the Northern Façade were constructed with embanked external surfaces that replicate those of the Western Façade described above. The western section of the North Façade was built in two closely bonded construction phases, with an internal vertical wall supported by a secondary layer of inclined structural buttressing. In contrast, the eastern section of the North Façade underwent two much more significant renovations involving the addition of two superimposed buttressing walls to contain a 2m deep (n-s) sand fill in each instance. Both of these more substantial structural buttresses served to support the growing mass and volume of the ETPC as the elevation was increased over time. The northern section of the ETPC was not originally supported by a large contained fill like the IWCC to the west that required the additional support of the two phases of buttress walls as the Eastern Terrace continued to be renovated through all phases of occupation.

As mentioned, each of these substantial buttressing walls were filled with a deep deposit of sand and rubble and capped with a sequence of fine clay floors. The discovery of the articulated remains of a small feline within the fill of the first buttress wall is interpreted as a ceremonial deposit marking this first substantial renovation. Considering the proximity of this ritual interment to the ETPC to the south, the placement of this feline offering is suggested to coincide with the first major reconfiguration of the entire ceremonial core in Phase 3 of the occupation sequence. This massive act of renovation saw the first major reduction of the IWCC and the first increase in elevation of the ETPC following the burning and burial of the original iteration of the Eastern Terrace.
In sum the construction of the first structural buttress wall onto the Northern Façade served the dual purpose of physically supporting increasing mass of the area while ceremonially and even aesthetically marking the renovation as an act of renewal. Following this same pattern, the addition of the second structural buttress wall 1.3 m to the north is associated with the decommissioning of the Western Chamber and the conversion of the ETPC into a singular level dominated by the central east-facing ceremonial platform. The eastern half of this second wall also supported a 4m wide (e-w) staircase ascending to the south towards the final levels of the ETPC. This monumental staircase would only have been in use during the final phase of occupation creating a new point of access onto the ETPC from the north, rendering all who climbed the stair fully visible to the spectators gathered in the plaza at the eastern base of Huaca Colorada (Figure 4.37)
Returning to the initial occupation of the NFKET, a fine clay floor was found at the base of the entire 25m span of the first Northern Façade and predated the wall additions that acted as structural buttresses described above. This early use surface is associated with the initial construction of the ceremonial core, and the presence of intact storage and cooking vessels in close association with this context indicates that the area north of the Northern Façade was originally an area reserved for food production. This interpretation was supported by the extremely high concentration of ash and organic refuse within the midden-like context of the first occupation phase of the NFKET. As the first of the wall additions were added to the eastern section of the Northern Façade, the function of the western section continued to serve as a kitchen area (Figure 4.38).
No formal floors were laid in this food production area. Instead, every sequential use surfaces consisted of compacted sand and an ever-increasing accumulation of ash, organic refuse and fragments of ceramic vessels. The remains of a substantial hearth filled with ash and charcoal was found in this area as well as a number of complete storage vessels. The latter were sealed with gourd lids and filled with squash seeds other food remains. The hearth was nearly 3m long and was formed by two parallel alignments of adobe bricks on which cooking vessels would be set over a low smouldering fire contained within space between the two rows of bricks. The large size of this hearth and the amount of refuse that accumulated within this kitchen area is a reflection of the scale of food production and the close ties between ceremonial activities and feasting events occurring within the ritual precinct. Indeed, this area likely served as a brewery that provisioned the corn beer for feasts as well as kitchens that prepared the prodigious quantity of camelid meat, sea food, peanuts, and other prized comestibles consumed by celebrants gathered at the site. The deep accumulation of kitchen refuse speaks to the continuity of use of this space as food production area and the presence of distinctive imported Cajamarca bowls and
Transitional Period ceramics within the uppermost levels of the midden clearly indicates that this function endured into the final occupation phases of Huaca Colorada (Swenson 2017). During this final phase of use, this food production area was formally enclosed by a crudely built “L”-shaped adobe wall that was bonded together with the same granular yellow mortar found in the late phase constructions on the WTPC described above.

4.5.5 Southern Façade Residential Area (SFRA):

In marked distinction from the Northern and Western Façades described in the previous two sections, the Southern Façade was not embanked, unlike the explicitly “boundary” walls that clearly delimited the ceremonial core. In fact, the excavations immediately south of the IWCC and ETPC areas defined a broad terrace that supported a series of small, enclosed rooms built during a late phase of occupation (Figure 4.39). Due to the small size of these spaces, this area is interpreted to have served in a residential capacity closely related to the ceremonial activities occurring in the Western Chamber and Eastern Terrace immediately to the north. Accordingly, this area is described as the Southern Façade Residential Area (SFRA).

Figure 4.39: SFRA complex of small enclosed spaces and preparation areas
The series of well-constructed compartments, rooms, and living terraces uncovered SFRA represents an entirely different category of architecture than any other area of Huaca Colorada. The formality, high quality, and integration of the residential architecture of the SFRA depart notably from much of the constructions documented in the expansive domestic areas of Zones A and C. The juxtaposition and superimposition of plaster and sand-based floors in in many of the residential units excavated in Sectors A and C suggest that the prevailing occupation of the larger settlement was seasonal, temporary, but cyclically recurrent (see above and Swenson et al. 2011, 2012, 2013). Ephemeral “floating floors,” sand-based use-surfaces, and more substantial wall and floor constructions have all been identified in Sectors A and C. However, networks of conjoined rooms with identifiable routes of communication (corridors, ramps) are rare in the two main residential areas of the site. In contrast, the palimpsest of shifting floors, walls, and sand use-surfaces predominate in the northern and central zones of this domestic area and in the central area of Sector C as well. This pattern directly parallels the discovery of the fine architecture in the SFRA which was also constructed immediately adjacent to the monumental sector. In fact, the agglutinated rooms at the south end of Sector B are reminiscent of the residential architecture of the urban zone at Huacas de Moche (Chiguala et al. 2012; Seoane et al. 2008). Nevertheless, the constructions in the SRFA occupy a much smaller area and were not organized into different compounds associated with plazas, patios, and alleyways.

The most distinguishing feature of the upper slope of the southern end of Sector B is the density of walls and enclosed use-surfaces constructed at different elevations; the number of walls and the hyper-compartmentalization of the area are largely unique to the huaca. Indeed, it is possible that the network of walls, floors, and storage bins formed part of one integrated compound or cohesive residential unit. The number of abutting walls forming distinct chambers is mostly lacking in Sectors A and C, where residential areas are characterized by more ample and open living areas (Swenson et al. 2012, 2013). In total, at least 7 to 8 rectangular rooms can be tentatively identified in the SFRA. Three to four chambers were located to the west of a ramp of which linked two distinct use-surfaces, while at least four discrete rooms are identifiable to the east of this ramp (Figure 4.40). A long east-west corridor connects directly to the north-south ramp, and it appears to have facilitated movement between the eastern and western zones of this integrated precinct.
The residential function of the SFRA seems beyond a doubt. For instance, six storage receptacles were identified within the area with the majority concentrated downslope in the south end of the area. The discovery of guinea pig feces in small adobe lined cubicles suggests that they may have served as *cuy* pens. A large storage vessel emplaced below the floor also demonstrates that storage and food preparation occurred in this sloping area of Sector B. In addition, the ashy lenses and burnt areas indicate that small hearths were lit within the complex.

Figure 4.40: Isometric view of the SFRA occupation surfaces and enclosure walls.

In general, relatively fewer artifacts and organic materials were recovered from SFRA than from many of the units excavated in the two principal domestic zones. Although in light concentrations, organic materials such as maize, squash, beans, avocado and a variety of animal remains were found in this area and some distinctly Moche period ceramics, and only one fragment of a Cajamarca bowl. The lack of Cajamarca sherds differentiates the SFRA from the
middens of the NFKET area and from the residential constructions excavated in the domestic areas of Sector A and C.

The architectural complex of the SFRA appears to have witnessed relatively permanent occupation. Four to five re-flooring episodes were documented in various parts of the precinct with two to three major renovations entailing the construction of later floors on thick deposits of construction fill. The construction of a ramp and the lower elevation of the southern floors and rectangular storage bins indicates that the complex was built as a series of two or more ascending terraces that followed the contours of the slope of Sector B. The most substantial walls built in this area tended to be a series of north-south walls that were likely built first, followed by the construction of the numerous east-west walls which separated the different rooms of the integrated precinct. The high-quality architecture of this residential area might suggest that it housed artisans, retainers, or religious specialists (priests) that were responsible for overseeing and maintaining the cult of Huaca Colorada. These residents may have represented a more permanent and established class of occupants at the center. The dense cluster of rooms and walls of the SFRA suggest that pilgrims could have only accessed the ritual core from the west side of Sector B along the sequence of elaborate ramps and monumental stairway found within the WTPC. As described above, entrance on to the ETPC during the late occupation phases brought celebrants into the complex at the northeast corner of ceremonial core following the monumental staircase over the Northern Façade.

As described in the site-wide description that began this chapter, a monumental adobe wall was constructed over the entire 140m width of Huaca Colorada during the late phases of occupation. This wall separated the ceremonial core from the lower southern slopes of the site and is located at a distance of only 10m to south of the architectural complex found in the SFRA. This substantial wall was approximately 1m thick and measured 275m in total length, running from the western wall of the compounds of Tecapa, across the eastern plaza and over Huaca Colorada to the base of the far western side (Figure 4.41). Excavation of a section of this wall immediately south of the ceremonial core demonstrated that it was built directly upon the upper levels of the compact dune sand that serves as the base of all constructions on Huaca Colorada. The shallow
Figure 4.41: View of Huaca Colorada from Tecapa along monumental wall that divided the site in Transitional period occupation of the site in relation to digital reconstruction of the ETPC.
depth of the foundations of this wall indicates that it was constructed in the final phases of occupation of the site. This interpretation is further supported by the fact that this wall is the western extension of a monumental wall emerging from the compounds of Tecapa in the west. Within Tecapa, the eastern portion of this same monumental wall serves as the central dividing line between the northern and southern compounds of this Transitional Period site. The importance of this feature will be discussed in detail as part of the architectural phase descriptions in the following section of this chapter, and in the interpretations of the site offered in Chapter 5.

The remainder of the current chapter will gather and synthesize the information regarding the functional areas described above into seven discrete chronological phases supported by spatial analysis and some preliminary data derived from a suite of radiocarbon dates. First, a complete architectural sequence of renovations of all areas of the ceremonial core of Huaca Colorada will be presented followed by spatial analyses of the changing patterns of access and visibility within and between these phases.

### 4.6 An Architectural Biography of Huaca Colorada

Each of the five functional areas presented in detail in the previous section were intimately linked as a single architectural and ritual ensemble that went through a sequence of synchronized renovations over the occupation of the site. The interconnectivity between public and private spaces of the ceremonial core are key to understanding how this site functioned as the locus of important rituals in both the Late Moche (AD650-800) and Transitional Periods (AD 800-900). The following section will present a chronological sequence of seven architectural phases in a manner that links the five functional areas of Huaca Colorada. However, I focus in particular on the synchronized renovations of the IWCC and the ETPC since they form the ceremonial nexus of the site and are critical to my interpretations presented in Chapter 5. This section will be followed by a comparison of these phases to a suite of 34 radiocarbon dates collected from contexts within Sector B over all years of excavation prior to a spatial analysis of each phase in terms of access and visibility graph analyses in subsequent sections.
4.6.1 Phase 1: Establishing the Ceremonial Core

The first phase of occupation established the architectural foundations of the ceremonial core by erecting the original four vertical façade walls on all sides of Sector B. Within the rectangular space defined by these walls, the Central Dividing Wall was constructed to separate the ceremonial core into the IWCC and the ETPC. In this phase, the IWCC contained a two-tiered space focused on the ceremonial platform in the southern end of the Western Chamber. Access to the ETPC from the IWCC was through CDW Door 1. In this phase, two tiers of the ETPC were connected by a ramp that led to the ceremonial platform in the southern end of the Eastern Terrace. The upper tier of the ETPC on which this platform was built was entirely covered by a roof supported by aligned wooden posts (Figure 4.42, 4.43).

Figure 4.42: Plan view of ceremonial core architectural Phase 1
4.6.2 Phase 2: First Minor Reduction - Refining the Core

The second phase of renovation involves relatively minor refinement of the form and structure of Phase 1 that did not alter the pattern of access into either the IWCC or the ETPC. Phase 2 saw the addition of an embanked buttress wall to the interior northern wall of the Western Chamber, as well as to the Western Façade and the west side of the Northern Façade. In Phase 2, ETPC remains focused on the ceremonial platform in the southern end of the two-tiered space connected by a ramp. The ETPC ceremonial platform is slightly enlarged laterally with the addition of a single layer of adobe bricks to both the eastern and western sides of the altar, the surface of which was subsequently renewed with a thin coat of smooth clay (Figures 4.44, 4.45).
Figure 4.44: Plan view of ceremonial core architectural Phase 2

Figure 4.45: Isometric view of ceremonial core architectural Phase 2 with roof coverings in place facing Southwest.
4.6.3 Phase 3: First Major Renovation - Burning down the House and building the “New Temple”

The third phase of occupation saw the first major renovation of the ceremonial core following a dramatic termination event of the original form and layout established in Phase 1 to create the “New Temple”. Before construction of the Phase 3 architectural elements, the ETPC was intentionally burnt, and the entire Eastern Terrace was filled with a deep layer of sand in which at least three individuals were interred as ceremonial offerings. Phase 3 involved the erection of the Northern Reduction Wall 1 in the Western Chamber and the construction of the second north-facing ETPC ceremonial platform 8m to the north of the first north-facing ETPC platform. In Phase 3, both the IWCC and the ETPC were composed of two tiered spaces each focused on the ceremonial platform found towards the southern end of each area. The IWCC platform remained unchanged while the new ETPC platform was built with distinctive embanked exterior surfaces. The southern upper tier of the ETPC continued to be covered by a roof supported by wooden posts imbedded in a series of newly built circular post emplacements. Northern walls were added to the east side of the Northern Façade that served to buttress the increasing mass as well as to the northern portion of the Western Façade of the IWCC. Sometime during this phase, likely at its inauguration, the pregnant woman, a possible sacrifice, was placed within the new embanked dais of the East Terrace (Figures 4.46, 4.47)
Figure 4.46: Plan view of ceremonial core architectural Phase 3

Figure 4.47: Isometric view of ceremonial core architectural Phase 3 with roof removed facing Southwest.
4.6.4 Phase 4: Second Major Renovation - Reconstructing the “New Temple” and a Turn to the East

The fourth phase of occupation saw the second major renovation of the ceremonial core and represents the penultimate use-phase of the Western Chamber. During the construction of the Phase 4 architectural elements, four individuals were ceremonially interred in the IWCC and ETPC. Two young women were buried in the floor at the base of the Phase 3 IWCC ceremonial platform before the construction of the Phase 4 floor of the Western Chamber to reduce this space to a single level that also buried the bottom step of the platform. During the erection of Northern Reduction Wall 2, an adult woman was buried in the space between the new wall and the Phase 3 Northern Reduction Wall 1 that preceded it. The erection of the Northern Reduction Wall 2 compressed the Western Chamber to its final dimensions and shifted the access to the ETPC though CDW Door 3.

As mentioned, before the Phase 4 renovations of the ETPC, a pregnant woman was buried in the Phase 3 north-facing embanked platform. Following this ceremonial offering, the entire northern tier of the ETPC was filled with rubble while a narrow corridor was constructed east of the CDW to allow access to the ETPC through CDW Door 3. The first east-facing ceremonial platform on the ETPC was constructed on the newly elevated northern tier while a third north-facing ceremonial platform was built directly on top of and completely encapsulating the second north-facing platform in which the pregnant woman was buried (Figures 4.48, 4.49)
Figure 4.48: Plan view of architectural Phase 4

Figure 4.49: Isometric view of the ceremonial core in architectural Phase 4 with roof removed facing Southwest.
4.6.5 Phase 5: Final Occupation of the “New Temple”

The fifth phase of occupation involved relatively minor renovations to the form of the ceremonial core established during Phase 4. Only the ETPC was renovated in Phase 5, while the IWCC remained unchanged. During this phase, the first east-facing platform built in Phase 4 was encapsulated by a larger east-facing platform that was built over top of its predecessor. This new east-facing addition extended all the way to the northern wall of the ETPC that transformed the area from a platform into a larger landing at the north end of the narrow corridor that ran along the eastern face of the CDW. The north-facing platform at the south end of the northern tier of the ETPC continued to be used during Phase 5, as was the roofed-covered area on the southern tier (Figures 4.50, 4.51).

Figure 4.50: Plan view of architectural Phase 5

The sixth phase of occupation marks the complete transformation of the original architectural form of the ceremonial core of Huaca Colorada. Phase 6 coincides with the start of the Transitional Period occupation of the site (end of the Moche era) associated with the construction of Tecapa. The drastic architectural renovations that took place in Phase 6 saw the synchronized burial of both the Western Chamber and the major renovation of the entire Eastern Terrace. The decommissioning of the Western Chamber first involved the sealing of the Northern and Southwestern Entrances and the construction of a narrow corridor along the eastern side of the CDW to entirely bypass the Western Chamber. This corridor reutilized the Southeastern Entrance as the primary point of access from the IWCC into the ETPC through the final CDW Door 4. Once this corridor was constructed, the Western Chamber was closed by filling the room with clean sand to entomb the ceremonial platform and decommission the space permanently. During the same construction event, the entire area of the ETPC was covered with adobe rubble and a singular level of floor was constructed to completely decommission both the Phase 5...
northern-facing and the eastern-facing platforms. In their place, a single large east-facing platform was built in the centre of the ETPC looking directly towards the compounds of Tecapa and Cerro Cañoncillo beyond. As the construction of this monolithic platform involved a significant increase in elevation of the ETPC, a second encasement wall was affixed to the Northern Façade and a monumental staircase was built atop this addition to allow access onto the Eastern Terrace from the north.

During Phase 6, significant renovations along the Western Façade involved the construction of a ramp ascending to the south as a new point of access through the Southern Entrance and into the reconfigured ETPC. This western ramp was contained on its west side by a platform with inclined structural buttressing on its north face. These new architectural elements represent the first phase of construction of the Western Terrace Platform Complex (Figures 4.52, 4.53, 4.54).

Figure 4.52: Plan view of architectural Phase 6
Figure 4.53: Isometric view of ceremonial core architectural Phase 6 with roof removed facing Southwest.

Figure 4.54: Isometric view of ceremonial core architectural Phase 6 with roof removed facing Southeast towards Tecapa.
4.6.7 Phase 7: Transitional Occupations and Abandonment

The seventh and final phase of occupation of Huaca Colorada falls entirely within the Transitional Period and involved relatively little renovation of the Eastern Terrace, while the Western Terrace Platform Complex saw a sequence of reconstruction events. Although the renovations of the WTPC took place over a period of time, they are treated collectively as components of the terminal occupation of the site. The ETPC remained almost unchanged throughout Phase 7, marked only by a minor renovation of the east-facing ceremonial platform that moderately increased the dimensions of the altar. From the beginning of this phase until abandonment, the ETPC remained as a single level floor with a roofed area covering southern half of the terrace. A series of crudely fashioned walls were found within the final occupation levels of the food production areas on the Northern Façade as well as the last phases of renovation of the Western Terrace Platform Complex (Figure 4.55).

Figure 4.55: Plan view of architectural Phase 7
4.7 Radiometric Dates for Architectural Phases

In total, 34 carbon samples were collected from Sector B analyzed by either Beta Analytic in Miami, Florida or Lalonde AMS at the University of Ottawa. In light of significant discrepancies in results obtained from portions of the same samples sent to both laboratories, we were forced to reject five dates. Accordingly, the preliminary results of the analysis of the remaining 29 samples are reported in Figure 4.81. Using OxCal Software v4.3.2, Branden Rizzuto calibrated the following dates.

