# MORE THAN MILITARY: DECOLONIAL APPROACHES TO DEFENSIVE AND MILITARISTIC ARCHITECTURE IN COLONIAL MEXICO

by

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Art and architectural history's disciplinary inclination has traditionally been to assign value to works of architecture based on a binary categorization scheme wherein some buildings are understood to be works of "architecture," while others are termed "utilitarian" and thus are of little interest to the art historian. Fortifications and buildings constructed in a militaristic style are, more often than not, relegated to the space of this latter category. Yet, if we acknowledge that art and architectural history's purpose is, at least in some part, to enable us to understand the ideas and experiences that shape societies, we would be remiss in excluding defensive and militaristic constructions from study given their often prominent role at points of political, social, and cultural conflict.

This dissertation takes a decolonial approach to analysis of sixteenth-century colonial Mexican defensive and militaristic architecture and its adornment, examining the fortress of San Juan de Ulúa in Veracruz and the fortress monasteries of San Miguel el arcángel in Huejotzingo and San Salvador in Malinalco and their relationships to pre-Hispanic architecture at Teotihuacan, Xochicalco, Cacaxtla, and Malinalco. I put forth interpretations that yield new and different perspectives on the historical significance and cultural relevance of these sites. These interpretations intentionally decenter Europe and disrupt the Eurocentric perspectives characteristic of foundational studies of the architecture of colonial Latin America. I argue that examples of defensive and militaristic architecture and its adornment in pre-Hispanic and early colonial Mexico are critically important cultural artifacts that illuminate the common importance of ritualized militarism prior to the Spanish invasion in 1519 and in the decades that followed.

Creating a decolonial avenue for understanding this style of architecture is also important because it is infrequently analyzed from the perspective of those who were not victorious in the conflicts associated with colonialism. Thus, this dissertation furthers the efforts of scholarship in the field of Latin American art history to elevate Indigenous knowledge and architectural traditions that preceded and coincided with the Spanish occupation of the Americas to advocate for a re-envisioning of the history of defensive and militaristic architecture from the perspectives of the Global South. ... to Oiseau ...

There will never be enough words to thank you for walking this world with me.

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#### **INTRODUCTION**

Art and architectural history's disciplinary inclination has traditionally been to assign value to works of architecture based on a binary categorization scheme wherein some buildings are understood to be works of "architecture," while others are termed "utilitarian" and thus are of little interest to the art historian. Fortifications and buildings constructed in a militaristic style are, more often than not, relegated to the space of this latter category. Yet, if we acknowledge that art and architectural history's purpose is, at least in some part, to enable us to understand the ideas and experiences that shape societies across time periods and places, we would be remiss in excluding defensive and militaristic constructions from study given their often prominent role at points of political, social, and cultural conflict.

This dissertation takes a decolonial approach to the analysis of sixteenth-century colonial Mexican defensive and militaristic architecture and its adornment. I put forth interpretations that yield new and different perspectives on the historical significance and cultural relevance of these sites. These interpretations intentionally decenter Europe and disrupt the Eurocentric perspectives characteristic of foundational studies of the defensive and militaristic architecture of colonial Latin America. I argue that examples of defensive and militaristic architecture and its adornment in pre-Hispanic and early colonial Mexico<sup>1</sup> are critically important cultural artifacts that illuminate the common importance of ritualized militarism both prior to the Spanish invasion in 1519 and in the decades that followed. Ritualized militarism, in this context, is the conflation of aspects of ceremony and belief systems with military methods, both in practical and

<sup>&</sup>lt;sup>1</sup> To ensure clarity of terms, throughout this study "colonial Mexico" is used to refer to the "Viceroyalty of New Spain," or "New Spain." "Mesoamerica" is used to refer to the region that includes the territory of the present-day country of Mexico during the period prior to the Spanish invasion in 1519.

in symbolic forms, that are specifically employed for the purposes of gaining and maintaining power.

To build this case, I examine Mesoamerican and European traditions in defensive and militaristic architecture and their strategic conflation in colonial Mexico. I argue that the resulting structures exemplify architectural hybridity, reflecting European and Indigenous architectural traditions and belief systems. I further argue that these hybrid spaces are manifestations of the agency of Indigenous creators and Europeans, making them polysemic and performative spaces of negotiated power. As such, they are particularly culturally relevant artifacts that offer insight into the complex cultural intersections of the early colonial period.

Defensive architecture is here defined as architecture that practically and symbolically serves a functional purpose related to the establishment and maintenance of power in the context of war. It literally protects territories or spaces and populations in instances of bellicose conflict. Examples include functional fortresses and fortified structures. In contrast, militaristic architecture is built in a style that appears defensive in nature, but does not have a protective function in war. Outstanding examples include the fortress monasteries and fortress-like civic structures of colonial Mexico and the fortified ritual sites of pre-Hispanic Mesoamerica. Their military bearing is performative in its symbolic establishment and maintenance of power. It is imperative to note that defensive architecture and militaristic architecture are not mutually exclusive categories. Defensive architecture certainly is performative and symbolic in addition to being functional in instances of war.