<table>
<thead>
<tr>
<th>Context</th>
<th>Material</th>
<th>Conventional Age (BP)</th>
<th>Age Cal (CE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC-B-U10-11-ZA-N17-R5</td>
<td>Wood Charcoal</td>
<td>1400 +/-30</td>
<td>550 +/-30</td>
</tr>
<tr>
<td>HC-B-U5-16-N4-R8</td>
<td>Textile</td>
<td>1370 +/-30</td>
<td>580 +/-30</td>
</tr>
<tr>
<td>HC-B-U2B-09-N11</td>
<td>Wood Charcoal</td>
<td>1360 +/-40</td>
<td>590 +/-30</td>
</tr>
<tr>
<td>HC-B-U3-09-N11</td>
<td>Wood Charcoal</td>
<td>1350 +/-40</td>
<td>600 +/-30</td>
</tr>
<tr>
<td>HC-B-U4-16-N10-R14</td>
<td>Carbonized Maize</td>
<td>1340 +/-30</td>
<td>610 +/-30</td>
</tr>
<tr>
<td>HC-B-U2A-10-N7-R10</td>
<td>Wood Charcoal</td>
<td>1330 +/-30</td>
<td>620 +/-30</td>
</tr>
<tr>
<td>HC-B-U3-10-N16</td>
<td>Wood Charcoal</td>
<td>1320 +/-30</td>
<td>630 +/-30</td>
</tr>
<tr>
<td>HC-B-U5A-12-N9</td>
<td>Plant Remains</td>
<td>1310 +/-30</td>
<td>640 +/-30</td>
</tr>
<tr>
<td>HC-B-U3D-10-N9-R14</td>
<td>Carbonized Maize</td>
<td>1310 +/-30</td>
<td>640 +/-30</td>
</tr>
<tr>
<td>HC-B-U2-11-N5-R3-R6</td>
<td>Wood Charcoal</td>
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<td>640 +/-30</td>
</tr>
<tr>
<td>HC-B-U3-09-N14-R17</td>
<td>Wood Charcoal</td>
<td>1290 +/-40</td>
<td>660 +/-30</td>
</tr>
<tr>
<td>HC-B-U8-11-N16</td>
<td>Wood Charcoal</td>
<td>1290 +/-30</td>
<td>660 +/-30</td>
</tr>
<tr>
<td>HC-B-U9-11-ZC-N3</td>
<td>Wood Charcoal</td>
<td>1280 +/-30</td>
<td>670 +/-30</td>
</tr>
<tr>
<td>HC-B-U10-11-ZB-N17-R7</td>
<td>Wood Charcoal</td>
<td>1280 +/-30</td>
<td>670 +/-30</td>
</tr>
<tr>
<td>HC-B-U2A-10-N2-R4</td>
<td>Wood Charcoal</td>
<td>1280 +/-30</td>
<td>670 +/-30</td>
</tr>
<tr>
<td>HC-B-U3C-10-N4</td>
<td>Wood Charcoal</td>
<td>1270 +/-30</td>
<td>680 +/-30</td>
</tr>
<tr>
<td>HC-B-U3-18-N2-R4</td>
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<td>1260 +/-30</td>
<td>690 +/-30</td>
</tr>
<tr>
<td>HC-B-U2A-10-N5</td>
<td>Wood Charcoal</td>
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<td>700 +/-30</td>
</tr>
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<td>Code</td>
<td>Material</td>
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<td>---------------</td>
<td>-------------</td>
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<td>710 +/- 30</td>
<td></td>
</tr>
<tr>
<td>HC-B-U1A-10-N11</td>
<td>Wood Charcoal</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>720 +/- 30</td>
<td></td>
</tr>
<tr>
<td>HC-B-U4A-10-N4</td>
<td>Wood Charcoal</td>
<td>1230 +/- 30</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>720 +/- 30</td>
<td></td>
</tr>
<tr>
<td>HC-B-U1C-09-S-R2</td>
<td>Wood</td>
<td>1230 +/- 40</td>
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<tr>
<td></td>
<td></td>
<td>720 +/- 30</td>
<td></td>
</tr>
<tr>
<td>HC-B-U1-14-Z2C-N30</td>
<td>Gourd Shell</td>
<td>1230 +/- 30</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>720 +/- 30</td>
<td></td>
</tr>
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<td>HC-B-U2-14-R34</td>
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<td>730 +/- 30</td>
<td></td>
</tr>
<tr>
<td>HC-B-U1-14-Z2C-N30</td>
<td>Gourd Shell</td>
<td>1210 +/- 30</td>
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<td></td>
<td></td>
<td>740 +/- 30</td>
<td></td>
</tr>
<tr>
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<tr>
<td></td>
<td></td>
<td>760 +/- 30</td>
<td></td>
</tr>
<tr>
<td>HC-B-U5-12-N4</td>
<td>Plant Remains</td>
<td>1160 +/- 30</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>790 +/- 30</td>
<td></td>
</tr>
<tr>
<td>HC-B-U1-14-ZC-N19</td>
<td>Plant Remains</td>
<td>1120 +/- 30</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>830 +/- 30</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.56: Contexts and dates of radiocarbon samples collected from Sector B

In general, the overall range of dates agrees with those established for the Late Moche and Transitional Periods in the Jequetepeque Valley. Figure 4.57 presents the date ranges of samples associated with each phase, while Figure 4.58 simplifies these data to the earliest and latest possible date by phase. In Figure 4.59, these overall Phase ranges are collected into three eras proposed for the occupation of Huaca Colorada, Era A (Phases 1-3) Era B (Phases 4 and 5) and Era C (Phases 6 and 7). Figures 4.60 and 4.61 provides a range of probable start and end dates for the site, and Figure 4.62 provides the probability of the total span of occupation. Figure 4.63 presents the ranges of probable dates for three critical phases of renovation within the IWCC. Further Bayesian analysis of the calibrated dates will continue to refine the time spans associated with each of the proposed phases of renovation. However, the initial trends illustrated in Figures 4.63 and 4.64 indicate distinct separation of all seven phases. This preliminary modelling also supports my identification of the three broader eras associated with an initial Late Moche occupation (Era A and B) and a subsequent Transitional Period reorganization (Era C) of the ceremonial core of Huaca Colorada.
<table>
<thead>
<tr>
<th>Phase</th>
<th>Earliest Date</th>
<th>Latest Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>550 +/-30</td>
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<tr>
<td>Phase 2</td>
<td>610 +/-30</td>
<td>720 +/-30</td>
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<tr>
<td>Phase 3</td>
<td>610 +/-30</td>
<td>720 +/-30</td>
</tr>
<tr>
<td>Phase 4</td>
<td>640 +/-30</td>
<td>680 +/-30</td>
</tr>
<tr>
<td>Phase 5</td>
<td>640 +/-30</td>
<td>760 +/-30</td>
</tr>
<tr>
<td>Phase 6</td>
<td>690 +/-30</td>
<td>790 +/-30</td>
</tr>
<tr>
<td>Phase 7</td>
<td>690 +/-30</td>
<td>830 +/-30</td>
</tr>
</tbody>
</table>

Figure 4.57: Table of earliest and latest possible date ranges of samples collected from Phase 1-7 contexts.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Earliest Date</th>
<th>Latest Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>520</td>
<td>670</td>
</tr>
<tr>
<td>Phase 2</td>
<td>580</td>
<td>750</td>
</tr>
<tr>
<td>Phase 3</td>
<td>580</td>
<td>750</td>
</tr>
<tr>
<td>Phase 4</td>
<td>610</td>
<td>710</td>
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<tr>
<td>Phase 5</td>
<td>610</td>
<td>790</td>
</tr>
<tr>
<td>Phase 6</td>
<td>660</td>
<td>820</td>
</tr>
<tr>
<td>Phase 7</td>
<td>720</td>
<td>860</td>
</tr>
</tbody>
</table>

Figure 4.58: Table of earliest and latest possible dates of samples collected from Phase 1-7 contexts.
<table>
<thead>
<tr>
<th>Phase Era</th>
<th>Earliest</th>
<th>Latest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Era A</td>
<td>520</td>
<td>750</td>
</tr>
<tr>
<td>Era B</td>
<td>610</td>
<td>790</td>
</tr>
<tr>
<td>Era C</td>
<td>660</td>
<td>860</td>
</tr>
</tbody>
</table>

Figure 4.59: Table of earliest and latest possible dates within each broader era of collected phases.

Figure 4.60: Graph of probability density of Phase 1 start date (graph by Branden Rizzuto)
Figure 4.61: Graph of probability density of Phase 7 end date (graph by Branden Rizzuto)

Figure 4.62: Graph of probability density of total length of occupation (graph by Branden Rizzuto)
The probability of start and end dates for Eras A, B and C is presented in the comparison of radiometric date spans in Figure 4.64. Although each of the spans covers a very wide range of dates, the highest probability for the start and end dates of each of the proposed Eras aligns well with the accepted dates for the end of the Late Moche Period and start of the Transitional Period. As can be seen, the earliest date for Era A is well within the 8th century AD (~750AD) and ends within the first half of the 9th century AD (~800-850AD). For Era B, the dates are entirely within the 8th century, and Era C is firmly within the end decades of the 9th century (~880-900AD) and into the early 10th century (900-920AD).
4.8 Spatial Analysis of the Architectural Phases of Huaca Colorada

The ceremonial precinct at Huaca Colorada contained both visually secluded interior spaces and public performative stages that varied significantly in a number of the architectural phases described above. The following section employs two forms of spatial analysis, Space Syntax Analysis and Visibility Graph Analysis to reconstruct how the communication of intended messages underwriting ritual spectacles changed through time in each phase of occupation. Considering the visibility of the Eastern Terrace, a relatively large subset of the population could have observed the rituals performed in these spaces. Although covered by a massive roof, the platforms in the East Terrace lacked walls and were open and clearly visible. In fact, the plastered gable roof shelters would have likely directed spectators to focus their attention on the arresting platforms—examples of which are commonly depicted in Moche iconography as the principal arena of ritual performances (see Chapter 5). These ceremonial performances possibly served as integrative rites that reaffirmed communal affiliation as a congregation. If these spaces were visually accessible from some distance allowing for unbroken sightlines towards the ceremonial “stage”, groups of observers could have gathered *en masse* from within the adjacent open plaza to experience ritual performances as members of a recognized audience. In contrast, if these spaces were visually secluded and physically restrictive, as characterizes the use of the western platform chamber in all phases, then only select and privileged ritual participants could have accessed the space, possibly filing into and out of the chamber in small groups, or even individually. As my study demonstrates, both modes of ritual practice were in play at Huaca Colorada but varied in intensity and emphasis in the different architectural phases. The following quantitative spatial analyses are based on two-dimensional projections of three-dimensional reconstructions of the changing architectural configurations of the ceremonial precinct at Huaca Colorada.

4.8.1 Space Syntax Analysis

The use of space syntax as developed by Hillier and Hanson in The Social Logic of Space (1984) provides a starting point for examining the changing spatial configurations of built environments
and their embodied experience. In particular, their gamma analysis (also called access analysis) is useful for identifying how spaces within a structure are arranged and related to one another, and how a building mediates the relationship between its occupants and visitors. The first part of such an analysis involves translating a building into an access graph, or “gamma map” in which each room is represented as a circle, with access between rooms represented as lines linking them together. The access graph can be “justified” by arranging each room with equal depth at the same level from a fixed exterior point of initial ingress.

Space syntax works on the assumption that the space around buildings is designed for movement by strangers, but only inhabitants and certain visitors are allowed to enter particular structures. Inhabitants are empowered and control access and movement, while visitors enter or stay as subjects of the architectural ensemble and are thus subject to control or regulation (Markus 1993:13). Typically, the deeper spaces of a building are occupied by the inhabitants and the shallower spaces by visitors. Therefore, inhabitants are defined by their access to and occupation of the greatest depths of structures, while visitors are usually only allowed access to more “shallow” or public rooms within a building. Of course, this forms just a base-line premise and depth analysis and their meaning is culturally contingent. For instance, it certainly would not explain the politics underlying the spatial organization of a prison or a network of caves used in the initiation of young children. Nevertheless, the degree to which visitors are allowed to penetrate into a structure often correlates with their perceived status (Dovey 1999: 22).

As mentioned, the patterns generated by space syntax analysis must be considered though the filter of the particular people using that space, an element that is both culturally specific and difficult to determine without living informants. In examining the demarcation of public and private domains in Roman houses, Mark Grahame (1997) notes that we should not analyze public and private as absolutes (i.e., inside is private; outside is public), but as a continuum operating along two dimensions. One interfaces the public world of strangers/visitors with the private world of the inhabitants, while the other interfaces the inhabitants with one another. The degree of privacy is thus potentially a measure of power for it denies the stranger knowledge of the lives and dispositions of residents. Indeed, examination of the changing depth of the ceremonial precinct of the huaca permits interpretation of transformations in public/private and segregation/access that fruitfully informs my conclusions outlined in Chapter 5. I thus make use
of three principal values outlined by Hillier and Hanson to make sense of the changing spatial syntax and their meaning at Huaca Colorada.

1) **Control value (CV):** measures the degree of control a space exercises over its immediate neighbours. Each space (often a discernible room) in the building is assigned a value of 1, which is divided among each of the neighbouring spaces to which it is connected. These are totalled to give the control value of the entire space. The higher the CV, the more controlling the structure.

2) **Mean Depth (MD):** Measures how deep a space is relative to the other spaces in the building. MD = cumulative depth of each space / p − 1, where p is the number of points in the system.

3) **Relative Asymmetry (RA):** Measures the accessibility of a space in relationship to other spaces and how well a space is integrated into the building’s structure. The result is a value between 0 and 1 with values approaching 1 indicating lower accessibility. RA = 2(MD − 1)/k − 2, where MD signifies the mean depth of the system and k designates the number of spaces in the system.

The principal goal of the following access analyses was to interpret how ritual performance and physical engagements with the ceremonial core may have changed between the phases of renovation and in particular between the Late Moche and Transitional Periods. Ultimately, the study allows for inferences on how the foundation of Tecapa and the likely appropriation of the cult precipitated changes in ritualism and identity politics. Movement from the exterior to interior was defined by known entrances associated with each phase of renovation, with the WTPC serving as the primary carrier space for the models of Phases 1, 2, 3, 4 and 5. The presence of an access point via a stairway into the ETPC from the north in Phases 6 and 7 allowed for movement into the network of connected spaces in two directions. As this secondary point of ingress is associated with the Era C or Transitional Period occupation of the site, this significant change to the layout of the ceremonial core reflects the importance of processional movement onto the ETPC. Therefore, procession in full view of a public audience became fundamental to ritual practice in the latest occupations of Huaca Colorada.
Phase 1 Access Pattern:

In the first phase, the Western Chamber was accessed from the Western Terrace through both an open area of the northern lower tier along the northern interior wall of the IWCC and the Southern Entrance behind the IWCC platform. Access through the Southern Entrance allowed for movement into upper southern tier of the Western Chamber through either the Southwest or Southeast entrance. All access to the ETPC was through CDW Door 1 (Figure 4.65).

<table>
<thead>
<tr>
<th>Control Value (CV)</th>
<th>Mean Depth (MD)</th>
<th>Relative Asymmetry (RA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>1.75</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Figure 4.65: Access pattern, justified graph and integration measures of Phase 1
Phase 2 Access Pattern:

In Phase 2, access into both the IWCC and ETPC was identical to that of Phase 1 suggesting continuity in the movement through space during ritual practices during the initial period of occupation (Figure 4.66).

<table>
<thead>
<tr>
<th>Control Value (CV)</th>
<th>Mean Depth (MD)</th>
<th>Relative Asymmetry (RA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>1.75</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Figure 4.66: Access pattern, justified graph and integration measures of Phase 2
Phase 3 Access Pattern:

In Phase 3, the access points into the IWCC were nearly identical to that of Phases 1 and 2. However, the ETPC was accessed from the IWCC though CDW Door 2. Although the lower northern tiers of both the IWCC and the ETPC were reduced in overall area, the flow of movement through the ceremonial core replicated that of both Phase 1 and Phase 2 suggesting further continuity in ritual practices staged in the “New Temple” (Figure 4.67).

<table>
<thead>
<tr>
<th>Control Value (CV)</th>
<th>Mean Depth (MD)</th>
<th>Relative Asymmetry (RA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>1.75</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Figure 4.67: Access pattern, justified graph and integration measures of Phase 3.

Phase 4 Access Pattern: Movement into the final reduction of the Western Chamber again occurred though the Northern and Southern Entrances of the Western Façade. Due to the increased elevation of the Western Chamber floor in Phase 4, a platform and ramp were added to
the Northern Entrance and a staircase was added to the Southern Entrance. The Southwestern Entrance into the Western Chamber was slightly modified though the addition of a low knee-high half wall to create a corridor-like space along the west side of the Western Chamber. This phase also saw the addition of another set of stairs at the base of the final Northern Reduction Wall 3. However, no formal use surface was found north of this area. Access to the ETPC from the Western Chamber was through CDW Door 3 and into the narrow corridor east of the CDW. The Phase 4 east-facing platform was accessed by climbing a staircase at the northern end of the corridor. Access to the northern tier of the ETPC was gained by stepping down from the east-facing platform and onto the new floor of the Eastern Terrace. Although both the IWCC and ETPC were both significantly altered in Phase 4, movement from the Western Terrace through the Western Chamber and onto the Eastern Terrace retained the overall flow and direction of that seen in previous phases of occupation, again suggesting continuity in the fundamental elements of the ritual performances orchestrated in Phase 4 (Figure 4.68)

<table>
<thead>
<tr>
<th>Control Value (CV)</th>
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<th>Relative Asymmetry (RA)</th>
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</thead>
<tbody>
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<td>4.53</td>
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</table>

Figure 4.68: Access pattern, justified graph and integration measures of Phase 4
Phase 5 Access Pattern:

In Phase 5, the access points into the IWCC were identical to that of Phase 4. Access to the ETPC from the Western Chamber continued through CDW Door 3 and into the narrow corridor east of the CDW. The renovated east-facing platform of Phase 5 was accessed by climbing the same staircase at the northern end of the corridor. Access to the northern tier of the ETPC again replicated the direction of movement of Phase 4 that involved stepping down from the east-facing platform and onto the new floor of the Eastern Terrace (Figure 4.69).

<table>
<thead>
<tr>
<th>Control Value (CV)</th>
<th>Mean Depth (MD)</th>
<th>Relative Asymmetry (RA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.53</td>
<td>3.28</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Figure 4.69: Access pattern, justified graph and integration measures of Phase 5
**Phase 6 Access Pattern:**

In Phase 6, the access through the Western Façade was restricted to the Southern Entrance alone. Movement through the southern end of the decommissioned IWCC was restricted to the Southeastern Entrance into the bypass corridor west of the CDW. Access into the ETPC was gained through CDW Door 4 into the corridor east of the CDW directly behind the singular east-facing platform central to the Eastern Terrace. The construction of the monumental staircase on the Northern Façade permitted access to the ETPC from the north as well allowing for bidirectional movement for the first time (Figure 4.70).

<table>
<thead>
<tr>
<th>Control Value (CV)</th>
<th>Mean Depth (MD)</th>
<th>Relative Asymmetry (RA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.16</td>
<td>2.5</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Figure 4.70: Access pattern, justified graph and integration measures of Phase 6
Phase 7 Access Pattern:

The stair-like entrance terraces of the WTPC were expanded in four successive phases of renovation. Each of these step-like platforms were added to the northern face of the WTPC reiterating the function of this area as a point of access into the Southern Entrance through the corridors of the IWCC and into the ETPC to the east. The monumental staircase over the Northern Façade continued to provided access onto the Eastern Terrace from the north throughout Phase 7 continuing the possibility of bidirectional movement through the ceremonial core (Fig.4.71).

<table>
<thead>
<tr>
<th>Control Value (CV)</th>
<th>Mean Depth (MD)</th>
<th>Relative Asymmetry (RA)</th>
</tr>
</thead>
<tbody>
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<td>2.16</td>
<td>2.5</td>
<td>0.75</td>
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</tbody>
</table>

Figure 4.71: Access pattern, justified graph and integration measures of Phase 7
<table>
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<th>Control Value (CV)</th>
<th>Mean Depth (MD)</th>
<th>Relative Asymmetry (RA)</th>
</tr>
</thead>
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<td>2.5</td>
<td>1.75</td>
<td>0.5</td>
</tr>
<tr>
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<td>2.5</td>
<td>1.75</td>
<td>0.5</td>
</tr>
<tr>
<td>4</td>
<td>4.53</td>
<td>3.28</td>
<td>0.76</td>
</tr>
<tr>
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<td>0.76</td>
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<td>6</td>
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<tr>
<td>7</td>
<td>2.16</td>
<td>2.5</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Figure 4.72: Comparison table of Phase 1-7 integration measures

The adoption of linear, processional movement in the later phases demonstrates significant shifts in ceremonial practices and the transformation of the huaca to a more inert, public stage in the Transitional Period. As the tempo and scale of renovations slowed down in this later era, this possibly signals a de-emphasis in the sacrificial, synecdochal ideologies of the Moche. The few renovations at Tecapa would parallel this new architectural ethos, perhaps underlining the increasing importance of monumental permanence as an intended symbol of the enduring, timeless authority of highland elites in the late occupation of Huaca Colorada. The three broad Eras (A, B and C) described above in relation to the radiocarbon analysis directly relate to the groupings of integration values for each phase as seen in Figure 4.72. The equivalency of integration values across Phases 1, 2 and 3 (Era A), Phase 4 and 5 (Era B) and Phases 6 and 7 (Era C) further support considerable change in how ritual was performed in the ceremonial core of Huaca Colorada over time. In comparison to Era A (Phases 1, 2 and 3), the drastic increase in Control Value and Mean Depth in Era B (Phases 4 and 5) reflects how movement was restricted following the decommissioning of the Western Chamber. Although access from the WTPC towards the ETPC continued in Era C (Phases 6 and 7), the addition of the northern entrance staircase onto the ETPC effectively reduced the Control Value and Mean Depth. However the
linear, processional quality of movement in this late phase maintained the same high Relative Asymmetry values present in Era B. This particular continuity is notable, suggesting that the changes made to the access into the ceremonial core during the terminal Moche occupation (Era B) endured into the Transitional Period (Era C) use of the ETPC.

### 4.8.2 Visibility Graph Analysis

The original concept behind DepthMap X developed by combining the insights of isovist analysis (Benedikt, 1979), with space syntax (Hillier and Hanson, 1984). Benedikt’s isovist relied on mapping of the properties of the visual field at points within the plans of buildings. He drew contours of equal visual area within the plan and created a resulting “isovist field”. He argued that these maps permit analysis of how people navigate actual buildings. Since closely packed contours would indicate a rapidly changing visual field, he reasoned that they often informed the designs and decisions of architect, occupant, and visitor alike. As discussed above, Hillier and Hanson developed the theory of Space Syntax in which they created various representations for the components of space, drew maps of these components, and crucially, the relationships of the components with each other. Within the present corpus of space syntax studies, axial maps have proved especially effective as a heuristic device. The actual mathematical derivation of an axial map is quite complex, but essentially it involves drawing a set of lines through the open space of an architectural plan. Hillier and Hanson further improved the technique by developing a graph that relegated the axial lines to actual nodes, so that each line was considered connected to others that it intersected. This graph permits calculation of the degree of integration of each line with respect to all the others in the graph. In other words, they calculated a measure of the average number of steps it takes to get from one line to any other within the axial map. The integration of axial lines is of particular interest to researchers as it correlates well with the number of pedestrians found to be walking along the axial line (Hillier et al., 1999).

Since Benedikt theorized that isovist fields would correspond in some way to the patterned movement of people, and Hillier et al. demonstrated that the relationship between lines through a space also corresponds to such patterns, the two methods were profitably combined. The joint
analysis provides a measure of the degree of integration between isovists within a plan of a particular environment (Turner and Penn, 1999).

The methodology was later formalized and streamlined as Visibility Graph Analysis (VGA) (Turner 2001). In VGA, a grid of points is overlaid on the plan. A graph is then made of the points, where each point is connected to every other visible point. The visual integration of a point is based on the number of visual steps it takes to get from that point to any other point within the system (Turner 2004). Various graph measures, not just integration, can thus be calculated. In other words, all possible occupiable locations within the built environment are categorized by their visual relationships to other occupiable spaces through a continuous map. VGA can thus provide a good indication of how people might interact with space either moving through it or standing in one place, whether talking to another individual or undertaking a particular task (Desyllas and Duxbury, 2001). Alasdair Turner and his team at the VR Centre for the Built Environment in the Bartlett School of Graduate Studies at the University College London created DepthmapX to perform these analyses.

The colour range specific to the VGA results is quite intuitive; red represents areas with the greatest average visibility, while other colors of the spectrum signal decreasing visibility, with blue shades indexing the most enclosed spaces. For all phases analyzed with VGA at Huaca Colorada, the ceremonial platforms are maintained as neutral black as in each case they would have been highly visible within each space. The colour of the space directly surrounding these platforms indicates their relative visibility to all other areas in each plan. The platforms were neutralized to get a better sense of how they would have been perceived from different exterior and interior spaces within the centre.
Phase 1 Visibility Graph Analysis:

The results of the Phase 1 VGA clearly show that the ETPC is by far the most visible area within the ceremonial core while the IWCC is the most secluded. This trend is repeated in various intensities for all seven of the architectural phases that were analyzed. Of particular note in Phase 1 is the intensity of visibility at CDW Door 1, clearly indicating the importance of this entrance as a position of emergence onto the ETPC from the IWCC. Within the ETPC the western side of the southern tier is relatively less visible than the north, due to the number of posts that would obstruct the view beyond the east face of the ETPC platform (Figure 4.73).

Figure 4.73: Visibility Graph Analysis of architectural Phase 1.
Phase 2 Visibility Graph Analysis:

The VGA patterns in the ETPC and the IWCC are quite similar in Phases 1 and 2, and Phase 2 varies only marginally. The results of the Phase 2 VGA again show that the ETPC is by far the most visible area within the ceremonial core while the IWCC is the most secluded. Of particular note in Phase 2 is the continued intensity of visibility at CDW Door 1, reiterating the central importance of this entrance as a portal of emergence onto the ETPC from the IWCC. On the southern tier of the ETPC, the covered area of western side continues to be less visible than the eastern side, and collectively the southern tier is much less visible than the northern tier (Figure 4.74).

Figure 4.74: Visibility Graph Analysis of architectural Phase 2.
Phase 3 Visibility Graph Analysis:

The Phase 3 VGA shows some significant changes from Phase 2 patterns due to the first major renovation of both the IWCC and ETPC. The compression of the IWCC decreased visibility in the southeastern corner of the northern tier of the Western Chamber. On the ETPC, the northern expansion of the southern tier increased the depth to which this upper space was seen. However, the resulting compression of the northern tier moderately reduced the depth of visibility.

Following the previous trends of Phase 1 and 2, a marked increase in visibility towards CDW Door 2 again speaks to the importance of emergence from private to public space (Figure 4.75).

Figure 4.75: Visibility Graph Analysis of architectural Phase 3.
Phase 4 Visibility Graph Analysis:

The VGA of the ceremonial core following the second major renovation of the ETPC and IWCC in Phase 4 shows an intensification of the visibility trends of the previous phases. In Phase 4, the IWCC becomes even less visible than Phase 3 with nearly the entire space becoming closed and private (dark blue) with the exception of a slightly more visible area in the northern tier along the path towards CDW Door 3. On the northern tier of the ETPC, the north-facing platform is highly visible, and the first east facing platform clearly assumes a position of importance with increased visibility on the northern tier towards the platform itself. The CDW Door 3 was blocked by the corridor east of the CDW entrance that provided access to the ETPC via the east-facing platform, and thus the door no longer formed the focal point of emergence. Instead, rites of revelation and sudden appearance, as witnessed by spectators in the plaza to the East of the huaca, would have occurred instantly and no doubt dramatically on the east-facing platform itself. Indeed, this dais is directly connected to the short staircase of the hallway (Figure 4.76).

Figure 4.76: Visibility Graph Analysis of architectural Phase 4.
Phase 5 Visibility Graph Analysis:

In Phase 5, the only major renovation of the ceremonial core took place on the ETPC and saw the east-facing platform expanded to the north along the entire northern section of the CDW. The Phase 5 VGA shows only minor differences from the Phase 4 analysis, with the ETPC remaining the most visible area, while the IWCC continued to have the lowest visibility as an enclosed private space (Figure 4.77).

Figure 4.77: Visibility Graph Analysis of architectural Phase 5.
Phase 6 Visibility Graph Analysis:

Following the termination of the Western Chamber and complete renovation of the ETPC into a single east-facing platform, the VGA of Phase 6 reveals remarkable changes in visibility in comparison to all previous phases. With the IWCC converted into a space of transfer, movement through the ramps and corridors east of the CDW took place in a very low visibility area. On the contrary, the conversion of the ETPC into a single broad terrace increased the visibility across the eastern façade. Again, the highest visibility areas are immediately in front of the east facing terrace. The addition of the monumental stairway onto the ETPC from the north was also highly visible, indicating the new importance of procession into the ceremonial core though this access point (Figure 4.78).

Figure 4.78: Visibility Graph Analysis of architectural Phase 6.
Phase 7 Visibility Graph Analysis:

The VGA of Phase 7 reflects the continued high visibility of the ETPC, while the IWCC corridors remain private spaces of movement from the WTPC into the Eastern Terrace. The addition of the superimposed WTPC platforms served to decrease the visibility of the Western Terrace to some degree as this space became the external extension of the private interior corridors. As the area west of the WTPC has not been excavated, the relative visibility of the monumental entrance terraces in Phase 7 cannot be fully appreciated (Figure 4.79).
Inter-Phase VGA and Access Pattern Comparison:

Overall, the spatial analyses conducted on the seven phases of construction show some interesting albeit not surprising trends in how the ceremonial architecture of Huaca Colorada was encountered and experienced over time. The seven phases can be collected into three groups based upon the similarity of both the integration values and VGA results: Era A (Phase 1, 2, 3), Era B (Phases 4 and 5) and Era C (Phases 6 and 7).

Era A:

Phases 1, 2 and 3 all have identical integration values (Figure 4.72), and very similar VGA patterns. The VGA of Phase 3 differs slightly from Phases 1 and 2 due to the renovations of the ETPC and IWCC. However, all three trend towards the primacy of the CDW doorways as the point of highest visibility. These phases are associated with the establishment and first renovation of the ceremonial core.

Era B:

Phases 4 and 5 have identical integration values, and extremely similar VGA patterns. The ETPC remained a highly visible space that exploited the importance of the entrance through the CDW in the positioning of the east-facing platforms of each phase. These two phases are associated with the final period in which the Western Chamber was in use as an intensely private, enclosed space.

Era C:

Phases 6 and 7 have identical integration values and nearly the same VGA results. The central east-facing platform on the ETPC became the centre of attention, with movement into the space possible from both the CDW Door 4, and from the north via the monumental staircase. These two phases are associated with the Transitional Period occupation following the complete decommissioning of the Western Chamber.
4.8.3 Changing Views of the Eastern Terrace from the Eastern Plaza:

The final section of this chapter will present three-dimensional data regarding visual relationship between the ceremonial core as viewed from the plaza at the base of the eastern façade (Figure 4.80). I combined Sketchup and Google Earth to precisely recreate the topography and built environment of Huaca Colorada during each phase in didactic three-dimensional models. I modeled in particular a viewpoint from the eastern plaza looking west towards the Eastern Terrace and generated images of the viewshed for each phase illustrated for comparison. This comparison relies much more on qualitative analysis of the relative position of possible viewers and the performances they observed rather than a quantification of visual experience. This form of visual analysis relies more on phenomenological aspects and proxemics parameters to compare what was seen from the eastern plaza and how the renovation of the ceremonial core reflected both continuities and changes in the communication of ritual action particular to Huaca Colorada.

![Composite map of Phase 1 and 2 architecture in relation to an orthographic projection of the eastern plaza generated from drone imagery](image)

Figure 4.80: Composite map of Phase 1 and 2 architecture in relation to an orthographic projection of the eastern plaza generated from drone imagery
In Figure 4.72, the complete model of Phase 1/2 architecture is depicted with a hypothetical roofline covering the platform found in the southern end of the ETPC. As described earlier, the evidence of a roof over this particular dais derives from the position of two rows of wooden posts within the platform itself and the presence of burnt roofing material found *in situ* within the rubble that decommissioned this first space. The choice to represent this roof as composed of two planes rather than one is entirely conjectural and relies upon depictions of such roofs in Moche iconographic depictions of such ceremonial platforms (see chapter 5). However, to facilitate comparison between phases, the remainder of the models depicts the Eastern Terrace without any hypothetical roofing material in place—for the east edge of the platform from the vantage post of spectators in the plaza would have been visible regardless (Figures 4.82-4.89). In each model, a human figure is positioned standing on the centre of the platform associated with each phase for scale and to give a sense of relative visibility of human actors on the ETPC. In Figure 4.88, the models for Phases 1, 4 and 7 are superimposed as representatives of the broader architectural phases of Era A (Phases 1,2,3), Era B (Phases 4 and 5) and Era C (Phases 6 and 7).

Figure 4.81: View of Eastern Terrace from eastern plaza in Phase 1, with roofing included.
Figure 4.82: Viewpoint location from eastern plaza in Phase 1 (Era A)

Figure 4.83: View of Eastern Terrace from eastern plaza in Phase 1, with roofing removed.
Figure 4.84: Viewpoint location from eastern plaza in Phase 4 (Era B).

Figure 4.85: View of Eastern Terrace from eastern plaza in Phase 4, with roofing removed.
Figure 4.86: Viewpoint location from eastern plaza in Phase 7 (Era C) in relation to Tecapa walls.

Figure 4.87: View of Eastern Terrace from eastern plaza in Phase 7, with roofing removed.
Figure 4.88: Comparison of views of Eastern Terrace from eastern plaza in Phase 1, 4 and 7, levels of floor and position of figures on respective ceremonial platform by phase.

Figure 4.89: View from Eastern Terrace towards the eastern plaza and Tecapa in Phase 7 in relation to Cerro Cañoncillo.
4.9 Conclusion:

The combined access, visibility graph and proxemic analyses presented above indicate that rituals at Huaca Colorada become more visible, public, and spectacular through time, especially at the onset of the Transitional Period. The implications of my findings for understanding the political and religious history of Huaca Colorada will be explored further in the following chapter.

Stratigraphic comparison of the complete construction sequence of Sector B has shown that the Eastern Terrace was built contemporaneously to the earliest phases of the Western Chamber and persisted beyond the termination of the interior space. This indicates that public and private performances would have been held on these two ritual stages in Phases 1-5 and reduced to a single public space in Phases 6 and 7. Both of these spaces were linked by the phased sequence of entrances through the Central Dividing Wall separating the eastern and western sectors. As the private Western Chamber was reduced in length and volume, each of these doorways were carefully bricked up and plastered over, actively maintaining the accessibility of the two spaces over time. The remarkable continuity of ritual traditions at Huaca Colorada, speaks to an enduring social memory of cultic practices and religious ideologies, evidence of which is seen in the long-term maintenance of architecturally delineated public and private ritual arenas in the main ritual precincts. While the higher eastern public platforms of the ETPC would have been visible to audiences that could have gathered in the plaza at the base of the *huaca*, the private Western Chamber was an intimate, exclusive, and highly controlled space. The reduction of the West Chamber through time—becoming increasingly more exclusive and intimate—correlates to the increasingly public layout of the East Terrace—a fascinating and no doubt meaningful opposition.

The perdurance of the dual ceremonial chambers at the summit of Huaca Colorada in Phases 1-5 may have referenced and possibly commemorated the dyadic organization of ritual platforms and nested precincts at the neighboring and earlier Formative Period site of Jatanca, a site that was likely revered as a sacred and ancestral place. The suppression of this dualistic configuration in the Transitional Period—when the West Chamber was buried, and the East Terrace was brought into the spatial and ideological sway of Tecapa to the east—signals major transformations in religious and political ideologies. The construction of a single east-facing platform in Phases 6
and 7 might suggest the cooption the previous dyadic cult and the imposition of new ideals during the Transitional Period.

As discussed further in Chapter 5, the dualistic configuration of the ceremonial nucleus of Huaca Colorada speaks precisely to the synecdochal construction of space-time in which the whole was conceived through the operation of two separate but dependent and complementary parts. Although anchored by comparable stepped platforms, a number of notable differences distinguish the Western Chamber and the Eastern Terrace in all seven phases of occupation. The Eastern Terrace was public and becomes higher with each phase. Thus, the vertical renovations increased visibility over time. The West Chamber was a private space that became smaller with each renovation characterized by phased, horizontal reductions. In its final reduction, it disappeared altogether and was forever “upstaged” by the Eastern Terrace. The Eastern Terrace was first terminated by fire between the end of Phase 2 and the construction of Phase 3, then by a sequence of sand and rubble fills between each new layer of floor in Phases 4-7. The Western Chamber was maintained in place throughout all occupations (Phases 1-5) and was carefully decommissioned with clean sand fill at the end of its life. The burial of the Western Chamber marks a significant moment in the occupational history of Huaca Colorada, effectively materializing the shift from Late Moche Period to the Transitional Period through a careful, meaningful burial of the last vestige of the original temple.

The following chapter will demonstrate how the peculiar architectural biography of Huaca Colorada outlined above sheds new and original light on Moche ontology, conceptions of time, and constructions of home and identity. It will also offer some thoughts on how social practices and ideologies changed at the onset of the Transitional Period.
Chapter 5

Nesting Space, Folding Time and Creating Home at Huaca Colorada

In the following section, I present my interpretations of the complex architectural history of Huaca Colorada presented in the previous chapter to support my three principal theses. First, I present the mereological foundations of Huaca Colorada as comparable to an analogical-animistic ontology that brings human and architectural “bodies” into active dialogue through nested acts of sacrifice and envelopment. I then investigate how the huaca served as an engine of time, history, and identity within the Late Moche period through an investigation of the importance of scalar relationships between ceremonial architecture and their representations. Finally, I suggest that important ceremonial locales such as Huaca Colorada were celebrated as collective houses throughout the Late Moche Period and how this status changed into the later Transitional period when the centre was appropriated by later occupants of the neighboring site of Tecapa.

5.1 Made of its Makers: The Nested Biographies of Huaca Colorada and its Builders

An important objective of the chapter is to demonstrate that the material and reciprocal interpenetration of whole and part was materialized in the recurrent architectural reconstructions documented at Huaca Colorada. Human and architectural bodies were comingled as nested components of each other, exemplifying a worldview predicated on the mereological relationality between parts and wholes (for an in-depth theoretical exploration of mereology—see Chapter 2). A Moche synecdochal corporeality is thus expressed in the material interactions between human and architectural actors. The incorporation or even ingestion of human bodies
into the adobe fabric of the structure points to a particular synecdochal ontology in which humans and buildings could alternate between subject and object, as well as serve as representative parts that engendered and vitalized the whole (Spence-Morrow 2017)—creating a visceral “meretopology.” These relationships will be considered through an examination of such meretopological linkage of corporeal and architectural sacrifices at Huaca Colorada.

The complex, multi-generational construction of the ceremonial architecture at Huaca Colorada clearly functioned to anchor people in space and time. Analysis of the sequence of building phases has allowed me to sketch a nuanced architectural biography marked by specific cycles of ritual construction and pilgrimage to the site that were likely timed with public feasting events. Acts of ritualized renovation that took place at Huaca Colorada served to exemplify how collective social memory about the past formed a significant bond between members of this particular community. As described in the previous chapter, sequential spatial renovations of the ceremonial architecture at Huaca Colorada were commemorated with at least fourteen human and animal sacrifices with subjects literally incorporated into the fabric of the sacred space to enliven the built environment.

The ceremonial precincts of Huaca Colorada were places of conspicuous consumption with feasting middens found in direct association with the ceremonial precinct containing high quantities of prestige food remains and ceramic vessels. It is clear that feasting events were fundamental to the use of this space; human participants ate with the huaca, feeding offerings to the monument through structured deposits of exotic refuse (Duke 2017, Lynch 2013, Swenson 2018, Swenson and Warner 2016:46). Commensal rites involving individual sacrifices of animals, peoples, and things may have been deemed necessary to nourish the huaca and ensure the boons of fertility and community well-being that the huaca reciprocated in return. As Bruce Mannheim and Mary Weismantel have recently argued, the act of eating with and feeding huacas formed the nexus of reciprocal and ritual bonds uniting great powers and their human dependents (Mannheim and Salas Carreño 2015, Weismantel 2004, 2009, Weismantel and Meskell 2014).

As presented in Chapter 4, the central ceremonial district was comprised of two complementary but opposed parts. Each of these areas were anchored by a stepped ritual platform at the southern
end of two precincts, the Western Chamber and the Eastern Terrace. As outlined in Chapter 4, excavations have revealed that this Western platform chamber was repeatedly remodeled, with each renovation concurrently raising the level of the previous floor while simultaneously diminishing the overall length of the room, compressing the space both laterally and vertically, incrementally reducing the original area from 154m$^2$ to 70m$^2$ prior to termination and abandonment. In fact, the ceremonial precinct of Huaca Colorada appears to have been in a constant state of renovation, and it is evident that there was a religious expectation to ritually terminate and rededicate altars, rooms, and platforms, perhaps as dictated by a religious calendar or festival round (Swenson 2012:11). The two-stepped platform located in the southern end of the Western Chamber maintained its position and dimensions throughout Phases 1-4. The conservation of this particular locale indicates that this altar clearly served as the point of focus for the activities that took place in this interior space throughout all of the early occupation phases associated with Moche period (Figure 5.1). As mentioned, the ultimate phase of use of the platform chamber had compressed the space to cover an area of nearly half the original dimensions, and it was extraordinarily well preserved due to an intentional decommissioning episode that saw the entire chamber filled with upwards of 180m$^3$ of clean sand fill. This singular termination event encased and preserved two plaster coated wooden pillars found rising from the platform, highly curated architectural components that once supported a simple gable or split-skillion roof commonly depicted in Moche iconography (Figure 5.1).