My examination of the pre-Hispanic tradition in defensive and militaristic architecture and its adornment focuses on select Mesoamerican edifices at Teotihuacan, Xochicalco, Cacaxtla, and Malinalco. These sites illuminate the ongoing investment in and significance of

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defensive and militaristic architecture over time. Additionally, they are geographically, and in the case of Malinalco, temporally proximate to the Mexican colonial sites also studied here. These colonial sites include the Spanish fortification of San Juan de Ulúa and the fortress monasteries of San Miguel el Arcángel in Huejotzingo and San Salvador in Malinalco. I argue that the architecture and iconography of these structures are informed both by theoretical and practical developments in Italian Renaissance and Early Modern European defensive architecture and by Mesoamerican traditions and building practices. They are also testaments to the ongoing importance of ritualized militarism in the colonial context of the sixteenth century. And, as such, they are best examined through a decolonial lens that makes clear their cultural relevance as hybrid, multivalent spaces of negotiated power between Europeans and Indigenous peoples.

To establish a relevant through-line from pre-Hispanic sites to colonial Mexico, I engage in upstreaming as a methodological approach. Through upstreaming, modern scholars seek to understand cultural patterns and the people who created them in the past via their descendants<sup>2</sup> in a more contemporary present.<sup>3</sup> This method is particularly essential in instances where recorded primary source information is limited or non-existent, as is the case in pre-Hispanic Mesoamerica. Written records that speak to the cultural and architectural developments analyzed in this study simply do not exist. The archaeological record, by contrast, is quite robust. I, therefore, use the principles of upstreaming to analyze developments in defensive and militaristic

<sup>&</sup>lt;sup>2</sup> This reference to "descendants" is not intended to be literal. Rather, it is an indication of analysis of generations of peoples that followed those who built and occupied the pre-Hispanic sites considered here.

<sup>&</sup>lt;sup>3</sup> Upstreaming is referenced by William N. Fenton in his anthropological study of the Iroquois in New York. The term is first referenced in William N. Fenton, *Iroquois Journey: An Anthropologist Remembers* (Lincoln: University of Nebraska Press, 2007). An example of relevant scholarship on Pre-Columbian cultural traditions that uses upstreaming as a model is Cecilia Klein's examination of modern understandings of and cultural practices associated with gender ambiguity in Mexico. She uses these as a mechanism for interpreting and better understanding pre-Hispanic Nahua beliefs and practices related to gender identity. From Cecilia Klein, "None of the Above: Gender Ambiguity in Nahua Ideology," in *Gender in Prehispanic America* (Washington DC: Dumbarton Oaks, 2001): 183-253.

architecture as they relate to the ongoing importance of ritualized militarism beginning with Teotihuacan, in approximately 150 CE, and continuing at Xochicalco, Cacaxtla, Malinalco, and through the Spanish invasion of Mexico in the early sixteenth century.

It should be noted that upstreaming is not without possible pitfalls. In principle, it seeks out recognizable cultural patterns over time and across related groups. It also holds that certain aspects of culture as observed in later periods can guide our understanding of the more distant past. There is an inherent challenge in this assumption because nothing truly remains static over the course of time.<sup>4</sup> However, in the absence of records beyond the archaeological, upstreaming is a necessary tool. In the present study, it is essential for complicating our understanding of sixteenth-century colonial Mexican edifices.

Creating a decolonial avenue for understanding defensive and militaristic architecture in Spanish America, and in colonial Mexico in particular, is also important because, until recently, much of the pertinent scholarship infrequently accounts for Indigenous perspectives.<sup>5</sup> This is, in

<sup>&</sup>lt;sup>4</sup> Other critiques of upstreaming include that presented by Kubler, who argues that works of art cannot record anything they are not "programmed" to register. Further, Kubler notes limitations in technological resources and figural traditions. He argues that art should not be understood as reflective of life and we should therefore limit the extent to which we acknowledge the information that art can convey. George Kubler, "History - or Anthropology of Art?" *Critical Inquiry* 1, no. 4 (June 1975): 766. Esther Pasztory also offers a critique of upstreaming by arguing that pre-Columbian arts should not be be understood as "steps on a ladder, or endpoints on a scale" and further that naturalism, for example, "is neither a specific 'vision' nor a technological skill belonging to a particular stage of culture. It has most to do with the social and political requirements of a given context. Moreover, it is also clear that there is not, necessarily, a grand overall development in the arts of an area. Development is restricted largely to the area of individual cultures." Esther Pasztory, "Aesthetics and Pre-Columbian Art," *Anthropology and Aesthetics*, no.29-30 (Autumn 1996): 322. If we accept Pasztory's critique, it would not be possible to effectively evaluate the artistic practices of the contemporary Maya, for example, and successfully apply that knowledge to an effort to understand the past because the development of the current culture is restricted to that culture alone.