Figure 5.1: Iconographic depiction of gable-roofed platform compared to platform of Western Chamber; clay covered posts found in situ (right side, top and bottom).
As outlined in Chapter 4, excavations have discovered at least seven distinct phases of renovation of the West Chamber, each of which incrementally reduced the precinct while carefully maintaining and reiterating fundamental components of its spatial organization. These horizontal reductions maintained the overall width of the chamber throughout every phase of use, with new points of access built through walls as the chamber area was reduced. These entrances through the eastern, western and southern walls of the room were carefully recreated in each phase, maintaining access patterns into and out of the chamber through time. These reductions clearly defined the use of this space as focused on the gable-roofed structure found at the southern end of the central chamber. Most of these architectural renovations were commemorated with the incorporation of human sacrificial victims beneath successive floors and within the construction fill behind various reductions of the northern wall of the Western Chamber (Swenson et al 2010, 2011, 2012, 2013, 2015) (Figures 5.2 and 5.3).

Figure 5.2: Locations of burials within the ceremonial core across all phases collectively; plan depicts Phase 1 ETPC and IWCC, and Phase 7 WTPC to orient burials in relation to the architecture of their respective phases of interment.
Within the Western Chamber, the discovery of six foundation sacrifices associated with both the closure and re-dedication of the different phases of use of the altar platforms corroborates the hypothetical linkages between corporeal and architectural sacrifice. The periodic ritual renovations of the monumental chamber thus seem to exemplify a concern to control and regulate the movement of time itself as will be discussed in the next section of this chapter (see Swenson 2011, 2012, 2014, 2017, Spence-Morrow 2017). As a direct materialization of Moche conceptions of time, these changing spaces served as a “chronotope” of sorts that was animated by the sacrificial incorporation of young women. Therefore, the multiple rebuilding phases encapsulated the metamorphic and even the procreative power of Huaca Colorada’s ceremonial architecture (Bakhtin 1981:7, Swenson 2015:689 Swenson 2017, Spence-Morrow 2017). The incorporation of human burials as offerings during the ritual closure of altars, ramps and chambers sealed under floors and tons of clean sand indicate that the Moche of Huaca Colorada were aware of the power of invisible but immanently present agents as vitalizing components of the architectural constructions. In previous publications, it has been argued that Huaca Colorada formed part of a “sacramental landscape” involving the consubstantiation of humans and architecture; the foundation sacrifice of young women possibly served to transfer the life force and youthful vigour of the offerings to the sacred space in question (Swenson 2015: 690).

Figure 5.3: Burial offerings found in ceremonial core with image of conserved tumi knife showing decoration on both sides.
Excavation of the penultimate phase of construction within the Western Chamber (Phase 3) uncovered adjacent burial cuts containing two adolescent women interred supine before the dais (Figure 5.4). Located immediately north of the bottom step of the twin-stepped platform, these two individuals were oriented with their heads to the south and both bore evidence of rope ligatures around their necks. The pair of burials was accompanied by a dog and a guinea pig (cuy) that had been deposited immediately to the west. It is clear that these sacrificial offerings and the act of renovation occurred in short order, if not simultaneously, as the open grave was filled with clean sand fill before being encased in a new compact clay floor that covered both the entire area of the chamber and the lower step of the original platform as a final reduction and use in Phase 4.

Figure 5.4: Plan of Western Chamber with relative position of two human interments and animal burials.
Three additional female sacrificial burials were found in direct association with a small terrace that abutted the exterior of the southern wall of the central ceremonial chamber, each placed in shallow single graves in semi-flexed supine positions (Figure 5.3). Found in close proximity to one another, each of these individuals was between 13-25 years of age, with two bodies buried supine with the third laid in a somewhat haphazard position with her right arm extended above their head. Due to the stratigraphic relationship of these burials in relation to the Western chamber, it appears that all three of these burials are associated with the final phase of occupation (Phase 4) that is related to the establishment of Tecapa in the Transitional period.

Evidence of the ceremonial relationship between the sacrifice of human and architectural bodies is best illustrated by one particularly noteworthy sacrificial burial found within the construction fill that served to terminate the penultimate areal reduction of the central platform chamber. Oriented with her head to the east towards Cerro Cañoncillo, this 25-35-year-old female was sprawled supine across the area between the newly constructed northern perimeter and the wall that preceded it, seemingly tossed into the rubble while the space was being closed (Swenson et al 2012). Directly beneath this individual were the fragile remains of a large wooden post, approximately 30cm in diameter and nearly 2m long, laid in the adobe rubble in an almost identical orientation and position as the sacrificial victim. The combined offering of these two distinct yet connected dedications speaks to the shared importance of both human and architectural subjects as vital component parts in the creation and sustenance of Huaca Colorada as a whole (Figure 5.5).
As presented in the previous chapter, the Eastern Terrace of Sector B was in use simultaneously with the various phases of the more enclosed Western Chamber and constituted important foci for more public ceremonial activities. The southern end of the public Eastern Terrace of the huaca was covered by a roofed veranda that sheltered a second stepped platform and ramp complex that served as the public counterpart to the more private dais found in the central chamber. Investigations west of the Western Terrace exposed a tiered sequence of platform landings ascending to the south that were constructed in Phase 6 and 7 following the decommissioning of the monumental ramp that provided access to the interior Western chamber. By the end of occupation sequence, the Western Terrace became akin to a broad staircase that became the major access route along the western side of the ceremonial sector following the closure of the Western Chamber. As discussed in Chapter 4, excavations of the Eastern and Western terraces presented a complex sequence of remodeling episodes that both paralleled but differed from construction phases in the Western Chamber. Renovation of exterior Western and
Eastern Terraces were renewed with vertical shifts and northern expansions rather than horizontal reductions, encasing earlier platforms or stair landings by increasing the elevation of the surrounding floors. As presented in the previous chapter, the WTPC appears to have served as the main ceremonial entrance that replaced movement through the Western Chamber into the Eastern Terrace following the closure and decommissioning of the IWCC during Phase 6 and into Phase 7.

On the Eastern Terrace, this vertical growth required careful extraction and reuse of substantial wooden posts that supported the roofed areas of this visible public area. Recent investigations on the Eastern Terrace uncovered alignments of unusual circular adobe lined pits that acted as the supporting bases for large wooden posts, two of which held dedicatory offerings of finely worked *spondylus* shell (Figure 5.6).

![Figure 5.6: Spondylus shell offerings associated with the construction of two post emplacements (Feature R15 and Feature R16 of U4-16)](image)

I interpret the construction of these post emplacement bins as acts of architectural curation, built one atop each other in synch with the construction of new and superimposed clay floors that allowed the eastern terrace to change and grow between phases while maintaining the relative positions of individual architectural elements through time (Swenson *et al.* 2010, 2011, 2012). This desire to maintain the location of features could easily have been achieved in other ways,
but it seems that the continuity of post emplacements cited the previous construction sequences, creating physical conduits through which an association with the past was maintained, affirming a continual connection to the earliest iteration of the structure and its ancestral inhabitants literally dwelling within (Figure 5.7). The transference of cultural knowledge though the process of removing, preparing and resetting these posts, allowed multiple generations of the builders of Huaca Colorada to commune through the materiality and animated agency of the posts themselves (Pauketat and Alt 2005: 217). This particular construction tradition constituted a vital and repeated component of each major renovation event vitalized by combined human and architectural sacrifices that marked and put into motion temporal cycles at Huaca Colorada (Swenson 2017, Spence Morrow 2017).

Figure 5.7: Post emplacements of the Eastern Terrace, with a model of their construction sequence in relation to flooring events.
Interestingly, the only comparable post emplacement structures contemporaneous to those at Huaca Colorada were found in the later occupation phases at Huaca Fortaleza at Pampa Grande in the Lambayeque Valley (Figure 5.8) (Anders 1981, Day 1971, 1975, Haas 1985, Shimada 1994). With only two building phases, Huaca Fortaleza is not only one of the largest monumental structures of Moche culture but also by far the most quickly built, demanding an enormous and highly organized workforce (Shimada 1994:179). Unlike the layered sequence of occupations at Huaca Colorada, the platform mounds of Pampa were constructed using a ‘chamber-and-fill’ method involving a honeycomb of rectangular walls filled with rubble, thereby reducing labor requirements and the overall number of adobe bricks needed for construction (Shimada, 1994:160). The platforms at this site were uniform in style and did not reveal the numerous construction phases that characterize most earlier Moche huacas of this monumental scale, or even more modest sites such as Huaca Colorada. The relatively rapid construction of Huaca Fortaleza may speak to some urgency in its creation, possibly linked to the rise of Pampa Grande during an era of major sociopolitical reconstitution, as discussed in Chapter 3. This rapid construction might also point to distinct ideologies of space and time.

Figure 5.8: Post emplacement colonnade at Huaca Fortaleza (modified from Anders 1981).
Excavation of the later Sicán Period (ca. 900-1100) Huacas Loro and Lercanlech in the Lambayeque Valley (Batan Grande) have uncovered hundreds of similar adobe brick post emplacement sockets that appear to have served the same function as those at Huaca Colorada (Shimada 1990, Klaus and Shimada 2016). The construction of the Sicán Post Emplacements were commemorated with small foundation offerings of copper and shell, and nearly half contained sacrificial victims, often found blindfolded with their limbs bound to the posts with rope, embracing the base of the pillar just below the floor level (Figure 5.9) (Klaus and Shimada 2016). The presence of these remarkable human offerings at Batan Grande suggests a significant intensification of dedicatory rites in the Sicán Period specifically linking human and architectural sacrifice as interdependent, propitiatory acts. Although the post burial found at Huaca Colorada is unique and admittedly less dramatic than the multiple Sicán examples, similar beliefs may have been in play at the earlier Moche sites, especially during the subsequent Transitional Period often deemed contemporaneous with the early Lambayeque Phase (Castillo 2001, 2003, Shimada 1990).

![Figure 5.9: Post emplacement burials at Huaca Lercanlech (left) and Huaca Loro (Right) (Modified from Klaus and Shimada 2016)](image)

The recycling, erection, and reanimation of posts may have served to maintain and circulate vital energies, and this distinctive form or renovation differs from the envelopment of earlier sacrifices and altars under new floors. As mentioned, repeated acts of human and architectural sacrifice played a vital role in the renewal of Huaca Colorada, and the deposition of synecdochally nested organic and inorganic bodies, bounded wholes that became porous parts
and vice-versa, were no doubt seen as integral to sustaining the larger structure as a living totality.

The original two-tiered ceremonial platform found at the southern end of the Eastern Terrace was slightly larger than the equivalent platform in the West Chamber but was otherwise identical in form, composed of two steps in exactly the same north-facing orientation (Swenson et al. 2015). Unlike the Western chamber platform, the dais of the Eastern Terrace was accessed by a central ramp immediately north of the platform, a configuration that is commonly portrayed in iconographic depictions of Moche ceremonial platforms (Bourget 2006, Donnan and McClelland 1999) (Figure 5.23, 5.31). Located at the very eastern edge of the huaca, this arresting ritual stage would have been clearly visible from the open plaza that stretches eastward from the base of Huaca Colorada toward the ruins of the site of Tecapa (see Chapter 4 and Swenson et al 2015). Investigation of this public platform revealed that it was enlarged laterally at least once before being intentionally destroyed in an intense burning episode. This dramatic termination event effectively “fired” the floor surfaces of both the platform and surrounding area as well as the clay-coated gabled roof that once stood over the eastern ramped platform (Figure 5.10) (Swenson 2018a, 2018b).

Figure 5.10: Burnt surface of Phase 1/2 ETPC platform in relation to post emplacements.
Considerable amounts of fragmentary burnt roof plaster, bearing impressions of cane, were found across the surface of the entire southern limit of the eastern terrace—all sealed under a later and clean floor. Considering the size of the platform, the clay-covered, cane roof would have been of considerable weight, requiring the support of large wooden columns, the burnt bases of which remained deeply embedded in the floor of the platform within the adjacent post emplacement bins (Figure 5.11). The concentration of burnt rubble and the extent of the burning across the entire eastern platform area indicates that it was intentionally immolated, likely requiring considerable volumes of combustible material to be amassed in preparation for this dramatic act of architectural termination associated with the first renovation of the Western Chamber between Phases 2 and 3.

Figure 5.11: Burnt fragments of cane and twine-impressed roofing material from the ETPC.

Excavations immediately north of the ramp and platform complex on the Eastern Terrace exposed two superimposed north-facing platforms (Swenson 2018a, 2018b, 2018c). These
platforms were built in succession following the burning of the original dais which was sealed under sand fill and a thick clay floor immediately after the ritualized immolation that defined the end of Phase 2 and the first reconstruction of the Eastern Terrace in Phase 3. Built upon a sequence of solid floors and compact rubble, each of these finely plastered platforms were also directly associated with dedicatory sacrificial burials of young women. The earlier of these two burials, an adolescent female, was found supine on the burnt surface of the floor of the original ramp and platform complex within a thick sand fill that terminated and elevated this early phase of the eastern terrace. In other words, this human burial directly coincided with the ritual firing of the first dais following Phase 2 and before Phase 3 (see Chapter 4). Oriented with her head to the south and her face tilted towards Cerro Cañoncillo, the sacrifice commemorated the closing of the original public platform in a manner that paralleled the treatment of the double sacrifices found immediately north of the more private platform in the Western Chamber (see above). Since the original phases of the Eastern Terrace and the Western Chamber platforms were occupied concurrently, these three dedicatory burials occurred in a succession of two architectural terminations on either side of the central dividing wall differentiating the private and public ceremonial spaces of the huaca. Two additional burials were found during excavations of this early floor level at the northern extreme of the eastern terrace. Both were juveniles with the youngest aged approximately 3 years and buried supine, while the elder female individual (11-14 years old) was sprawled on her left side. Considering the stratigraphic relation of these early burials to others found across the Eastern Terrace, it seems that these two individuals may have served as foundation sacrifices for the entire area, which appears to have coincided with the completion of the initial construction phase of Huaca Colorada during this phase. As described in Chapter 4, immediately above these individuals, a finely made copper tumi knife decorated with an interlocking fish and bird motif was found imbedded in the clay floor that capped these two burials, further alluding to the importance of this particular offering (see Figure 4.19 and Figure 5.3 for a conserved version of the knife that accentuates the designs on both surfaces).

Following the immolation and closure of the original public ramped platform complex of the ETPC at the interface of Phase 2 and 3, the first of two superimposed platforms built during Phase 3 contained a second dedicatory burial, almost immediately above the first. Nevertheless, it remains unclear whether the intention of each rite was to serve as a propitiatory act
commemorating the foundation or closure of either phase. This second burial was found carefully laid within the floor of the earlier platform, with a cap of fine plaster placed over the burial cut to seal the individual within the interior of the dais (Figure 5.12) (Swenson 2018b, 2018c). As described, this interred individual was a pregnant woman in her third trimester. She was placed directly within the most visible ceremonial structure during this phase of occupation. The 16-20-year-old woman was oriented with her head to the east towards Cerro Cañoncillo following a clear pattern shared by half of the burials discovered within the monumental complex.

![Figure 5.12: Burial of pregnant woman in her third trimester within Phase 3 north-facing platform](image)

All of the burials oriented east are associated with the later construction phases, and they differ from the earlier interments whose heads are oriented to the south. It is also important to note that 12 of the 16 sacrificial burials found within the ceremonial sector were securely sexed as female (excluding one juvenile of indeterminate sex). All three of the confidently sexed male burials were found on the Western Terrace, a space exterior to the central ceremonial core. Therefore, the recurring dedicatory rites of architectural renewal within the controlled ritual settings of the IWCC and ETPC appear to have been founded on harnessing and transferring the powers of female creation and fertility (Swenson 2018a, Swenson and Warner 2012).
Stratigraphic comparison of the construction sequence of Sector B has shown that the Eastern Terrace and the West Chamber were built and renovated in sync with each other, indicating that public and private ceremonial performances were held concurrently on these ritual stages, linked by a phased sequence of entrances through the Central Dividing Wall (Swenson et al. 2015). As the Western Chamber was reduced in length and volume, doorways that provided access to the east and west were carefully bricked up and plastered over, actively maintaining accessibility between these spaces over time. While the Eastern Terrace would have been visible to audiences that could have gathered in the plaza at the base of the huaca, the more private chamber to the west was an intimate space that restricted access and movement. The dualistic configuration of public and private spaces within the ceremonial nucleus of Huaca Colorada materialized the synecdochal relationship between variable nested “bodies”, the whole edifice was enlivened through the operation of two separate but interdependent and complementary parts. Some of the oppositions between the East Terrace and West Chamber, each anchored by comparable stepped platforms further express this interplay of whole as parts forming larger wholes. The Eastern Terrace was public, higher, and renovated through vertical reconstructions, with phases of use that were clearly terminated by fire. In contrast, the Western Chamber was private, lower, public, and characterized by phased, horizontal reductions and was terminated by interment in rubble and sand. The incremental and repeated architectural terminations in the three central areas of the ceremonial core (East Terrace, West Chamber, and Western Terrace) provide further testament to this synecdochal continuum of bodies and buildings—in which wholes were continually divided into parts, with each part containing and enveloping the essence of the whole. This relationship was maintained in each iteration, speaking to the continuity of a particular architectural tradition that was clearly remembered, repeated and revered as a fundamental component of building and maintaining the larger edifice. Both the labour involved in the construction of the huaca and the physical incorporation of bodies served to enliven the monument through the consubstantiation of parts (humans, animals, bricks, posts) within the growing and contracting whole of the entire structure.

As Swenson and Warner note (2016: 45): “Rituals of cosmic and somatic re-assembly at Huaca Colorada appear to have been propelled by comparable acts of eating, digestion and growth, as
evidenced not only by the paramount importance of commensal rites at the site, but by the juxtaposition of distinct material elements bundled into the sacrifices of architectural remodelling.” The celebrants at Huaca Colorada viewed the monument as an integrated organic whole composed of inter-dependent and substitutable peoples, places, and things. This mereological or synecdochal control of the life-force is immediately evident in the interplay of the individual human sacrifices, the decommissioned posts, and the remarkably compressed re-dedication rites. These exceptional “structured deposits” (Richards and Thomas 1984) lend themselves to archaeological interpretation that inevitably relies on the identification of meaningful parts and wholes (see theoretical discussion in Chapter 2).

In light of the apparent interconnection of human and architectural sacrifice, it is clear that the Moche perceived adobe walls and matter in general to be in a state of “continuous birth” and “continuous movement” (Ingold 2006: 12-13, see Swenson 2015: 691). The ritual renovations further suggest that matter was perceived as fluid, constantly in flow and in formation, a viewpoint that would appeal to Ingold’s particular brand of ecological thinking (Ingold 2012).

Architectural constructions at the site thus mirrored generative processes of growth and change (food preparation, eating, pregnancy, gestation and birth) propelled by the dissolution, re-assembly, and fabrication of matter (Hugh-Jones 2009: 41, Swenson 2015: 691). As Swenson notes (2015:691): “Huaca Colorada’s ceremonial architecture was clearly grounded in an aesthetic of violence that celebrated rebirth, creation, and fertility. This aesthetic appears to have been linked to a particular conception of temporality [and spatiality] understood as gestational, animated, and inherently material.” As mentioned, almost all of the sacrificial victims offered in conjunction with the ritual termination and re-dedication of ceremonial architecture at Huaca Colorada were adolescent or young women (Swenson 2016, Swenson et al. 2010, 2011, 2012, 2013). The discovery of female sacrificial offerings deposited to commemorate the ritual closure of the numerous platforms thus points to the transference of the youthful vitality of the offerings to the sacred space in question. The presence of a pregnant sacrificial victim at Huaca Colorada powerfully underscores this procreative symbolism, as the inherently nested relationship between mother and unborn child provides the most salient example of the synecdochal foundation of life and creation. Indeed, a pregnant woman—interred in a series of nested altars—beautifully
exemplifies the generative indivisibility of part and whole in Moche worldview, one that finds analogy with the mereotopological foundations of archaeological interpretation.

In the end, Huaca Colorada can be productively interpreted as a topology as theorized by Deleuze and Guattari or even as a mereotopology as theorized by Casati and Varzi (Casati and Varzi 1999, Deleuze and Guattari 1987; see also Harris 2005, DeLanda 2005, Knappett 2011, Witmore 2007, Swenson 2015: 691, 2017). The continual rebuilding of the huaca appears to have conformed to a set template or architectural blueprint, however the multiple renovations varied notably in configuration, scale, and morphology reflecting the changing social realities of each generation of builders (Swenson et al. 2010, 2011, 2012). Accordingly, the morphing monument appears to have encapsulated an “activity of metabolization,” and an “idea of vital materiality” whereby the outside and inside mingled and recombined as an amalgam of interdependent parts and wholes (Bennett 2010: 50, Swenson 2015: 693).

The process of teasing apart the complexities of the construction sequence of Huaca Colorada rely upon a suite of archaeological techniques that are themselves inherently mereological in nature. The act of excavation, mapping, drawing, and photographic documentation are inherently reductive operations, and it is only once these partial media are recombined that complex patterns become tangible and amenable to interpretation (Lucas 2001: 102-6). The reduction of the complex assemblage of material traces of an archaeological site into constituent “types” or categories, entails the splitting of wholes into parts so that their “functions” or “meanings” may be better grasped. In his discussion of the mereological foundations of archaeological practice, Timothy Webmoor notes: “The material whole may not be reassembled, but the bits of knowledge are summed up to a supposedly more complete understanding. It is additive knowledge” (Webmoor 2014: 473). Of course, the inherent mereological procedures of archaeological research has little in common with Moche ontology—understood as a deep-seated disposition toward being, reality, and life. If anything, it highlights the analytical limitations of the latter term. The complex rituals of architectural renovation documented at Huaca Colorada demand the equal application of other etic categories—including ideology, epistemology, and philosophy. Nevertheless, the synecdochal ontology informing Moche architectural projects has proved highly convenient, for the Moche construction of the world—and being—was predicated on the part engendering and enlivening the whole, and vice-versa, as materialized in the
exceptional structured deposits of Huaca Colorada. The ritual creation and recreation of the monument resulted in an “archaeological record” readily amenable to interpretation. The meanings derived also inevitably relied on inferring the interrelationship of defined wholes and parts through inductive-deductive reasoning. In the end, the archaeological reliance on interpreting wholes from a myriad of parts was ideally suited for the analysis of the process of place-making at Huaca Colorada founded on a mereological logic specific to the Moche.

In the next section of this chapter, I will extend this discussion of the mereological basis for Moche architectural traditions through a consideration of how time was controlled through the interplay of whole-part relations between ceremonial locales and representations of these spaces in other media. Specifically, the synecdochal relationship between architectural models or maquetas from San José de Moro and the spaces that they reference such as Huaca Colorada will be presented as evidence of Moche ideologies of time and history.

5.2 Synecdochal Timescapes: Modelling Space and Time in the Moche World

“The cleverer I am at miniaturizing the world, the better I possess it. But in doing this, it must be understood that the values become condensed and enriched in miniature. Platonic dialectics of large and small do not suffice for us to become cognizant of the dynamic virtues of miniature thinking. One must go beyond logic in order to experience what is large in what is small.”

-Gaston Bachelard (1958:150)
In a short commentary on the status of scale models in contemporary architectural and artistic practice titled “Models are Real”, Danish artist Olafur Eliasson argues that our ability to understand, inhabit, and evaluate space is dependent on the recognition that “…space does not simply exist in time, it is of time” (Eliasson 2007: 19). As the actions of users continually recreate its structure, Eliasson suggests that this temporal aspect of the built environment is often forgotten or repressed in Western society. This repression is due to a persistent understanding of space as static and atemporal (Eliasson 2007: 19). In his investigation of how people model and re-model their modes of engagement with the lived-in-world, Eliasson argues that the modeling process, entailing the creation of concrete models themselves, plays an essential role in the co-production of space and society. The relationship between model and “reality” constitutes a recurring mimetic dialogue, each referencing the other in a cycle of infinite regression. Just as two parallel facing mirrors produces an infinite series of receding images, models and their referents are reflections of each other, nested interdependent realities that together produce our experience of the world.

Modeling the world is an inherently temporal process involving a combination of accumulated knowledge, skill and our unique capacity to adapt and project action into the future. The construction of the built environment relies especially on our ability to carefully consider the interplay between memories of past projects and plans for current and future tasks. These projects come about through our relationship to certain tools as “objects to think with” (Lévi-Strauss 1966). The process in which thoughts and meanings are attached to things is not arbitrary; rather, artifacts are active components of thought, ideas embodied in their fabric and made explicit in their use (Jones 2013, Henare et al 2007, Malafouris 2013). Some kinds of things might be considered “cognitive objects” that do more than represent and reference other things but serve as a forum by which ideas are concretized. These things, whether manufactured or merely selected from the environment, are essential in “…aiding, enhancing or improving cognition” (Hutchins 1999:126). These objects allow individuals not just to think about their world but think with their world (Birth 2012:6). As will be argued in the following section, cognitive objects often play a critical role in temporalizing practices, especially in terms of how humans understand and regulate the passage of time. For instance, Birth (2012) argues that cognitive artifacts such
as clocks and calendars serve to mediate our consciousness of cycles and patterns, concealing logics and processes that the users of artifacts do not understand or even know, but innately accept (Birth 2012).

I now turn to an analysis of a specific kind of cognitive artifact, Moche architectural miniatures or *maquetas* of religious buildings, focusing in particular on their relationship to specific places in the Jequetepeque Valley, Peru that date to the early Middle Horizon Period (AD 650-800) contemporaneous to the construction of Huaca Colorada. These architectural models were manufactured of unbaked clay and were placed in tombs at the great Moche cult centre of San José de Moro on the northern bank of the Jequetepeque Valley. I argue that their mimetic faculty, in which the architectural copy is manipulated to exert influence on original, larger buildings (a classic indexical icon in the spirit of Peirce), worked in a temporal capacity as much as a spatial one (Taussig 1993). The miniatures functioned not simply to commemorate or memorialize a space—as a sign of history—but to store and reactivate a “time” that was understood as inseparable from the space in question.

Thinking through the miniature is contingent on a process of abstraction in which the fidelity of the model always relies on the deliberate exclusion of detail. As efficient forms of “off-line” reasoning (the habitual thought processes that internalize abstract ideas), miniatures and models present “surrogate situations” that more effectively allow us to come to understand the world (Clark 2010:26). According to Clark, the suppression of detail inherent to the creation of miniatures is a process of “selective concretization” that comes about through a fundamental “temporal relaxation” required when confronting the miniature. By “relaxing” the temporal restraints of action and reaction, contemplation of the miniature is reliant on episodic memory systems and explicit stored knowledge (Clark 2010:26). The symbolic compression of miniatures improves understandings of abstract relations (Knappett 2010, 2012, Clark 2010). In this section, I will show that notions of time were inextricably embedded in the architectural models recovered from the cult centre of San José de Moro in the Jequetepeque Valley and the spaces they referenced, including Huaca Colorada. I suggest here that Moche temporalities were structured by architectural interventions in space on two distinct but interdependent scales—a veritable “mereotemporality.”
I argue that for the Moche of the North Coast of Peru, acts of symbolic compression and miniaturization served to reanimate specific times, known ceremonial locales, and the attendant social identities created and reaffirmed in these places. This compression in miniatures paralleled and reinforced the microcosmic folding of whole and part materialized in the sacrifice of architecture and human victims discussed in the first section of this chapter. Indeed, the ritual efficacy of the architectural simulacra rests in their mimetic power to condense and transfer the potency of ritually charged spaces and their human and other-than-human attendants across time (Freedberg 1991). Clay models or maquetas of ceremonial space, placed in tombs at the religious centre of San José de Moro, played an important role in rites of death and renewal as well as serving as chronometric markers of temporal breaks. However, a comparison of these architectural models in relation to the sequence of ritualized reconstructions of architecture found at Huaca Colorada reveals that they served as much more than passive mementos of deceased leaders and revered places. Instead they condensed a latent temporal or generative energy that at once stored but could potentially reactivate or remake ritually charged landscapes as active timescapes. In other words, scalar representations and transformations of place as exemplified in the maquetas and building renovations did not simply chart events in conformance with Moche ideologies of time, calendrics, and history. Instead, they served as direct interventions and reinventions of time, place, and identity particular to the Moche of the early Middle Horizon Period. More specifically, the renovation of ceremonial architecture is interpreted as demarcating periods of temporal rupture that allowed for simultaneous acts of place-making and identity reconstitution. Miniaturization in both monumental and modeled architectural spaces effectively materialized time’s passage, serving as synecdochal “timepieces” that concretized Moche temporalities in material form through a nested sequence of spatial compressions of ceremonial locales on two distinct yet intimately referential scales.

Therefore, portable miniature architectural models of ceremonial edifices represent more than depictions of lived space but should be interpreted as “objects-in-time” that served as symbolic referents that enabled the passage of time itself (Birth 2012, Hutchins 1999). A comparison of the form of these models to the particular setting of ceremonial activity at Huaca Colorada will connect both scales as devices in a mimetic process that literally
created and moved time in space, linking events and locales across the Jequetepaque Valley and further afield throughout the Moche sphere of influence. I argue that the ritualized acts of architectural renovation that accorded with Late Moche temporal ideologies were directly manifested in these models and should not be approached as representations of mythic scenes but were in fact “selective concretizations” of the specific lived experience of particular events in known locales (Clark 2010, Castillo et al 2011, Swenson 2011a and 2011b, Uceda 2010, Wiersema 2015). These models cannot be seen merely as souvenirs of particular phases of a structure’s biography, but as instruments for the transference of time and the re-enactment of powerful events that are materialized in full-scale Huacas themselves.

5.2.1 In Small Things Remembered – Mind and Miniaturization

The form of communication presented by any miniature is iconic in nature: such objects are scalar models of the things they reference (Peirce 1984). However, there is a deeper purpose to this iconicity beyond simple representation. In his famous discussion of miniatures, Claude Lévi-Strauss asks a fundamental question: “What is the virtue of reduction either of scale or in number of properties?” (1966:23). He concludes that miniaturization facilitates instant apprehension of the whole and that this produces a “very profound aesthetic emotion” by forcing us to reverse the normal process of comprehension (Lévi-Strauss 1966: 15). Although manipulation of scale allows us to consider miniaturized objects as less “formidable”, qualitatively simplified through scalar diminution, the relationship between the maker and consumer of scalar artifacts is far more complex than is immediately apparent. Such a scalar transposition allows us to extend and diversify “our power over a homologue of the thing, and by means of it the latter can be grasped, assessed, and apprehended at a glance” (Lévi-Strauss 1966:16). It is the immediacy of recognition that enlivens miniatures, drawing the viewer into these objects. Through the miniature, a sort of conceptual victory can be had “…which gratifies the intelligence and gives rise to a sense of pleasure…”, an intrinsic value of scale models that “…compensates for renunciation of sensible dimensions by the acquisition of intelligible dimensions” (Lévi-Strauss
In a similar manner, the models of Huaca Colorada effectively shift the experience of time by creating a place that is a condensation and recombination of memory and imagination (see below).

The scaled-down artifact offers instant totality and a subsequent unraveling of detail. By taking the effort to make a model, its reception as an object requires almost no effort at all, allowing comprehension to be experienced immediately. If the space, object, or individual (in the case of figurines) depicted in miniature is familiar to a viewer as a component of their lived experience or memory, then appreciation is primary and directly evocative. Even if the viewer has no such previous experience of the context or form depicted in miniature creating a relationship that is at times mystifying or unsettling, the totalizing effect of viewing such objects allows for a much more nuanced and complete understanding of the whole. To extend the aphorism, if a “picture is worth a thousand words”, then a model must be worth a thousand pictures (Smith 2010: 4). The communicative potential of the miniature is unrivalled in terms of the immediacy of its transmission, something clearly recognized since the earliest phases of the creation of portable art during the Neolithic “revolution” to our current fascination with three-dimensionally printed objects. Such a relationship can be established in the contemplation of any miniature, perhaps explaining the considerable body of literature focused on the role of anthropomorphic figurines cross-culturally (Bailey 2005, Joyce 2007, Halperin 2014, Hubert 2014, 2016, Lesure 2011, Meskell et al 2008). Although architectural models are far less prevalent than figurines in the archaeological record, the study of miniature depictions of the built environment can provide a different kind of understanding of past worlds, especially how spaces were experienced in time.

Within the context of literary criticism, the philosopher Gaston Bachelard, suggests the small conjures up the infinite more easily than the large. Indeed, the small, in certain instances, is the only way to create the sublime or to express abstract ideas. An attempt to understand the nature of time’s passage is no doubt among the most profound and enduring conceptual abstractions that human populations face. Only through the miniature can we really think about the truly enormous aspects of both material realities and conceptual infinities such as time, an experience that Bachelard describes as “intimate immensity.” Critiquing the “majestic” notions of being-in-the-world, Bachelard argues that an individual feels “…more at home in miniature worlds which, for me, are dominated worlds” (Bachelard 1958:161). The miniature densely compresses information, collapsing elements of space and time that form the fundamental aspects of
memory. Psychological studies suggest that miniaturization affects time perception, concentrating experience as space is compressed, suggesting that spatial scale may be a principal mediator in the experience of time (De Long 1981, 1983). If such a temporal compression is fundamental to the consideration of scalar objects, viewing the miniature invites the subject to know something without yet really knowing it, to circumvent the limitations of experience and transport the viewer into a time beyond time. Such considerations illuminate the psychological efficacy of miniatures but still fall short of explaining the role of maquetas in Andean societies.

5.2.2 Andean Approaches to Scale

Bachelard’s point that miniatures engage and enliven memory of lived experience of place and time is particularly clear in Andean ethnographic studies. In her work on the role of miniatures in the contemporary Andean community of Sonqo, Catherine Allen explicitly states that miniatures do more than simply delight their owners, “…they change the lived-in world” (Allen 1997). Through her investigation of the “pebble game” conducted at the destination of the ritual pilgrimage of the annual festival of Qoyllur Rit’i, Allen shows that the act of constructing elaborate miniature houses and corrals serves as a performative conduit through which humans communicate with the divine. Allen argues that the underlying motivation for such a form of communication in contemporary Andean ritual practice is based on the idea that all beings (animate or otherwise) are interconnected through ayni, the fundamental reciprocal “give-and-take” that controls and circulates vitality in the Andean world (Allen 2002, Bray 2009, McEwan 2015). As a cosmology that does not separate between mind and matter, this form of "consubstantiality" relies upon the coexistence of this vitality within all substances thereby attributing agentive animacy to material objects. This reciprocal consubstantiality also relies on a sense of envelopment or synecdoche, with parts standing for the whole, and the whole standing for the part. As first presented in Chapter 2 of this thesis, such synecdochal frameworks conceptualize the world in terms of nested homologous fractal structures that act upon each other. Such perspectives were widespread in Andean worldviews ranging from the complex layering of kinship and community organization, and the homologous relationships between sacred places and elements of the landscape, to the belief that every huaca is a mountain and every mountain a huaca. (Allen 1997: 76). Allen suggests that there is a tendency in Andean
thought for relationships between microcosms and macrocosms to collapse and expand back and forth endlessly, with each a reference to and creator of the other. When both scales of objective reality index each other concretely, Allen suggests that “… a powerful miniature informs the cosmos with its own form, and in turn the cosmos is not only referenced but instantiated in the objects at the same moment” (Allen 1997: 81, 2011, 2014, Swenson 2014: 701-702, Swenson and Warner 2015: 26).

This conceptual framework of enfolded material identities can be extended to time in the ancient Andes, a synecdochal temporality that differs from both linear and cyclical temporalities so often discussed in the literature. Accordingly, a “temporal synecdoche” is based on a dynamic yet nested flow between points of memory, perception, and expectancy that mirror Husserl’s tripartite structure of temporal cognition. For Husserl, the perception of any moment always contains elements of “retention” and “protention” of what has just passed, and what is about to occur (Husserl 1992). Within this structure, the “now” or the present moment cannot be pulled out of the sequence of the immediate past and the immediate future but is formed as a shifting frame of experience informed by knowledge and prospect (Gell 1998: 241). Each component part of this temporal “whole” is dependent on the presence of the other, built of and by the combination of elements.

A musical analogy can illuminate both Husserl’s theory of time and Andean synecdochal historicities. It is impossible to hear and appreciate a melody if our immediate apprehension of the note before our ears was not accompanied by our “memory” of the note just before and in expectation of the note to follow (Gell 1992: 223, Hoffman 2009). If the melody is familiar, the structure known, each individual note simultaneously prompts memory and action, each nested within the other, referencing each other in a cycle of constant revelation. However, as Ingold states in his work on temporality, “in music as in social life, there is not one rhythmic cycle, but a complex interweaving of many concurrent cycles” (Ingold 1993:160). It is in the efforts to find resonances between these cycles that “timework” is conducted, the meaningful actions that prevent and produce very particular temporal experiences (Flaherty 2011). By marking moments of change through repeated, iterative action fundamental to most ritual, we create and define the tempo of social life through the manipulation of temporal experience (Leach 1961, Rappaport 1992). Ritual actions often serve as “social technologies of time”, methods by which we seek to
comprehend and attempt to control the seemingly relentless passage of time (Østergaard 2013, Willerslev et al 2013).

An example of this sort of “timework” is clearly expressed in the manipulation of miniature quotidian elements such as animals and domestic tools in the “pebble game” of the Qoyllur Rit’i. Scale models of homesteads are populated with carefully selected stones representing desired livestock in order to control and influence possible futures (Figure 5.13) (Meddens 1995, Sillar 1994, 2009, Stenstrud 2010). Seen as tiny storehouses of prosperity and well-being, these miniature figures are carefully tended, animals are “fed”, and houses maintained to create miniature “texts” that express desires in full view of the deities at the end of a difficult pilgrimage (Allen 1997:81, 2016 McEwan 2015:268). Although occurring at different spatial scales, the materialized control of the passage of time is also evident in acts of ritual termination and dedication of architecture at Moche sites discussed in Chapter 4. Iterative renovations memorialized the phasing, scheduling and sequencing of ritual events and activated an awareness of temporal rhythms.

Figure 5.13 Miniature stone homestead constructed as part of the Qoyllur Rit’i pilgrimage (Modified from Allen 2016)
In the end, this synecdochal temporality was expressed in the spatialization of time’s passage through the combined acts of architectural reconstruction and miniaturization that appear to link the contemporaneous Moche sites of Huca Colorada and San José de Moro.

5.2.3 Architecture, Time, and Power in Moche Religious Ideology

As initially presented in Chapter 3, architectural reconstructions at Huaca de la Luna repeated and mimicked earlier building phases and reinvigorated these structures as living timepieces, “chronotopic” spaces that underlined the conservatively maintained ideals expressed through the monument (Bakhtin 1981:84, Swenson 2015: 689). The physical act of construction and completion of a particular phase created the tempo fundamental to acts of renovation.

Sitting above tiers of brightly painted friezes, the summit of Huaca de la Luna supports a series of elevated interior chambers and platforms that served as central stages for state sacrificial rituals. The ceremonial events orchestrated here may have been scheduled to natural annual cycles, and the five documented reconstructions of the *huaca*, involving the complete envelopment of earlier monuments by larger and later edifices, appear to have materialized and set time in motion (Bourget 2001, Hocquenghem 2008, Swenson 2012a). In fact, the likely calendrically timed expansion of temple mounds, involving the curated termination and rededication of pre-existing monuments has also been documented at Huaca Cao Viejo in the Chicama Valley and Dos Cabezas in the Jequetepeque Valley as mentioned in Chapter 3 (Figure 5.14) (Donnan 2007, 2014, Franco et al 1998, Swenson 2018).

The enveloped nesting of the platform mounds points to a notion of temporality as synecdochal, in which older, terminated temples (previous wholes) become an active and energizing “part” of the later, “present” whole (Canziani 2009: 206, Uceda 2010: 150). Excavations of the ceremonial precinct at the summit of Huaca Colorada have identified elements of this core Moche ideology as presented above but, as Swenson has discussed, the reductive as opposed to amplified architectural terminations point to a local tradition of architectural time-reckoning (Swenson 2018). Although the sequence of renovation events at Huaca Colorada may parallel elements of this clearly enduring architectural tradition, the incremental compression of the internal platform
chamber within the core of the ritual precinct presents a unique opportunity to consider variations in how the Moche made and regulated time in space.