<sup>&</sup>lt;sup>5</sup> Scholars who have undertaken relevant critical studies written from a decolonial perspective include Jeannette Peterson whose *The Paradise Garden Murals of Malinalco* (1993) is frequently cited in this study. Peterson offers an interpretation of the murals at Malinalco that does not exclusively privilege European perspectives on artistic creation in the colonial context. Eleanor Wake's *Framing the Sacred* (2016) similarly challenges the notion that early colonial churches built in Mexico solely reflect European viewpoints and instead encourages understanding these churches as reflecting the beliefs of the Indigenous communities that built them. Additionally, Alessia Frassani's *Building Yanhuitlan: Art, Politics, and Religion in the Mixteca Alta Since 1500* examines how post-conquest Mesoamerican culture was shaped by the active participation of Indigenous peoples in its development.

part, due to the lack of a written archive of Indigenous perspectives on the structures produced in Mesoamerica prior to the arrival of the Spaniards. Archival evidence collected during the early colonial period that is written by Indigenous sources is also notably limited. Although the lack of archival records presents a challenge, it must also be acknowledged that the archive itself presents another sort of challenge as it is perhaps best understood as a tool of imperialism that captured, codified, and reinforced European power.<sup>6</sup>

Given the role of the archive in the imperial scheme furthered by the Spanish in Latin America, this study draws on Lisa Lowe's advocacy, as articulated in the *Intimacies of the Four Continents*, for methodologies and approaches to history that read across the archive through interdisciplinary study. To this end, my study accounts for perspectives of the Global South by braiding scholarship in the disciplines of art and architectural history with that of ethnic studies, postcolonial studies, and decolonial studies. Reinterpreting the history of colonialism from this perspective is essential not just to understanding the colonial past more thoroughly and accurately, but it is also essential to our present as we, as a global community, continue striving to redress the long-entrenched negative impacts of colonialism, to recognize its violences, and to elevate the perspectives of those who have been historically marginalized. It is also imperative that this project not be a mere retelling of history, but rather, to build on the foundation established by Lowe, it must be a concerted effort to return to the past, to acknowledge its known gaps and uncertainties, with transformative intentions.<sup>7</sup>

My study draws on this foundation while also engaging with Saidiya Hartman's work in "Venus in Two Acts." In this essay, Hartman advocates for an illumination of the "contested

<sup>&</sup>lt;sup>6</sup> Lisa Lowe, *The Intimacies of the Four Continents* (Durham: Duke University Press, 2015), 4. Lowe, drawing from Ann Laura Stoler, argues that the colonial archive is a 'supreme technology of the imperial state, a repository of codified beliefs that clustered (and bore witness to) connections between secrecy, the law, and power.'

<sup>&</sup>lt;sup>7</sup> Ibid., 175.

character of history," not necessarily to give voice to the voiceless among the archive, but rather to imagine their experiences despite those experiences being unverifiable through reference to archival materials.<sup>8</sup> Hartman goes so far as to advocate for what she terms "critical fabulation," which is a method for writing cultural histories that actively displaces the content and history authorized by the archive with an imagining of what might have been, narrated from the perspective of the traditionally voiceless.<sup>9</sup> I do not propose a fabula<sup>10</sup> associated with the defensive and militaristic architecture of colonial Spanish America in my study. Instead, I call for a reconstruction of the discipline of art and architectural history's approach to this style of architecture that acknowledges the gaps in our written histories and seeks to address them through analysis of the archaeological, artistic, and architectural record in such a way that creates space for new and more complex interpretive possibilities.

Although this decolonial reading serves as a critical intervention that challenges the traditionally Eurocentric approach to colonial Latin American architecture, which became institutionalized within the canon of the discipline by the likes of George Kubler and Martin Soria, among others, it should be noted from the outset of this study that I am not employing a decolonial lens with the intention of speaking for the Indigenous peoples of Mesoamerica. Instead, I create pathways that illuminate the potential for more robust readings of the fortifications and militaristic constructions of the Spanish colonial period that specifically recognize architectural hybridity and its related multivalent interpretive possibilities. In so doing,

<sup>&</sup>lt;sup>8</sup> Saidiya Hartman, "Venus in Two Acts," Small Axe 26 (June 2008): 12.

<sup>&</sup>lt;sup>9</sup> Ibid., 11.

<sup>&</sup>lt;sup>10</sup> Ibid., 11. Mieke Bal defines a fabula as a 'series of logically and chronologically related events that are caused and experienced by actors. An event is a transition from one state to another. Actors are agents that perform actions. (They are not necessarily human.) To act is to cause or experience an event.' This definition is referred to by Hartman and is derived from Bal's *Narratology: Introduction to the Theory of Narrative* (Toronto: University of Toronto Press, 1997), 7.