Figure 5.14: Comparison of the northern plaza facades of Huaca de la Luna (left) and Huaca Cao Viejo (Right)

5.2.4 Marking Time at Huaca Colorada

As presented in the previous chapter, excavations at Huaca Colorada define at least seven distinct phases of renovation of the Western Chamber each incrementally reducing the chamber in size, compressing the layout of the original dimensions while carefully maintaining and reiterating fundamental components of its spatial organization. Entrances into the chamber through the Eastern, Western and Southern walls of the Western Chamber were carefully recreated in each phase, maintaining access patterns into and out of the space through time. These reductions clearly defined the use of this space as focused on the gable-roofed structure found at the southern end of the Western Chamber. As discussed above, many phases of these architectural reductions entailed the incorporation of human sacrificial victims beneath each successive floor and within the construction fill behind various reductions of the northern wall of the chamber (Swenson et al 2010, 2011, 2012, 2013, 2015).
Once the Western Chamber had been filled and abandoned in the latest periods of occupation from Phase 6 onward, it was this higher eastern area that continued to be an important focus for ceremonial activity. As described, the Eastern Terrace was covered by a veranda that sheltered a stepped platform and ramp complex, the public counterpart to the dais in the Western Chamber. The post emplacements that held the wooden pillars that supported this roof were built on top of older adobe post emplacements maintaining their original positions relative to the publicly visible ceremonial terrace. As already described, the superimposition of these architectural elements cited the previous construction sequences, connecting the present state of the structure to the powerful ancestral past. These construction efforts marked and created temporal rhythms at Huaca Colorada, and the envelopment of past floors and posts under new constructions speaks to this synecdochal nesting of time in space (Figure 5.7).

Stratigraphic comparison of the complete construction sequence of Sector B has shown that the eastern platform was built at the same time as the earliest phases of the Western Chamber, indicating that both public and private performances would have been held on these two ritual stages, linked by the phased sequence of entrances through the central dividing wall separating the eastern and western sectors (Swenson et al. 2015). As the private Western Chamber was reduced in length and volume, all of these doorways were carefully bricked up and plastered over, actively maintaining the accessibility of the two spaces over time. While the higher and eastern public platform would have been visible to audiences that could have gathered in the plaza at the base of the huaca, the western, private chamber was an intimate space wherein access and movement was highly controlled.

Moreover, the dualistic configuration of the ceremonial nucleus of Huaca Colorada speaks precisely to the synecdochal construction of space-time in that the whole was conceived through the operation of two separate but dependent and complementary parts (see above). The incremental, synchronized, and repeated architectural terminations on both the east and west precincts discussed in detail above provides further testament to this synecdochal creation and movement of time—as implied by the very notion of synchronicity and incrementality (Allen 1997).
5.2.5 (Re)presentations of Moche Architecture and the *Maquetas* of San José de Moro

The simultaneous, incremental (“partial”) sacrifice of the architectural edifice, accompanied by a representative human individual at Huaca Colorada, is repeated in reverse within the tombs of San José de Moro through the incorporation of architectural models within mortuary spaces dedicated to interred elite individuals. The interment of the models in elaborate chamber tombs at San José de Moro continued to enliven and replenish distant sacred locales such as Huaca Colorada.

The process of reduction and miniaturization of the ceremonial platform chamber at Huaca Colorada finds parallel in the *maquetas* for the latter served to fix synecdochally or “store” specific architectural complexes and their associated moments in time at the great Priestess center of San José de Moro. Interconnected acts of architectural and elite burial were spatially separated yet fundamentally linked efforts to achieve the same “timework,” possibly during periods of social and communal rupture or possibly to commemorate the cessation or beginnings of celestial cycles (Willerslev *et al.* 2013). In other words, both the interment of models in the burials and architectural terminations and rededications served to mark the passage of time and the renewal of social order (Østergaard 2013). Although separated by a distance of 25km within the Jequetepeque Valley, the interconnection between the ceremonial core of Huaca Colorada and San José de Moro is evident in notable similarities in artifactual assemblages. However, this is most apparent in parallels between the formal design features and access patterns of some of the architectural models interred in the tombs at San José de Moro as compared to specific phases of occupation of the eastern and western ceremonial precinct of Huaca Colorada.

Over the past 25 years, the extraordinary *maquetas* of the great funerary centre of San José de Moro have been extensively analyzed, but under-theorized (Castillo *et al.* 2011, Gavazzi 2012, McClelland 2010, Pillsbury 2015, Wiersema 2010, 2011, 2012, 2015a and 2015b). Donald McClelland (2010) has recently outlined the complex interrelation of *maquetas* to the particular artifact assemblages of each tomb context investigated during the 1991 and 1992 excavation seasons. I draw from this particular dataset to compare the building phases and the associated ceramic assemblages of Huaca Colorada. My archival research conducted under the supervision of Prof. Luis Jaime Castillo Butters at the San José de Moro project collections at the Pontificia
Universidad Católica de Perú in Lima allowed me to make more in depth analyses of the artifact assemblages associated with the specific tomb contexts that contained maquetas. As mentioned above, maquetas were manufactured of either unfired or very low-fired clay and were found in extremely poor states of preservation. Careful consolidation by conservators during excavation and recording in situ have allowed a small number of examples to be fully conserved and reconstructed, with detailed notes, drawings and photographs serving as the foundation for the plans of those maquetas that were damaged beyond repair.

Figure 5.15: Maqueta from San José de Moro and a profile cross section though the centreline (Modified from Castillo et al 2011: p133)

Until quite recently, depictions of architecture in the Moche artistic corpus were simply interpreted as a descriptive shorthand to communicate the specific setting of ritual activity within painted and modeled scenes. This line of thinking also extends to the Moche maquetas excavated at San José de Moro (Castillo et al 1997, 2008, Castillo 2000a, 2000b, 2001, 2003, McClelland 2010). A collection of 44 such models have been documented and conserved, with many of the elaborate tombs containing numerous architectural models in a single context (Castillo et al 2011, Castillo 1997). The extant maquetas are all less than 50cm square and are constructed and finished in much the same way as buildings of the period, rectangular in plan and slipped and painted with red, black, and white pigments (Castillo et al 1997:127). Three of the Priestess burials, for which San José de Moro is famed, contained maquetas that were seemingly locally made, perhaps even constructed within the tomb itself during mortuary rituals (Figure 5.15) (Castillo et al 1997, Castillo et al 2011, Wiersema 2010, 2011, 2012, 2015a, 2015b).
Due to the close similarity of one particular excavated *maqueta* to a small platform structure at the site of Portachuelo de Charcape in the hinterland of the Jequetepaque Valley, Edward Swenson convincingly argued that the maquetas from the tombs at San José de Moro were representations of real rather than imagined spaces (Figure 5.16) (Castillo *et al* 1997, Johnson 2008, 2012, McClelland 2010, Swenson 2004, 2008: 415-421). Portachuelo de Charcape is an example of one of many relatively small ramped structures called *tablados* found throughout the Jequetepaque valley thought to represent scaled-down minor regional versions of the massive platform mounds found at Late Moche sites of more central importance, such as Huaca Colorada (Swenson 2004, 2011a, Wiersema 2010). Given this correspondence, it seems that *maquetas* may have served as symbolic tomb substitutes or references to the full-scale *tablados*, possibly as markers of community identity. If these models served as referential substitutes for the ritual architecture associated with the deceased, this speaks to the social connection that individuals likely held *vis-a-vis* these meaningful locales. If this were the case, having a representation of the specific layout of the gable-roofed complex of their “home” *huaca* included in their tombs may have served as a powerful emblem of their political and geographic affiliation, as discussed further in the final section of this chapter (Swenson and Warner 2015: 46).

Figure 5.16: Maqueta from San José de Moro closely resembling topographic map of ceremonial platform from Portachuelo de Charcape (Modified from Swenson 2006: 121).
As an important component of the funerary assemblages found in many of the tombs of San José de Moro, the *maquetas* have been found in the same context as fine-line painted stirrup vessels bearing iconographic depictions of identical although schematized ceremonial locales that are enlivened with characters in action. In stark contrast, the *maquetas* are usually devoid of evidence of any such personages, merely empty spaces, or ad-hoc containers for miniature ceramic vessels known as *crisoles*, and in two notable cases, collections of miniature copper artifacts (McClelland 2010). Despite the fact that these models would have served as ideal stages for the placement of figurines comparable to a remarkable wooden Chimú-period *maqueta* found at Huaca de la Luna, none of the Moche *maquetas* bear any evidence of their inclusion (Figure 5.17) (Pillsbury 2015, Uceda 1999).

Accordingly, I suggest that these models were not merely depictions of ceremonial locales but should be seen as individualized and animated representatives of the locales in question. As instantiations of particular powerful places in specific moments, the identity of the full-scale ceremonial locale they reference was compressed, transferred and contained in these miniatures as generative seeds filled with potential energy to connect, collapse and renew both space and

Figure 5.17: Chimu Maqueta from Huaca de la Luna (Photo: Daniel Giannoni, Museo de Arte, Lima)
time (see also Swenson 2012a: 186). The architectural similarity of two particular *maquetas* from separate tomb contexts (M-U30 and M-U41) to the basic layout of the western chamber at Huaca Colorada is particularly relevant to this analysis. Specific investigation of the artifact assemblages associated with both of these tomb contexts show stylistic and chronological continuities with the ceramics found in the feasting middens of Huaca Colorada, pointing to additional connections between the sites. Both of the tombs contained multiple models, with a total of seven found in tomb M-U30, and a total of five in tomb M-U41 (Figures 5.18 and 5.19). It is worth noting that there is a direct one-to-one relationship between the number of *maquetas* and the number of individuals buried in both tombs, suggesting that each interred individual was associated with a particular model and thus a specific geographic locale.
Figure 5.18: Plan and photograph of Tomb 30 (MU-30) at San José de Moro showing position of Model 7 (right side in Niche 6) (Modified from McClelland 2010: 214, based on drawing by Luis Jaime Castillo and photo by Christopher Donnan)
Figure 5.19: Maquetas in relation to Priestess burial of Tomb 41 at San José de Moro (Modified from McClelland 2010: 220)
The layouts of Model 7 of Tomb M-U30 and Model 15 of Tomb M-U41 bear remarkable similarity to the enclosed space of the western chamber at Huaca Colorada (Figure 5.20). Indeed, it deserves consideration that these models are directly referencing the site. Both of these maquetas are divided into two sections within an enclosing perimeter wall, and they are equally composed of exterior forecourts with a raised platform partially covered with a single gable roof. In fact, a series of interior chambers are connected to the forecourt by a doorway on the right-hand side of each platform in exactly the same manner as at Huaca Colorada. Considering that the entrances from both the east and west sides of the northern limits of the internal platform chamber at Huaca Colorada were re-established anew at each phase of construction, it is notable that the doorway immediately to the east of the platform through the Southern wall of the chamber itself remained unchanged throughout the entire sequence of renovations that compressed the chamber towards the south.

Figure 5.20: Floor plans of Model 7 from Tomb 30 (left) and photo of Model 15 from Tomb 41 (right) from San José de Moro (Modified from McClelland 2010: 220, 217 based on drawings and photos by Christopher Donnan)
The complex of divided rooms located behind this Southern access immediately behind the platform of the West Chamber at Huaca Colorada closely mimics the layout and organization of the interior chambers found in the two models (Figure 5.21). In addition, both Models 7 and 15 have a singular central access through the perimeter wall through a stepped threshold located immediately opposite the platform. Again, this access pattern is remarkably similar to the spatial organization of the Western Chamber at Huaca Colorada. Excavation of the floor covering the penultimate phase of structural compression of the Western Chamber revealed a heavily worn adobe brick step located immediately in front the platform. As this pattern of controlled centre-line access into these chambers is repeated at both scales, it suggests that movement and vision were intentionally directed towards the ceremonial platform and the activities that took place upon them.

Figure 5.21: Comparison of floor plans and digital reconstructions of the Western Chamber of Huaca Colorada (bottom) to digital reconstructions of Model 7 (centre) and Model 15 (top) from San José de Moro. Left side shows spaces without roof coverings, right side covered.

Based upon analysis of the associated ceramics, the specific chamber tomb contexts in which Models 7 and 15 were encountered were dated to the same Late Moche period contemporaneous to that of occupation Phases 1 -5 at Huaca Colorada (Castillo 1997, McClelland 2010). The similarities of a number of the artifacts found in both tomb M-U30 and tomb M-U41 bear striking resemblance to many of the ceramics found in direct association to significant deposits
of ceramics located in close proximity to the western chamber at Huaca Colorada. The fineware ceramics and enormous amounts of organic remains deposited in significant feasting events were recovered from large middens that surrounded the entire western and northern perimeters of the western chamber (Lynch 2013, Swenson et al 2011, 2012). The density of material in the middens, including the highest concentration of Cajamarca feasting ceramics of any area excavated at Huaca Colorada, contrasts to the clean and relatively sterile contexts found within the chamber itself. The ceramics recovered from these middens are stylistically identical with vessels placed in the tombs at San José de Moro associated with the models in question. The co-occurrence of Cajamarca kaolin plates in both of the tombs and in midden contexts at Huaca Colorada is especially noteworthy (Castillo et al 2008, Lynch 2013). As discussed in Chapter 3, the only other site in the Jequetepeque Valley where Cajamarca plates have been found in secure context is the contemporaneous site of Cerro Chépen, a fortified hilltop site allied with San José de Moro (Castillo et al 2011, Rosas Rintel 2010). Remarkably, many of the stone structures found at Cerro Chépen bear striking resemblance to other maquetas found at San José de Moro, further suggesting linkages between these three sites (Castillo et al 2008, Castillo et al 2011, Rosas Rintel 2010: 493, Swenson 2012b). The presence of Cajamarca fineware and the architectural correspondences between the maquetas and these two contemporaneous sites point to a shared ceremonial tradition indicative of major changes associated with increased highland influences at the beginning of the Transitional Period.

This inclusion of such “architectural portraits” in elite Moche burials at San José de Moro suggests meaningful connections between the individual interred and the original spaces they replicate in miniature. Given the striking resemblance between the layout of two maquetas and the western chamber at Huaca Colorada, I argue that the scalar relationship between these objects complements the architectural renovations of Huaca Colorada by reaffirming the nested synecdochal temporal ideologies at play during the Late Moche Period. Acting as cognitive artifacts or “synecdochal timepieces,” maquetas not only served as representations of particular events and places but materialized and froze moments in time that connected individuals with specific places and ceremonies. Nested within an array of meaningful and interrelated symbols within the tombs at San José de Moro, the maquetas indexed distant locales, connecting within a synecdochal network the tomb and the interred individual with a specific meaningful place. As miniature “wholes,” forming “parts” of a larger mortuary assemblage, the maquetas reified
fleeting but essential phases (and peoples) associated with sacred places of memory and identity distributed across the valley. Indeed, the *maquetas* served as powerful historiographic media—making and remaking the history of likely diverse groups of people in the region. If the ceremonial locales were perceived as living entities with their own life-cycles, the “timework” involved in maintaining, changing and memorializing these spaces through the acts of renovation could also explain why the *maquetas* were buried in tombs at San José de Moro. By choosing to model specific architectural phases in miniature, specific moments of the life histories of ceremonial structures were transferred and “selectively concretized” (Clark 2010). Buried in tombs (just as daises and chambers were carefully interred at Huaca Colorada), these frozen moments of space-time would continue to shape and animate their architectural macrocosms. The presence of representative emblems of distant locales within the tombs of San José de Moro thus speaks to a concerted effort to at once assert social difference but still align local histories with the religious ideologies and calendrical cycles of the priestess centre. The tombs of San José de Moro thus functioned in part as a sacred archive, preserving and crystallizing the meaningful but fleeting events defining communities or authorities associated with the structures represented in miniature.

Both the incremental ritual renovations at Huaca Colorada and the creation and inclusion of *maquetas* in the tombs of San José de Moro served to make and order time. Indeed, both the models and architectural interventions provide a means to regulate the temporalization of practices in material form. In fact, the relationship between the two scales of architectural expressions served simultaneously as both “Signs in History” as well as “Signs of History” as discussed by Parmentier (1987). As “Signs in History” the *maquetas* are value-laden material objects implicated in social strategies that focus attention on specific historical processes. As “social technologies of time” they secured the places they present as the loci of historical intentionality and agency (Parmentier 1987, Preucel 2006, Willerslev *et al* 2013). As “Signs of History” both the renovations and the models they objectified acted to materialize discourses of history, especially how historical knowledge was materially recorded and temporally transmitted both backward and forward. As built objects, monumental structures such as *huacas* served to mark the *longue durée*, as their very existence mediated and legitimized the political order linked to the deep cosmological history framing mythic time, ordering the present and anticipating the future. Preucel notes that in traditional, non-literate societies “Signs of History” are often
simultaneously “Signs in History,” wherein material objects acting as historicizing signs are often directly implicated in the manipulation, contestation and concealment of meaning (Preucel 2006:86). At Huaca Colorada, the act of preparing building materials and of construction itself were embodied, incorporating Signs of History, while the finished spaces and the maquetas that reference them can be understood as material Signs in History (Connerton 1989). As physical, habitable, and subjectified “cognitive artifacts” embedded in the landscape, full-scale ceremonial loci such as Huaca Colorada were the conceptual stages on which Moche senses of time were created, preserved and continually reaffirmed (Moore 2010).

This section of the chapter has suggested that the ceremonial platform structures and their miniature depictions were synecdochal referents to particular moments in the architectural biographies of important ritual locales in the Moche world. The act of constructing and renovating Huaca Colorada may have been memorialized in miniature in the creation of maquetas to synecdochally concretize and store the particular spatial identity of a singular phase of construction. These powerful objects stood not only as markers of affinity with a particular community or region but as symbols of particular moments in time. Of course, religiously charged places such as Huaca Colorada must have marked particularly charged liminal events of destruction and renewal. These events at once marked, materialized and effectively controlled the passage of time.

With death as a liminal and necessary phase in the process of creation and becoming in Moche cosmology, the transformation of the human body or architectural space through sacrifice constituted a vital generative force of life, cosmos, time, authority and ultimately the creation of ‘place’ itself. This sacrificial ontology appears to have persisted across the Moche sphere, with repeated dedication and termination rites at Moche centres indicating that Moche conceptions of place clearly considered architectural spaces as vital, living entities in their own right (Swenson 2013, 2018b). Indeed, notions of home, territory, and place specific to the Moche must take into account these central ideologies of life, creation, and death as interdependent modes of being deeply embedded in the landscape (Swenson 2011, 2012, 2018b).

Current radiocarbon dates collected from the foundational phases of construction of Huaca Colorada as presented in the previous chapter firmly situate the initial occupation of the site to the Late Moche Period (AD 650-750) (see Figure 4.89, and Swenson et al 2011, 2012, 2013,
Interestingly, prior to the Late Moche Period, massive renovations at important sites such as Huaca de la Luna, Cao Viejo, or Dos Cabezas occurred every 50 years or so, possibly commemorating the start of a new Moche century and the calendric renewal of the cosmos. In contrast, the intensity and regularity of the phases of architectonic renovation and renewal at Huaca Colorada over a relatively period of time (7 major renovations over 190-270 years according to the current set of radiocarbon dates, see Figure 4.87) may suggest a population facing considerable political and possibly environmental stress that sought constant renegotiation and reaffirmation of the bonds of community through material acts of ritualized reconstruction that defined their connection and dedication to this particular place on the landscape.

As a space of gathering, is clear that communal ceremonial acts of construction that took place at Huaca Colorada were fundamental to the creation of a central place for this particular community. In the next section, I explore the nature of the relationship between this particular locale and those who revered it through a discussion of belonging, identity and the importance of place in the creation of community at Huaca Colorada over time.

5.3 Pillars of the Community: Moche Ceremonial Architecture as Symbolic Household

“The sacred might dwell at home. Given the pivotal place dwellings have in the human experience and the capacity of our houses to shelter both mundane tasks and complicated meanings, it is not surprising that people make their dwellings into sacred homes. What is surprising are the elaborate and diverse ways in which we do this.” (Moore 2012: 179).

In the final section of this chapter, an analysis of the ritual practices at the ceremonial centre of Huaca Colorada permits a critical reassessment of conventional definitions of the house and “domestic” life. I consider at what scale the concept of a “household” can be applied to the study
of ancient lifeways of which we have little more than distant ethnographic comparisons to serve as analogies. Although the monumental architecture of the North Coast of Peru is disproportionally investigated, I argue that there is value in approaching what we define as ceremonial structures from a household perspective, to reinterpret those spaces contained within monumental or “ritualized” architecture as symbolic houses and in direct relationship to more prosaic domestic contexts (Gillespie 2007). Questioning the assumed opposition of “house” and “temple” in the Moche context also serves to historicize the application of “commoner” and “elite” as heuristics to make sense of Moche social and spatial ideologies in a way that avoids the imposition of contemporary constructions of status, class, and privilege. In other words, definition and application of these unavoidable concepts should respect the cultural context of past social inequalities.