I strive to actively avoid privileging Western points of view, and instead, I present the hybridity of defensive and militaristic architecture in sixteenth-century Mexico as a manifestation of the complex convergence of cultures and associated negotiations of power that occurred as a result of the Spanish invasion.

Applying this lens does not and cannot accomplish the fundamental objective of decolonization: the repatriation of Indigenous lands and Indigenous life. As Eve Tuck and K. Wayne Yang articulately argue in their article "Decolonization is Not a Metaphor," "the metaphorization of decolonization makes possible a set of evasions, or 'settler moves to innocence,' that problematically attempt to reconcile settler guilt and complicity, and rescue settler futurity."<sup>11</sup> The intention of my work is not to present decolonization as a metaphor nor to reinscribe the violences of settler colonialism. Rather, I articulate interventions that disrupt the Eurocentric perspectives that have largely dominated studies of art and architectural history in colonial Latin America. And further, I create opportunities to see the defensive and militaristic edifices of sixteenth-century Mexico as truly hybrid constructions born of Indigenous and European traditions and belief systems, while also expanding academia's treatment of this style of architecture more broadly.

### Reimagining the Study of Defensive and Militaristic Architecture in Latin America

To complicate our understanding of colonial militaristic and defensive architecture, it is essential to acknowledge and elevate the multiple ontologies and perspectives that informed its creation while challenging the notion that these types of buildings are solely or primarily reflective of a European conquering power. This perspective is derived from the historically

<sup>&</sup>lt;sup>11</sup> Eve Tuck and K. Wayne Yang, "Decolonization is Not a Metaphor," *Decolonization: Indigeneity, Education & Society* 1, no. 1 (2012): 1.

Eurocentric approach that has been used to evaluate the art and architecture produced in colonial Latin America. It is rooted in some of the earliest writings on the arts of this region produced by Manuel Toussaint. In his efforts to record and preserve the colonial monuments of Mexico,<sup>12</sup> Toussaint often used pejorative language describing these works as "pagan" or as created by a "rude Indian hand," thus positioning Europe as an apex to which these colonial works did not measure up. The notion of inferiority that is implied in this characterization was further institutionalized through the use of the term *tequiqui* to indicate that works of art and architecture created under Spanish colonial rule were merely tributes to European antecedents.<sup>13</sup>

In this study, I challenge the implication of inferiority and elevate the extent to which Indigenous traditions in art and architecture extended into and were creatively elaborated upon in the colonial period. I directly counter Kubler's argument that European artistic conventions were so powerful that they "precluded any real continuation of native traditions in art and architecture," resulting in the death of Indigenous motifs in a form of symbolic extinction.<sup>14</sup>

<sup>&</sup>lt;sup>12</sup> Toussaint documented Viceregal monuments of Mexico as the head of the Departamento de Bellas Artes in Mexico City and as the director of the Dirección de Monumentos Coloniales y de la República under the Instituto Nacional de Antropología e Historia. Elizabeth Wilder Weisemann, "Manuel Toussaint 1890-1955," *The Hispanic American Historical Review*, 36, no.2 (May 1956): 268.

<sup>&</sup>lt;sup>13</sup> José Moreno Villa, *La escultura colonial mexicana* (Mexico City: Colegio de México, 1942) and José Moreno Villa, *Lo mexicano en las artes plásticas* (Mexico City: Colegio de México, 1947). In the 1940s, José Moreno Villa coined the term *tequiqui*, using it to indicate the "tributary" nature of works created by Indigenous artists under colonial rule. In using this term, Moreno Villa suggests a sort of European primacy to which colonial works are merely paying homage. Johanna Hecht also uses the term *tequiqui* to describe the style of works of art and architecture produced by Indigenous artists working in colonial Mexico. Her framing approaches *tequiqui* as a sort of artistic synthesis or "redrawing" of European designs. Although she importantly acknowledges the agency of colonial, and primarily Indigenous, artists and craftsmen, she nonetheless centers Europe, and the Renaissance in particular, as the basis from which all colonial artistic production, and architecture in particular, originated. Johanna Hecht, "Mexican Architecture and Sculpture in Renaissance Modes," in *Mexico: Splendors of Thirty Centuries* (Boston, Massachusetts and New York, New York: Metropolitan Museum of Art, 1990), 280-281.