In critiquing ahistorical models of elite-commoner interactions, it is still likely that there was some degree of resistance to centralized power among the Moche as based upon contemporary analogies. However, people’s relationship to differing institutions of authority often defines positions in life and attachment to place. In her recent study of the conceptual dialogue between vernacular and monumental architecture in the Maya Lowlands during the Terminal Classic Period (800-950 CE), Christina Halperin describes the mutual influence between architectural forms and the social statuses they reference, suggesting that commoner and elite architectural styles likely informed each other reciprocally (Halperin 2017: 114). From this perspective, discussion of “elite” structures then must pay attention to both the convergences and differences between high-status and commoner residential spaces as symbolic reflections of each other in form and function. Although beyond the scope of the current discussion, such a comparison should include an examination of the differences in the assumed roles that were performed by both elite and common participants within the greater community.

Unquestionably, there are serious concerns in assigning hierarchical and unavoidably ethnocentric values to particular sumptuary materials or exclusive spaces that often are taken as evidence of the elevated status of elite members of society in the ancient past. However, leadership and privilege are not necessarily synonymous, and there is evidence that the responsibilities of elite authority among the Moche may have amounted to accepting a death sentence. This is suggested by the discovery of portrait vessels of individual authority figures at Huacas de Moche depicted as captives ready for sacrifice later in life, likely after a generation of
rule (Figure 5.22) (Donnan 2004, Hill 2005, Scher 2018, Uceda 2001). Although celebrated and deified in life, elite rulers were sacrificed in order to ensure their leadership beyond the realm of the living through their connection to their home huacas. The preponderance of elaborate elite tombs closely associated with so many of the Moche huacas such as at Sipán, San José de Moro and Dos Cabezas suggests that their physical incorporation into such monuments was of fundamental importance to the continued power of these places as the seats of local royal lineages. Recent biodistance analysis of dental traits within a sample of elite burials from sites across the Lambayeque and Jequetepéque Valleys suggests a great degree of genetic continuity within each region that is indicative of closed dynastic kin groups and intermarriage within families (Klaus et al. 2018).

Figure 5.22: Portrait vessel of captive excavated by Proyecto Arqueológico Huacas del Sol y de la Luna (PU-499) (Modified from Scher 2018)
If leaders served as conduits of communication with the cosmos through the medium of sacrifice, they thus constituted a vital component of the larger social collective. Unlike, then, feudal barons in medieval Europe, Moche elites were viscerally committed to the continuity of the community as living stewards, rather than simply as expropriating “lords.” If members of an elite lineage or household were perceived as deified ritual practitioners who unified a community through their leadership, then it stands to reason that the ceremonial structures to which they were intimately connected represented sacred houses. These spaces would have been freighted with heightened symbolic meaning as both extreme places of alterity and as idealized residences of these leaders. This symbolism no doubt influenced conceptions of place, identity and cosmos as part of an ongoing dialogue between vernacular and monumental expressions of these ideals. In other words, conceptions and experience of the quotidian—for different status groups—can only be properly understood in terms of the convergence or contradictions of different ideologies of life and emplacedness, including culturally specific notions of the home as locus of belonging and identity. As discussed in the previous section of this chapter, Moche temples served as the interlocutors between their community and cosmic, ontological others. These ceremonial arenas of the Moche elites were likely perceived as the ultimate place of origins, becoming, and life itself. For many Moche, then, a sense of home, community, and well-being—qualities often ascribed to the private house in the modern context—may have been attributed more to the residences and ceremonial arenas of lordly ritual specialists than to the often transient and make-shift vernacular dwellings documented in certain regions of the Moche world, including the Jequetepeque Valley (Dillehay et al. 2001, Duke 2017, 2019, Swenson 2004, 2012). If Moche elites ensured the wellbeing and continuity of their society, then such roles no doubt shaped conceptions and experiences of identity and “rootedness.” Participation in rituals in charged ceremonial locales that anchored a community’s sense of belonging and identity no doubt enhanced these elites roles that became inextricably intertwined with the places in which the ceremonies were orchestrated (Durkheim 1915).

In Andean and Mesoamerican archaeological contexts, rituals of architectural renovation of such important ceremonial “homes”, either additive or reductive, materialized acts of both social and cosmic termination and dedication (Swenson 2015). Similar to the well-documented cosmological-temporal principles of destruction and regeneration linked to calendrical and agricultural cycles and dynastic succession in ancient Mesoamerica, acts of architectural renewal
in Andean contexts were highly ritualized (Prieto Burmester 2008, Friedel 1998, Hoquenghem 2008, Mock 1998). The sequence of construction phases at Moche huacas are fruitfully compared to Mesoamerican rites of architectural renovation and they served in part to impart meaning to daily life for those who were involved in the construction and use of these spaces. Moche huacas were special places where quotidian acts of construction and communal consumption were elevated to community-making rituals that also metaphorically represented production and reproduction more generally (sexual, agricultural, artisanal, etc.). Reconstruction made and remade the archetypical house just as other rituals referenced the making and remaking of the cosmos and the agricultural resources so closely tied to the annual cycles that the rituals powerfully re-enacted.

In this light, I examine rituals of architectural renovation and sacrifice at Huaca Colorada over the entire span of its occupation, not as exotic or aberrant rites, but as fundamental to local constructions of imagined communities and identity (Hobsbawm and Ranger 1983). As presented earlier in this chapter, seasonal and cyclical rites of architectural construction appear to have reaffirmed and materialized temporal, embodied bonds of community in relation to a specific sacred locale—productively analogized to a large, collective “home” defined here as a place of cooperation and belonging.

5.3.1 Symbolic Authority and the Power of the House

During the 1987 rescue excavations of the remains of a heavily looted Moche tomb at Huaca Rajada near Sipán in the Reque Valley, a remarkable copper sceptre was discovered, unique in form and manufacture. Decorated with an elaborately detailed architectural model of an open gable-roofed structure, the depicted building was fringed on four sides by a portico embellished with sculpted war clubs or porras (Figures 5.23) (Alva and Donnan 1993:48-49). There is little doubt that this singular artifact served as a rather unambiguous emblem of office. The associated grave goods further indicated that the original occupant held a privileged status in life, perhaps on a par with the Señores de Sipán, (Alva 1999:26, Alva 2012).
The roof line of the miniature building was embellished with miniature metal heads bearing horn-like projections, a stylistic representation not known to have a correlate in full-scale architecture elsewhere (Wiersema 2010). Months after the scepter was salvaged, fragmented ceramic war club decorations bearing the same horned human heads were found in closely associated architectural fill (Figure 5.24) (Alva 1999:30-34). Although not in situ, these unusual architectural adornments no doubt decorated a building similar to the one represented on the unique sceptre. It appears the horned roof ornaments were destroyed at or before the time of the deceased’s internment, possibly as a means of entombing symbolic architectural elements with the person most closely associated with the structure. In fact, the unusual porras may have served as portraits of the interred and the architecture that powerfully materialized his identity (Alva 2012).

Figure 5.23: Sipán sceptre, detail of gable roofed structure and reconstruction drawing (Modified from Castillo et al 2011: 140).
Figure 5.24: Decorative ceramic rooftop *porras* from Sipán (Modified from Castillo *et al* 2011: 142)

Figure 5.25: Rollout drawing of iconographic depiction of gable roofed structure with *porras* on roofline (modified from Bourget 2006: Figure 2.143)
Much like the *maquetas* of San José de Moro, scholars have interpreted the gable-roofed architectural spaces depicted in the Sipán sceptre and in various ceramic media as representations of the architectural complexes that have been uncovered archaeologically on the summits of many *huacas* across the North Coast of Peru (Shimada 1994, Wiersema 2010). As presented earlier in this chapter, the visual shorthand of a simple open gable-roof structure was a highly charged symbol of a divine authority often shown seated beneath these iconic structures (Figures 5.25, 5.26, 5.27, 5.28, 5.29, 5.30, 5.31) (Chapdelaine 2006, Franco *et al* 1994, 2003, Bourget 2003, Chapdelaine *et al* 2003, Wiersema 2010, 2015). I further contend that the gabled structure symbolized the archetypical household uniting the elite in question with his or her subjects. Iconographic depictions of elaborate ceremonies staged within such buildings, including feasting and the offerings of ceramic vessels would support the notion that these monuments staged rites that mirrored domestic ideals or ideologies of home and territory (for an exploration of elite residences as archetypical households in the Andes—see Kolata’s [1996] Weberian analysis of the Andean city) (Benson 2012, Bourget 2001, 2006, Donnan 1982, Hocquenghem 1987).

Religious buildings that symbolized the home of a leader or god macrocosmically reified the concept of the household as encompassing the larger community (Allen 1997, Herva 2010). Archaeologists have documented numerous examples of miniature architectural models in ancient funerary contexts cross-culturally, with many of these remarkable miniatures condensing ideals of the physical dwelling as a sacred domestic space (Muller 2002, 2016). Indeed, these material depictions of vernacular and monumental households served as the conceptual stages on which life was lived and identity continually performed, even in death (Bradley 2003, 2005, Castillo *et al* 2012, Kirch 2000, Wiersema 2010, 2012).

Similar to the miniature houses in funerary contexts in other cultures (and comparable to two-dimensional depictions of such structures on Moche fineline ceramics), the three-dimensional models of the gable-roofed residences were also of central significance to the political theologies of Late Moche communities. As suggested in the previous section of this chapter, these models served as a substitute for the ritual architecture associated with the deceased buried in the tombs of San José de Moro. Burial with a representation of the specific layout of the gable-roofed
Figure 5.26: Various depictions of gable roof structures from Moche ceramic vessels from the Ethnologisches Museum der Staatlichen Museen zu Berlin - Preußischer Kulturbesitz (a) VA18282, (b) VA 17637 and Museo Larco, Lima (c) ML002875, (d) ML031752, (e) ML002892 (Photos by author)
complex of their home huaca may have served as an emblem of their affiliation, literally taking symbols of their community to the grave with them. A comparison of these models to the gabled roof structures on the summits of huacas reveals that the visual cue of a simple roofed structure becomes a charged symbol of a ritualized household that incorporated members of a specific community who participated in ceremonies in places housing such buildings. Reinforced by ritual performances of social destruction and regeneration, the huaca stood as marker of corporate affinity with an elite household, a symbol of identity uniting diverse communities into a single cooperative or ceremonial body. As such, the ritual performances assumed to have occurred within these structures likely underlined the continued legitimacy of both the leadership and the community as a whole as mereologically interconnected and interdependent parts. If social identity was in fact forged within these ceremonial spaces, acts of renovation in these profoundly powerful places must have marked particularly charged liminal periods. As discussed above, local communities were bound to huacas through both the physical labour involved in their construction as well as their literal incorporation into the structure as sacrificial offerings.

As a form of symbolic household reproduction, acts of construction and renovation would have extended kin-based ideologies of home and identity across generations through an embodied process of “cultural construction and contestation” that reified existing ideals while presenting opportunities to materially express changes in tradition (Pauketat and Alt 2005). These renovation histories clearly suggest that architectural renewal was fundamental to the ideological construction of society and likely tied to intertwined agricultural and cosmological cycles that connected social, religious, political and environmental aspects of daily life (Prieto Burmester 2008). By possibly housing the ruling elite at the peak of huaca structures, even if on a temporary, rotational or purely symbolic basis, I suggest that the entire monument symbolized an idealized central house. Identification with a deified authority figure, their lineage and the natural huaca of the adjacent Cañoncillo mountain range itself thus served to legitimize and incorporate a larger community through regular participation in feasting and ritualized public activities.
Figure 5.27: Collection of sherds found in Sector B of Huaca Colorada depicting gable-roof structures

Figure 5.28: Rollout drawing of “Burial Theme” (Modified from Bourget 2006: 187)
In light of this argument, I suggest that it is useful to mobilize elements of Lévi-Strauss’ concept of the *société à maisons* or ‘House society’ to understand how architecture materialized and served as lynchpin of corporate identity. According to Lévi-Strauss, a *société à maisons* refers to communities documented ethnographically that ascribe central importance to material and conceptual aspects of the house in expressing group identity and organizing social relations. A number of archaeologists have recently applied this perspective to their interpretations of past social organization (Beck 2007, Driessen 2010, Gonzalez-Ruibal 2006, Joyce and Gillespie 2000, Gillespie 2000, Weismantel 2014 ). In a similar manner, I propose that the Moche
conception of the domestic sphere may have incorporated and extended beyond our notion of the quotidian to align more closely to Lévi-Strauss’ conceptualization of the *maison* (Lévi-Strauss 1982, 1987). Admittedly ambiguous, Lévi-Strauss defines the *maison* as:

“[a] corporate body holding an estate made up of both material and immaterial wealth, which perpetuates itself through the transmission of its name, its goods, and its titles down a real or imaginary line, considered legitimate as long as this continuity can express itself in the language of kinship or of affinity and, most often, of both.” (Lévi-Strauss 1982:174)

Following Gillespie’s consideration of the material markers of house societies as inextricably linked to their temporal and spatial dimensions, a key function of the house is to reify and connect communities to specific meaningful places through highly regulated and repeated sets of ritual action (Gillespie 2000a). House societies self-defined and reproduced through particular narratives of history that relied upon architectural biographies that materialized social memories and generational continuities that transcended changes in familial alliances, household membership or leadership structures. It is this sense of temporality that serves to “…embody a collective memory about the past, a reference to origins that often forms a salient bond uniting house members” that seems to be expressed through the sequence of renovations that took place at Huaca Colorada (Gillespie 2000:3). Buildings serving as the foundation of social affinity might be relevant to understanding the exclusive household compounds documented at Huacas de Moche but also the numerous regional *huacas* that appear to have marked the territorial boundaries of urban and rural Moche communities (Shimada 1994, van Gijseghem 2001). By interpreting Moche social organization as comparable to, but certainly not identical to classic *sociétés a maison*, I argue that monumental *huacas* materialized membership within a larger community, extending a common identity across the sphere of Moche influence that negotiated situated notions of place within the landscape (Gillespie 2000).
Figure 5.30: Rollout drawing of iconographic scene depicting ceremonial use of roofed platforms (modified from Bourget 2006: 12)

Figure 5.31: Complete vessel and rollout drawing of iconographic scene depicting ceremonial use of roofed platforms (modified from Bourget 2006: 218-219)
5.3.2 Huaca Colorada as Ancestral House

The spatial interrelationship between residential, production, and ceremonial space at Huaca Colorada demonstrates that the interpretation of public events and the architectural creation of public spaces must not be confined strictly to monuments and large plazas but needs to take the entire settlement into consideration (See Chicoine et al. 2019, Ossa et al 2017). As there is no evidence of a large, permanent settlement of purely residential structures within the vicinity of the Huaca Colorada during the Moche phases of occupation, it is assumed that the participants who made and celebrated this place would have travelled to the site from agricultural settlements from across the region (Swenson 2012a, 2017; Swenson and Chiguala 2010, 2018). As a space that brought a community together to witness and participate in large ceremonial rites, the residential, food-preparation and artisanal production areas so far investigated are all located on the huaca itself in Sectors A and C on either side of the central ceremonial core in Sector B. Even if these areas were inhabited only temporarily by pilgrims during specific festivals, the proximity of these activity areas to the ritual precinct suggests that celebrants were literally and figuratively “at home” when they gathered at Huaca Colorada. Their physical location on the same structure where important ceremonies took place indicates that their presence was fundamental to the functioning of the very core purpose of this space of bringing the community together. At larger sites, such as Pampa Grande or the Huacas de Moche, established residential compounds were located apart from their central huacas and the enormous plazas at both sites’ temples, spaces that are thought to have constituted more exclusive religious arenas that were periodically open to city residents (Shimada 1994, Uceda 2001). The overall orientation of these major huacas in relation to the organization of the residential and industrial compounds clearly positions the monumental structures as the central focus of attention, visible from every area of the urban settlements but apart from them. Unlike other Moche huacas of the period, the ritual participants of Huaca Colorada communed with the deified elite leadership by living on, eating together and burying their dead in proximity to this central place.

Although the Moche phase occupation of Huaca Colorada represents the central node of a much more compact and sporadically settled community in comparison to larger sites, the central importance of the huaca as a grand stage of ritual performance is worth reiterating. As was
presented in Chapter 4, and further discussed below, the series of public ceremonial platforms along the Eastern Terrace of Huaca Colorada was clearly intended to be seen from the plaza at the base of the structure. Paralleling the spectacular nature of Moche huacas across the North Coast, this space likely fostered a sense of *communitas* amongst key participants. Gathering in the plaza at the eastern base of Huaca Colorada to witness ceremonies marking specific moments in the ritual calendar was of fundamental importance to the creation of place and formation of social bonds through time. Whether these rites celebrated mythohistoric events, agricultural or celestial cycles or dynastic change, from a public perspective, the gable-roofed ceremonial platforms visible on the Eastern Terrace formed the central focus of this monument. The continuity of this central unifying role seems fundamental to the Moche period communities who originally constructed and repeatedly renovated this monument.

Despite significant structural changes of this ceremonial space in the final phases of occupation at Huaca Colorada, I argue below that that the huaca as a symbolic house endured beyond the Moche occupation into the Transitional phase. Although in the Transitional phase highland communities who founded the neighboring site of Tecapa attempted to co-opt and reformulate the established cult, the huaca as a corporate house perdured as feasting rituals continued and the East Terrace still served as a monument of social memory and public ceremonies.

As presented earlier in this thesis, the public Eastern Terrace of Huaca Colorada was built contemporaneously to the earliest phases of the more exclusive Western Chamber, with both public and private performances held on these two ritual stages that are almost identical in form to those depicted in the iconography of Late Moche fine-line ceramics (Figure 5.1) (Swenson *et al* 2010, 2011, Weirsema 2010). As discussed above, this curated and well-preserved internal sunken chamber contained a central stepped platform or dais that served as a stage for private ritual performances. In contrast, the public platforms of the Eastern Terrace were visible to a large audience gathered at the base of the *huaca*, an area that I suggest was used as a large open plaza. As described in the previous chapter, during the later constructions of the highland-imposed site of Tecapa, this open space was bounded to the west and south by high adobe walls (Figure 5.32, 5.33, 5.34). This Eastern Plaza would have covered a maximum area of 8,000 m² and, if Jerry Moore’s plaza occupation density constants are followed, this space could have hosted up to 17,000 ritual participants (Moore 1996a:117, Ossa *et al* 2017, see Inomata 2006 for similar occupation calculations for the plazas of Tikal, Copan and Aguateca in Mesoamerica).
Although this rather high occupancy limit is technically possible, this figure is highly unlikely and would not have allowed much movement in the cramped plaza. Considering the reduced visibility of the Eastern Platform the closer one stands to the base of the monument, I suggest that the easternmost area of the plaza would have formed the ideal location to appreciate the ceremonial performances enacted on the Eastern Terrace. Thus, I suggest that congregants occupied a much smaller area within the larger plaza, accommodating only a fraction of the upper density limit, perhaps between 1000 and 5000 individuals at most. Future excavations in Sector E are required to determine the presence and nature of any buried architectural elements in this plaza that might have served as formal areas for observation.