<sup>&</sup>lt;sup>14</sup> George Kubler, "On the Colonial Extinction of the Motifs of Precolumbian Art," *Studies in Ancient American and European Art* (1961): 66-67, 69. Although his analytic approach elevates European architectural tradition to a place so superior that Indigenous motifs had little opportunity to survive, let alone be acknowledged in scholarship, Kubler does articulate the possibility of "convergence." Through convergence, some aspects of architecture and ornament can reveal a blending of Indigenous artistic practices with European antecedents. As an example, Kubler points to the façade ornament of the *Casa Montejo*, which appears to boast a conflation of Renaissance European as well as Indigenous Maya forms. Despite this apparent blending of European and Indigenous influences, Kubler

Indigenous motifs did indeed live on in the defensive and militaristic art and architecture of the colonial period. And, in contrast to the argument made by Kubler,<sup>15</sup> the Spanish proclivity for symbolically building colonial edifices atop Indigenous foundations as an indication of conquest did not unilaterally relegate Indigenous traditions to a pagan past.

The idea that Indigenous traditions and artistic conventions could so comprehensively be relegated to the past further implies a lack of agency on the part of Indigenous creators, who I argue were central to the construction of colonial Mexico. This implied lack of agency has historically been reinforced in the discipline of art history via the superior status often assigned to the artistic traditions of Spain and Portugal as "Mother countries" and the subsequent demotion of colonial art to the category of "folk art."<sup>16</sup> The center-periphery model often employed in the study of Latin American art also creates a related hierarchy wherein Europe is understood to be the artistic metropolis from which style emanated and was reinterpreted in

argues that it is impossible to know whether these convergences are "intentional, or subconscious, or purely adventitious." He further points to the lack of documentary record to substantiate any of these three possibilities.

<sup>&</sup>lt;sup>15</sup> Ibid., 67.

<sup>&</sup>lt;sup>16</sup> George Kubler and Martin Soria. *Art and Architecture in Spain and Portugal and their American Dominions: 1500-1800* (Baltimore, Maryland: Penguin Books Ltd., 1959), 164. In his collaboration with Martin Soria, first published in 1959, Kubler and his co-author further elevated European artistic traditions, particularly those of the "Mother countries" of Spain and Portugal, characterizing them as superior to any art or architecture created in the Americas. By contrast to the quality and splendor of European art and architecture, the authors characterize colonial art as "folk art," implying through the use of this term that this art was far inferior. This approach to examining colonial Latin American art and architecture denies the value of any sort of Indigenous artistic tradition and further assumes a lack of agency as well as the skill among Indigenous creators by relegating all of their works to the space of imitation.

far-flung points of reception.<sup>17</sup> This approach, too, minimizes the agency, intentionality, and skill of Indigenous creators.

As a counter to the aforementioned approaches, in this study, I argue that the synthesis of iconography and architectural forms, from pre-Hispanic as well as European traditions, in the fortified architecture of the sixteenth century reveals significant agency as well as power on the part of the Indigenous creators. This is further bolstered by the critical role that these creators played in the construction process and in the choice of materials and techniques used to build the fortresses and fortress monasteries of Mexico. Recognizing this agency builds on the scholarship of John McAndrew, who importantly acknowledged the quality of art created by Indigenous artisans under European masters and its resultant stylistic synthesis.<sup>18</sup> The agency of Indigenous creators was further recognized by Constantino Reyes-Valerio through his identification of the more than 100 pre-Hispanic motifs included in sixteenth-century colonial buildings. In describing these motifs and the buildings that feature them as *"indocristiano*," Reyes-Valerio semantically and conceptually acknowledges the blending of Indigenous and European influences that resulted in the creation of a style that was new and distinctly colonial.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Thomas DaCosta Kaufmann, *Toward a Geography of Art* (Chicago: University of Chicago Press, 2004). The notion of center-periphery, wherein Europe functioned as the artistic metropolis from which style emanated and was reinterpreted in far-flung provincial points of reception, continued to be elaborated upon by Kaufmann. He suggests that a geography of art can be articulated wherein artists, ideologies, objects, skills, and styles as well as patterns of production and distribution are organized across the colonial world, with all of the above generally germinating in and spreading from Europe. In his consideration of the façade of San Lorenzo in Potosí, Bolivia, for example, Kaufmann notes the influence of the European Plateresque in its design and ornament. At the same time, he also acknowledges that architectural forms are not neutral and that perhaps colonial structures, like San Lorenzo and others, are better understood as *mestizo* masterpieces within the specific context of their cultural geographies. In considering Kaufmann's work, it is evident that he is influenced by the thinking of Kubler. And, although Kaufmann's geography of art acknowledges expanded cultural influences in its study of style, his approach remains a largely Eurocentric one.

<sup>&</sup>lt;sup>18</sup> John McAndrew, *The Open-Air Churches of Sixteenth-Century Mexico* (Cambridge: Harvard University Press, 1965), 174.

<sup>&</sup>lt;sup>19</sup> Constantino Reyes-Valerio, Arte Indocristiano (Mexico City: Instituto Nacional de Antropología e Historia, 1978).