Figure 5.32: View of the Eastern Terrace from the eastern plaza (Phase 1 roofline depicted) in relation to remains of monumental wall extending from Tecapa in left of image

Despite the reorientation of the ceremonial platforms on the Eastern Terrace in the subsequent Transitional occupation of the Huaca, the fact that that this space remained visibly accessible suggests significant continuity in the nature of ceremonial performances. Whereas access to the plaza in the Moche Period was open and inclusive, the Transitional Period reformulation of ceremonial activities at the huaca appear to have focused on increasing control of the eastern
plaza with the erection of a substantial wall extending west from Tecapa that continued over the entire width of Huaca Colorada. This wall stretches 265 m from the western limits of Tecapa to the base of Huaca Colorada and actually ascends and bisects the huaca, thus extending an additional 195 m to the west over the western slope. (Figure 5.32). As this considerable boundary wall runs across the eastern façade of the huaca, this barrier effectively separated the ceremonial core of Sector B from the southern residential and production areas of Sector C. Excavations at the base of this wall within the southern limits of Sector B did not conclusively determine the contemporaneity of the wall to the Late Moche construction phases, as the remaining section was built on a base of sand that did not extend into earlier occupation phases (see Chapter 4 and Swenson et al. 2015). Running from west to east over the entire Moche monument, this wall stood over 5 m in height at the base of Huaca Colorada, and its eastern extent forms the central dividing wall between the northern and southern sectors of Tecapa. This internal division of Tecapa into nearly symmetrical halves has led Swenson and Berquist to suggest that this central wall may have spatially divided the centre into two distinct moieties, possibly a highland population and a subjugated Moche community native to the coast (Swenson and Berquist 2016). Accordingly, this significant feature appears to have changed the access to the eastern plaza, effectively controlling access into the area and limiting the number and placement of observers in the easternmost area of the Sector E plaza. In fact, in this phase, the westernmost walls of Tecapa form the eastern end of this open space. Although we cannot assume that the ceremonies that took place in this late phase platform mirrored previous Moche rites, the co-option of this space suggests that the Transitional period occupants negated the association of the huaca with the house of a Moche elite—since the West Chamber was closed down permanently and the Eastern Terrace remained the exclusive, public arena for rituals at this time. Indeed, the step-less daises of this phase, possibly lacking roofs on the later East Terrace no longer resemble the gabled stepped structures I interpret as iconic of a collective, ceremonial house. Indeed, the house of the elites clearly moved down the huaca to the vast compounds of Tecapa associated with newly arrived highlanders (Swenson et al. 2019). However, the new authorities of the huaca cult clearly needed to negotiate the likely tense relationship between new highland populations and the pre-existing community of Huaca Colorada that may still have adhered to Moche religious values. By re-establishing the Eastern Terrace as a focal point of ritual celebrations involving feasting, the re-use of the space acted as a means to create a new sense of community and dependency between these two groups.
As presented in Chapter 4, a sequence of floors decommissioned and buried the original north-facing public platform of the East Terrace in Phase 3 and again in Phases 4 and 6. These terminations, however, maintained the presence of a visible open space to the plaza below while subtly changing the architectural configuration. This constant renewal of the Eastern Terrace is mirrored in the numerous reductions of the private platforms of the Western Chamber, suggesting that the renovations of both public and private ceremonial spaces were synchronized during the Moche occupation. As mentioned, in the last phases of construction (Phases 4-7), significant renovation was marked by a ninety-degree shift in the orientation of the later public ceremonial platforms. The shift from north-facing to east facing terraces on the Eastern Terrace (oriented toward Cerro Cañoncillo) points to fundamental transformations in religious and political ideology. These developments were clearly linked to the foundation of the highland influenced centre of Tecapa to the east that marks the break between the Late Moche and Transitional Period in Southern Jequetepeque (Swenson et al. 2017).

Figure 5.33: Views of Eastern Terrace of Huaca Colorada from far northeast corner (top image) and southeast corner (bottom) of Tecapa.
Following the closure of the Western Chamber in Phase 6, the sequence of overlaid reconstructions of increasingly more visible platforms of the Eastern Terrace were clearly designed to maintain visual access to the eastern façade of the huaca. As presented in the previous chapter, the latest platforms shifted orientation to face Cerro Cañoncillo and the eastern plaza below. At the same time, residential or production activities on the Huaca clearly decreased significantly during this late occupation. As noted, this shift was associated with the latest occupations, dating to the post-Moche Transitional period when the huaca became little more than a simple platform for the presentation of particular rites as the attendant population appears now to have inhabited the compounds of Tecapa. This centralization of the Transitional Period population within the highly organized and controlled spaces of Tecapa point to major social and religious transformations founded on a new spatial ideology that no longer equated the huaca and its architecture with the home of an elite person and their community. However, it remained a highly visible component of the landscape from all areas of the settlement—and seemed to endure as a corporate house now shorn of Moche elite authority (Figures 5.33, 5.34).

Figure 5.34: Location of viewpoints towards the Eastern Terrace of Huaca Colorada from far northeast and southeast corners of Tecapa overlaid on drone image of both sites.
Although there is evidence of temporary settlement across the northern Sector A of Huaca Colorada into the Transitional period, the new form of urbanism present at Tecapa diverged from the traditions of itinerant Moche pilgrimage to the site, shifting into the establishment of a permanent community that was conceptually and literally bound to the huaca. Of course, considering the clear ceremonial importance of Huaca Colorada as an enduring monument in the Cañoncillo area, pilgrimage to the site no doubt continued. In fact, if one accepts that Tecapa was founded as a highland outpost on the coast, travel to and from the site likely increased.

Again, the continuity of the importance of this Eastern façade is made clear through maintenance of the position of a colonnade of wooden posts that replicated the location of the colonnades of previous phases as presented earlier in this chapter. By preserving fundamental elements of the most visible ceremonial stage of the original structure, the new constructions conserved certain elements of the architectural layout despite the otherwise radical changes in the orientation of this space to face the new centre of Tecapa.

Although the main ceremonial focus of Huaca Colorada turned to face the new urban centre, the maintenance of this roofed platform and colonnade of posts signals the continued religious and political importance of the huaca as an emblem of memory and identity. As such, I argue that these architectural components linked and connected the present, past and future communities to which this structure served as a powerful instrument of social reproduction. In fact, the posts themselves may have represented ancestral figures of sorts, animated architectural elements that brought the past into the present. The colonnade of the East Terrace thus served as true “Pillars of the Community” linking each generation of ritual participants through their presence while the entirety of the body of the Huaca was renewed through combined acts of construction and sacrifice. Although conjectural, it is possible that the posts were recycled through every phase of occupation during the Late Moche Period, important architectural heirlooms that became fundamental to the structure inherited or co-opted by the Transitional Period occupants. As mentioned earlier, the intensification of the use of post emplacements within the subsequent Sican Period Huacas Loro and Lercanlech as the loci of sacrificial and ceremonial acts suggests that this tradition might be traced back to the Late Moche Period, with Huaca Colorada as one of the earliest instances on record.

Feasting continued into the Transitional Period at Huaca Colorada and played a vital role in forging bonds of dependency and shared identity in the Andes. In this light, the huaca continued,
albeit in a very different form, as a kind of symbolic and corporate house, even after the co-option of the cult by the highland polity that founded Tecapa. However, the present data cannot explain why the East Terrace continued to serve as the premier stage for ritual performances and the continuation of public feasts in the combined settlement of Tecapa-Huaca Colorada. Perhaps the successful resistance of local populations or the efforts of the new highland leadership to placate a subjected community through tolerance and opportunistic patronage of an established religious organization can best account for this striking continuity. Although the excavations in Tecapa currently suggest that this site is a product of increasing immigration of and exchanges with communities from the Cajamarca highlands, the close physical relationship and architectural integration of Tecapa and the existing structure of Huaca Colorada strongly suggest that ceremonial performances on the Eastern Terrace were of continuing importance into the Transitional Period. Much like the strategies of territorial expansion employed by the subsequent highland empires of the Wari and Inka that allowed subjugated populations to maintain and continue local religious traditions, perhaps the Transitional Period incursions into the Jequetepoque Valley co-opted the established cult at Huaca Colorada in order to seamlessly dominate extant post-Moche communities of the Cañoncillo area (Kolata 2013: 27). From this perspective, the local Cañoncillo population living under the authority of new highland leadership would not have lost their connection to their ancestral “home” huaca.

In order to move beyond the continued categorization of Moche *huacas* as purely ceremonial locales designed to express and continually reiterate centralized political ideologies, we need to conduct more nuanced and long-term archaeological investigations as exemplified by the research undertaken at Huaca Colorada. A detailed examination of the specific biography of this curated religious space has allowed for the documentation of the materialized rhythms of social reproduction—as a moral ideal—of a particular ancient community over a period of considerable change, even with the demise of the Moche religious ecumene. A close analysis of the collaborative intergenerational architectural projects that created and recreated the communities of Huaca Colorada, has generated valuable insights on Moche *constructions* of society, time, and cosmos. As a great corporate house, Huaca Colorada symbolically linked and corporally bonded both participant and religious practitioner, spectator and performer, “commoner” and “elite” in a ritual community that mimicked and reinforced domestic preoccupations and marked and created time itself.
Chapter 6
Conclusion

6.1 Constructing Huaca Colorada: Making Worlds, Binding Pachas

During the 83rd meeting of the Society for American Archaeology in Washington D.C. in April of 2018, Catherine Allen delivered a lecture at Dumbarton Oaks to a capacity crowd. Her talk was entitled: “Looking Ahead to the Past: An Ethnographer’s Perspective on Archaeology in the Andes” (Allen 2018). Over the course of an hour, Allen presented a distillation of fifty years of her ethnographic research conducted in the Andes, and the presentation highlighted the numerous conceptual touchstones that have shaped the trajectory of contemporary Andean archaeology. It is safe to say that the entire audience in attendance, including myself, owes Allen a considerable debt of gratitude. Her nuanced ethnographic work has provided archaeologists an invaluable source of analogies and a rich account of Andean lifeways in the Cusco region that have informed our interpretations of the fragmented remains of ancestral communities.

Woven from interlocking lines of linguistic and sociological inquiry, Allen’s search for Andean specific ontologies underwriting social practice has long defined her scholarship and enlivened archaeological interpretations, albeit with reservations. Comparison of the tattered threads of evidence we collect archaeologically to the living, vibrant communities of the region obviously proves challenging and is open to criticism. The looming specter of cultural essentialism is referred to in this specific case as lo andino. Inspired by Said’s orientalism, Orin Starn coined the concept to criticize scholars’ depiction of Andean cultures as homogenous, static, and unchanging (Quilter 2013:19; Starn 1991; Weisman 2006). It thus refers to a constellation of perduring cultural traits that defined a millennial long worldview and way of life specific to the Andes. If Andean cultures have changed little and are defined by enduring essences, then archaeologists can make ready use of ethnographic and ethnohistoric analogues to interpret ancient Andean polities. Archaeologists have thus inferred traditional kinship structures based on the ayllu, paired moieties, ecological complementarity (verticality) and the importance of social
and cosmic dualism that extends directly from the ethnographic present into the deepest recesses of the past (Benfer et al 2011, Burger and Salazar-Burger 1993, Hastings and Moseley 1975, Moore 1995, Netherly and Dillehay 1986). Without question, uncritical application of ethnographic analogies can be charged with perpetuating *lo andino* essentialism. However, the choice to ignore the local context and the clear resilience of certain Andean ontologies and epistemologies could prove far more dangerous.

The core of Allen’s presentation anchored itself to Andean approaches to the concept of the house as both subject and actor within the communities she has studied. In the animistic ontology of the community of Sonqo in the province of Cusco that Allen studied, the built environment is engaged and enlivened as active social members inextricably entangled with human agency. In particular, she describes the fractal relationships between human actors and material objects as a process formed of reciprocal relations and synecdochal interactions. Identification of this complex interrelationship relied upon the comparison of a suite of Quechua concepts of her informants with ethnohistoric documentation of Inka cosmology. Amongst these concepts, the most widely employed are cama (form-infusing force), sami (the flow of animating force), tinku (the way to balance momentarily nonidentical forces), huaca (energetically powerful places) and most holistically, pacha (world: a configuration of time, space, matter and consciousness) (Allen 1997, Bray 2009). Allen stresses that these concepts cannot be applied directly to the study of ancient communities such as the Moche. Instead “they expose us to certain ontological premises about matter, agency, and animation that may guide our thinking in new channels” (Allen 2019:336). The three theses presented in the preceding chapters have closely followed this philosophy, in my attempt to interpret the pacha or exceptional world in which Huaca Colorada was continually built and rebuilt, enlivened, killed, and re-enlivened prior to eventual abandonment.

According to Allen, the term pacha can refer to the whole cosmos or to a specific moment in time, what she summarizes as a “world-moment”, with the precise meaning depending on the context (Allen 1998). Pacha is often thought to best compare with the western concept of “spacetime” (Qespi 1994). In his recent work on the pacha concept amongst the contemporary Aymara of Bolivia, Juan Villanueva Criales argues that the tripartite structure of pacha also presents a certain degree of fractality that makes it applicable to many spatial and temporal scales, from quotidian tasks, annual cycles and the realm of mythic history as inscribed in the
landscape (Villanueva Criales 2019: 275). The three interconnected realms are described as the Ukhu Pacha, Kay Pacha and Hanan Pacha. Ukhu Pacha is the inner, subterranean underworld defined by dark and nondifferentiated aspects of the ancestral, as a place bound closely to the germinating potential of seeds and agricultural growth as inherited from past generations. The Kay Pacha, or middle world, is the suspended state between present and the past that people, animals and plants inhabit, the perceived world as we know it. The divine Hanan Pacha, or upper world, is inhabited by forces of light, the sun, the world of colours and differentiation, of day, revelation and clear contrasts. According to Villanueva, the concept of pacha is punctuated by tinkus, the moment/place of union of unbalanced forces that serve as the transitional action between the realms of the differentiated and the nondifferentiated. Tinkus involve the making and “un-making” of an actor, not simply equated to birth and death, but the creation of an entity in a relational and gradual manner. As the pauses between stages, these moments allow for reconfiguration and renewal bringing the cosmos, the moment, and space-time into a confluence of materiality and subjectivity.

For Allen, the chaîne opératoire elemental to the construction of a house as a sacred locale or huaca serves as an example of how the flow of the energized consubstantial forces of cama and sami come together to create place through a series of rebalancing choices or tinkus. As the end of a chthonic line that links the mountains, the earth, and the community in a chain of communication between the various levels of pacha, the creation of huacas place people in the landscape, linking past entities and present matter. From this perspective, adobe bricks become the community materialized, the soil of the place formed and concretized as an undomesticated material that is domesticated through its transformation. The act of making bricks is a process by which the ukhu pacha, aspects of the local soil, is mixed with the living waters that flow through and enliven the kay pacha that are then left to dry and harden under the hanan pacha sun. Making adobe bricks and setting them into order to form a house or a huaca as a community becomes a metonymic representation of all of the relationships that created it. The built environment is literally made of the constituent parts of the landscape and it is through their combination that social space is constructed as a meaningful place at all levels of pacha.

This literal social “technology” of active place-making (“creation”) is reflected in the architectonic narrative that played out at Huaca Colorada as presented in this thesis. In fact, in her presentation at Dumbarton Oaks, Allen mobilized Huaca Colorada as a prime example of the
complexity of the process of making community through materialized acts of building and renovation. Allen referred to the phases of construction of Huaca Colorada as an “inscrutable jumble”, a collection of partial elements that combine to create a single whole that in itself is composed of layers of both space and time. The encapsulation of each phase of construction served as the foundation on which new iterations of community and animated infrastructure were built, and actively presented the ancestral vestiges of previous phases and earlier times vital to the rituals of social reproduction defining the huaca. In this way, the past was very much a powerful place; former phases of use and occupation were literally contained within and supported the present (Swenson and Jennings 2018). During each occupation, the ceremonial architecture of a single phase at Huaca Colorada formed the stage on which the realm of kay pacha played out, a moment held in tension between the ancestral, hidden ukhu pacha of earlier occupations and in interaction with the divine immensity of the hanan pacha through ritual acts conducted in full view of the community.

Although it is tempting to relate the three fractal levels of pacha to western notions of past, present and future, I believe it proves especially productive to compare pacha philosophy with Lefebvre’s spatial triad as a nested set of interdependent perceptions, conceptions and lived experiences of social space (Lefebvre 1991). Lefebvre’s “Spatial Practice” and kay pacha both deal with the present, the perceived space of what is seen and ruled by instinct, the realm of the physical and material practices that take place within a particular location, and the routes, networks and movement of everyday life as prescribed by the space at hand. The past, ancestral yet emergent aspects of ukhu pacha align with the “Representation of Space” as the conceived discourse on space, a mental conceptualization developed by central authorities such as planners and architects who wield control over the inherited structures of knowledge and the system of signs that maintain an ideologically sanctioned space. By combining the structures of perception and conception, kay pacha and ukhu pacha, the transcendent aspects of hanan pacha is reflected in “Representational Space” or “Spaces of Representation”. This third component refers to the lived world of what is felt, the discourse of space that overlays physical space and makes symbolic use of its objects as is the realm of ritual conditions (Lefebvre 1991: 39, Swenson 2012a). Huaca Colorada presents a remarkable example of how these two conceptual frames align: as a lived, divine ritual space, built upon conceptions of inherited, ancestral knowledge that was perceived through physical participation within a materialization of a specific ideology.
The complex architectural biography of Huaca Colorada presented in this thesis suggests that *huacas* symbolically materialized corporate affinity that embodied the connection between the wider community and their intimate association with the local, sacred landscape. This intimate association was mediated by ritual exchanges with a deified elite, the identity of whom was inextricably intertwined with the living and ever-morphing monument. This symbolic bond was reinforced physically through incorporative acts of construction as well as human and animal sacrifice linked to dedicatory and termination rites of architectonic renewal. As the Moche culture lacked a written language, a combination of iconography and architecture materialized and inculcated ideologies that shaped fundamental ontologies, including those of embodiment, temporality, and belonging. The *huaca* form, at both monumental and miniature scales, was intended to be emotionally evocative and physically arresting and the desired impact of the original builders is still felt to this day (Swenson 2018e). I argue that the prime function of central monumental *huacas* served to reinforce ideas of membership and association of individuals as vital component parts of the sacred, macrocosmic whole of the greater community to which they belonged. It was through their interaction with and participation in the creation of this powerful locale that social identity was forged for every member of the community.

The investigations undertaken within the ceremonial precinct of Huaca Colorada have presented a unique opportunity to trace the trajectory of how a specific community operationalized and expressed their understanding of place through time. The renovations and renewals of this important ritual locale represent a series of active interventions in the creation of space and community, moments of *tinku* wherein the combined act of construction and sacrificial offering may have served to equilibrate the cosmos during periods of rupture or change. Careful documentation of these patterns of renovation presented in this thesis has given voice to the vestiges of meaningful action embedded within the “inscrutable jumble” of walls and floors of the ceremonial core of Huaca Colorada. Although destructive in nature, I argue that the act of archaeological excavation at Huaca Colorada can be seen as an extension of the “memory work” that guided the construction of this ceremonial space in antiquity (Meskell 2008, Mills and Walker 2008). The architectonic biography of Huaca Colorada presented in this thesis relied upon the careful documentation and close reading of the traces of meaningful action in the past not as a record, but as a process of becoming. Hence, the “memory work” of excavation and documentation of the site of Huaca Colorada constitutes another phase of the life history of the
site. As presented in the previous chapters, the act of construction at Huaca Colorada activated a process of building and refining both ideological and material infrastructures over a period of cultural change spanning the Late Moche and Transitional Periods.

Analysis of the architectural history of Huaca Colorada has provided a unique opportunity to study a period of cultural transition in a way that is seldom possible through traditional typological studies of portable artifacts or building styles. Despite the near complete excavation of the ceremonial precinct of Huaca Colorada, a series of dissertation projects that are currently underway will continue to elucidate specific details of the occupational sequence of the site beyond the ceremonial core. The analysis of the wealth of artifactual data collected over the years of excavation across the site will no doubt provide a suite of new insights that will build upon the research presented in this thesis. Scientific studies of zooarchaeological remains and metallurgical assemblages in relation to continued Bayesian studies of the collected radiometric dates will further build on the narrative I have presented here. Ongoing excavations in Tecapa will clarify our understanding of the role of Huaca Colorada in the Transitional Period, research that will provide the epilogue and dénouement of this section of the cultural biography of the Cañoncillo region.

This thesis has woven together a number of independent, yet interconnected conceptual threads built upon numerous lines of evidence obtained from excavation and my detailed spatial analysis. The comprehensive interpretation of the life history of a singular ceremonial locale constructed, inhabited and abandoned by the Late Moche and Transitional Period populations of the Cañoncillo region, has presented an exceptional opportunity to move beyond traditional examinations of monuments as mere reflections of sociopolitical organization or an elite ideology. The methodical reconstruction of the phases of renovation of this complex structure has allowed me to develop a sense of the nested, synecdochal ontological frame specific to the community of builders. The diachronic nature of this study has also permitted an indepth consideration of how these fundamental ideological concerns mediated architectonic expressions of time, place, and identity over time. Continuities in the sacrificial ethos of construction within the ceremonial core indicate the enduring importance of interconnecting and merging different kinds of “bodies” within a singular and nested ontological continuum. This ideology spanned political and religious transformations between the Late Moche and Transitional Periods. However, the emphasis on constant becoming (repeated remaking of the built environment),
impermanence, and continual nesting of bodies may have become deemphasized in the Transitional Era as suggested by my access pattern analysis. Nevertheless, citation of previous iterations of ritualized architectural renovations in both periods served as a technology of time, powerfully reifying conceptions of place and forging attachments to the sacred landscape. Thus, the reconstructions literally made history and created a shared sense of identity and, as I argued, a collective home between generations distinct to the peoples of Huaca Colorada. From this perspective, the cycles of construction and renovation served to reiterate and strengthen the bond between each new community of builders and the landscape they shared through time.
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