The participation of Indigenous creators in the creation of a "regional" style is also acknowledged by Samuel Edgerton, who coined the term "expedient selection" to describe the ways in which European and Indigenous motifs in the visual arts were intentionally blended or hybridized to serve the colonial mission of conversion.<sup>20</sup> Edgerton's notion of synthesis importantly recognizes the skill of Indigenous creators and their agency in the artistic process. I argue, expanding on these scholarly precedents, that further examining the active role of Indigenous creators is a basis from which decolonial readings of Spanish American art and architecture can be advanced.

Understanding the active role that Indigenous creators played in the development of colonial styles also speaks to the critical issue of hybridity, which is studied in depth here. Throughout this study, I specifically highlight the hybrid complexities of defensive and militaristic architecture in colonial Mexico to make clear that they have the potential to aid us, as modern viewers, in addressing the gaps and elisions of the art and architectural histories that largely fail to mention "utilitarian" fortified structures, let alone their potential for multivalence. Acknowledging these complex hybridities is an important mechanism for negating the essentialization of culture as well. It further creates new spaces for recognizing and valuing unique cultural productions not predicated on assumed power dynamics between European invaders and Indigenous creators.

To advocate for more robust consideration of the hybridity of colonial defensive and militaristic architecture, I draw on Homi Bhabha's postcolonial articulation of the role of mimicry and hybridity among subaltern populations<sup>21</sup> as well as Matthew Liebmann's related

<sup>&</sup>lt;sup>20</sup> Samuel Edgerton, *Theaters of Conversion: Religious Architecture and Indian Artisans in Colonial Mexico* (Albuquerque: University of New Mexico Press, 2001), 2.

<sup>&</sup>lt;sup>21</sup> Kalpana, Seshadri-Crooks, "Surviving Theory: A Conversation with Homi K. Bhabha," in *Pre-occupation of Postcolonial Studies*, edited by Fawzia Afzal-Khan and Kalpana Seshadri-Crooks (Durham: Duke University Press, 2000), 370. Bhabha is quoted by Seshandri-Crooks. Hybridity, for Bhabha is "the strategic, translational transfer of

work on issues of power and inequity inherent to colonial societies.<sup>22</sup> The challenging of neat categorizations that results from acknowledgement of hybridity emphasizes the interdependence and multidirectional flow of cultural influences<sup>23</sup> in the colonial context. Not only is hybridity a testament to exchanges in cultural influences, it can also be a form of subversion, enacted through its nuance and ambiguity.<sup>24</sup> Building on this scholarship, I assert that acknowledging hybridity in colonial cultural artifacts, including buildings, allows for movement past Eurocentric interpretations of them and toward recognition of more complex power dynamics as they were actively negotiated by Indigenous peoples and Europeans in the early colonial period.

Examining hybridity in works of art and architecture is notably complex because of the issues of visibility that relate to what we, as art and architectural historians, often deem to be "hybrid." Generally speaking, art historical analysis is frequently and understandably driven by a consideration of the visual elements of works of art and architecture. Arguably, the scholarly approaches of the likes of Kubler, Soria, and Thomas DaCosta Kaufmann, among others

<sup>23</sup> Ibid., 31.

tone, value, signification, and position - a transfer of power - from an authoritative system of cultural hegemony to an emergent process of cultural relocation and reiteration that changes the very terms of interpretation and institutionalization, opening up and contesting, opposing, innovative, "other" grounds of subject and object formation." Hybridity, in this postcolonial sense, cannot neatly be parsed into distinct categories and as such is an apt characterization of the complex colonial architecture that this study examines.

<sup>&</sup>lt;sup>22</sup> Matthew Liebmann, "Parsing Hybridity: Archaeologies of Amalgamation in Seventeenth-Century New Mexico" in *The Archaeology of Hybrid Material Culture*, edited by Jeb J. Card (Carbondale, Illinois: Board of Trustees, Southern Illinois University, 2013), 31, 41. Not only are such power dynamics highlighted, but hybrid forms "create spaces for anticolonial resistance through the challenging of binary categories." Hybridity is not an innocuous concept nor is it one that is merely intended to indicate a blending of cultural influences. Drawing on Bhabha, Liebmann argues that hybridity not only highlights the negotiations of power central to the colonial condition, but it emphasizes the agency of subalterns through a mimicking, and in some cases mocking, of European-derived forms. Hybridity therefore "illustrates the limits of colonial dominance, where the discourse of colonial authority loses its unequivocal grasp and finds itself open to the interpretation of the colonized "Other." As such, recognizing hybridity encourages us to see objects and buildings in new ways. This recognition creates opportunities for understanding colonial cultural artifacts with increased nuance and complexity as well.

<sup>&</sup>lt;sup>24</sup> Stephen W. Silliman, "What, Where, and When Is Hybridity," in *The Archaeology of Hybrid Material Culture*, ed. Jeb J. Card (Carbondale, Illinois: Board of Trustees, Southern Illinois University, 2013), 495.

discussed here, rely heavily on observations of visible similarities or differences between European and Latin American works of art and architecture. In this study, too, visual observation plays an important role in establishing an understanding of pre-Hispanic and sixteenth-century colonial Mexican architecture. However, reliance on the visible characteristics of buildings, and especially hybrid colonial edifices, alone negates the importance of all that we cannot see.

To this end, Carolyn Dean and Dana Leibsohn's problematization of the notion of hybridity, or the "deceit of visibility," in the colonial context is particularly relevant to this study. While acknowledging that visual observation is undoubtedly essential to the practice of art and architectural history, the authors caution that visual indications of difference, blending, and even similarity can be deceiving.<sup>25</sup> In acknowledging visibility as a limiting factor when seeking to understand colonial art and architecture, Dean argues that we create opportunities for comprehending visual culture not through the lexicon of representation alone. Instead, she asserts that we, as art and architectural historians, must create space to acknowledge the presentation (living quality) of cultural artifacts as well.<sup>26</sup> This elevation of presentation is, in itself, a recognition of the possibility of multiple ontologies, or ways of knowing and interpreting reality. For Dean, then, perception is reality and there is no singular reality that can be assigned to any particular experience, object, or building. Rather, infinite realities can and do coexist.<sup>27</sup>

<sup>26</sup> Ibid., 312-313.

<sup>&</sup>lt;sup>25</sup> Dean, Carolyn and Dana Leibsohn. "Hybridity and Its Discontents: Considering Visual Culture in Colonial Spanish America." *Colonial Latin American Review* 12, no. 1 (2003): 13-15. Dean and Leibsohn coin the term "deceit of visibility" to describe the idea that perceived, visual hybridity can be misleading. They point to the invisible hybridities of the Qorikancha-Santo Domingo in Cusco, Peru, which can be described as "Europeanate" in its design and ornament but that is built with stones recycled from a pre-Hispanic ruin. It is, therefore, better understood as a hybrid structure. Its invisible hybridities are further complicated by Dean's argument for acknowledgement of the transubstantial and transformational aspects of stone in Inka belief systems. Carolyn Dean, "Reviewing Representation: The Subject-Object in Pre-Hispanic and Colonial Inka Visual Culture," in *Colonial Latin American Review*, 23, no. 3 (2014): 299.

<sup>&</sup>lt;sup>27</sup> Thus, as we consider hybrid objects or edifices, like the Qorikancha-Santo Domingo, or the fortifications and fortress monasteries of sixteenth-century Mexico, it is imperative that we make space for multiple realities and understandings that stretch beyond what we can see. Counter to the concern expressed by Bruno Latour regarding

Recognizing hybridity and its relationship to the existence of multiple ontologies and realities is particularly important in architectural studies. Stella Nair points out that architecture is often treated as a different kind of material culture and one that is frequently directly and exclusively associated with the state and its related institutions.<sup>28</sup> Thus, in the context of Spanish colonial America, architecture is frequently understood to be symbolic only of Spanish hegemony and dominance and subsequently as a reflection of European intentions in the Americas.<sup>29</sup> Although architecture functioned as a tool of conquest for the Spanish, assuming that "Europeanate" edifices are demonstrative of European perspectives and intentions alone belies the much more complex histories and implications of these structures. As Nair states, "architecture is dynamic and can reflect the specificity of the context in which it was built and the people who inhabited it."<sup>30</sup> In this study, I elevate this dynamism and the extent to which defensive and militaristic constructions in colonial Spanish America reflect the unique hybridity, whether visible or not, generated by specific conditions of the colonial context in which it developed.

Specific to architecture, recognizing these invisible hybridities also requires acknowledging the importance of the process of construction, not just the visible outcome of that

the outcome of such ontological relativism being a plunge "into a darkness in which all cows are gray," acknowledgement of the multiplicity of perceptive realities complicates and improves our understanding of colonial cultural artifacts and their hybridity, whether that hybridity is visible or not. Ibid., 307, 313.

<sup>&</sup>lt;sup>28</sup> Stella Nair, "Witnessing the In-visibility of Inca Architecture in Colonial Peru" in *Buildings & Landscapes: Journal of the Vernacular Architectural Forum* 14 (Fall 2007): 52.

<sup>&</sup>lt;sup>29</sup> Valerie Fraser, *The Architecture of Conquest: Building in the Viceroyalty of Peru, 1535-1635.* (London: Cambridge University Press, 2009, first published in 1990), 11, 167. Fraser bases her study of architecture in Spanish America on the idea that European sources of inspiration are obvious and that the colonial architecture of Mexico and Peru represents a reiterative spread of form from the center to the periphery, with Europe serving as the nexus from which style propagated across the colonial world. Fraser further articulates that the architecture of sixteenth-century Spanish America can solely be understood as an "architecture of and for conquest" and as such its European-derived style functioned as a mechanism for constructing and consolidating the Spanish empire.

effort. Connecting the construction process to the agency of the Indigenous leaders and builders, I draw specifically on Susan Verdi Webster's research on the "European-looking" architecture of colonial Quito.<sup>31</sup> Pointing to the importance of recognizing invisible hybridities, she argues that this architecture is multivalent and that these colonial buildings were understood differently depending on the audience that was viewing and interpreting them because of the agency, power, and authority associated with the construction process undertaken by Indigenous creators.<sup>32</sup> Although these structures may be outwardly "Europeanate" in their style, they are better understood as hybrid structures that concurrently appear European while also functioning as embodiments of the legacy of power the Inka associated with architecture, which predated the invasion of the Spanish.<sup>33</sup> In this study, I make a similar argument about the construction process associated with Mexican colonial edifices, pointing to the importance of acknowledging multiple ontologies and their relationship to the invisible hybridities inherent to the construction process. In recognizing this hybridity, the assumed power dynamics of colonialism, wherein the colonized are unilaterally subjugated to the hegemony of the colonizers, can be disrupted, and decolonial readings of otherwise visually "Europeanate" structures are possible.

<sup>&</sup>lt;sup>31</sup> Webster acknowledges the persistent inclination of art historical scholarship to rely only on visual observation of the character of buildings. She notes, for example, Kubler's assertion that Quito's architecture is governed entirely by European models as well as Diego Angulo Iñiguez's assertion that the buildings of colonial Quito "seem to reveal no signs of native agency" and that the "churches and monasteries present a varied set of patterns ranging from the purest Renaissance models to grand ensembles of Vignolesque proportions." On one hand, Íñiguez's assertion is not wholly inaccurate. As Webster points out, the architecture of colonial Quito does reflect the influence of European architectural treatises. For example, the main entrance to the Franciscan monastery features a replica of a stairway designed by Bramante, which appeared in an illustrated sixteenth century Spanish edition of Serlio's *Tercero y cuarto libro de arquitectura*. Along the same lines, the *portería* of this monastery also includes a portal that derives from Michelangelo's design for the Farnese Palace in Caprarola. Susan Verdi Webster, "Vantage Points: Andeans and Europeans in the Construction of *Colonial Quito*." *Colonial Latin American Review*, 20, 3 (December 2011): 303-330.

<sup>&</sup>lt;sup>32</sup> Ibid., 305-306, 309. Given the power and authority that was predicated on architectural production in Quito, Webster asserts that Andeans likely did not perceive the buildings they constructed in colonial Quito as "Europeanate" at all.

To advocate for adopting a decolonial approach to art and architecture, I draw on several frameworks developed by scholars of Early Modern and colonial Latin American art, including Dean, Nair, Claire Farago, Webster, Leibsohn, Jeanette Favrot Peterson, Eleanor Wake, and Ananda Cohen-Aponte. I also adopt a cross-disciplinary approach that allows for more complex readings of colonial defensive and militaristic architecture that are not singularly grounded in one academic discipline. To this end, I engage with select scholarship in the disciplines of ethnic studies, postcolonial studies, and decolonial studies, including the works of Walter Mignolo, Catherine Walsh, Dipesh Chakrabarty, Bhabha, Lowe, and Hartman.

To understand decoloniality and craft a decolonial lens through which to examine sixteenth-century Latin American architecture, it is helpful to begin by defining the term. Aníbal Quijano first introduced the concept of coloniality in the late twentieth century, and argued that scholarship must disengage and delink from Western epistemology.<sup>34</sup> Relatedly, decoloniality was a political as well as an epistemic project.<sup>35</sup> Mignolo builds on Quijano's thoughts in *The Darker Side of Western Modernity*, arguing that the creation of decolonial options requires a direct confrontation and subsequent separation from the "colonial matrix of power."<sup>36</sup> For this delinking to occur, racism and the power of the patriarchy must also be confronted as they

<sup>&</sup>lt;sup>34</sup> For Aníbal Quijano, coloniality and specifically coloniality of power is based on 'racial' social classification wherein Europe is centered as a world power and all other populations are presumed to be inferior. Coloniality also speaks to the imposition of a paradigm of European rational knowledge and modernity through Europe's colonization of other parts of the world. Aníbal Quijano articulates the need for "epistemological decolonization" as a mechanism for creating new ways of intercultural communication and exchange of ideas, experiences, and meanings. Essentially, he advocates for a decentering of European rationality and the notion that European knowledge is universal. From Aníbal Quijano, "Coloniality and Modernity/Rationality," *Cultural Studies* 21, no. 2 (2007): 167-178.

<sup>&</sup>lt;sup>35</sup> Walter Mignolo refers to Aníbal Quijano's work as a starting point that informs his own contemplation of decoloniality. Walter Mignolo, *The Darker Side of Western Modernity: Global Futures, Decolonial Options.* (Durham: Duke University Press, 2011), xxv.

<sup>&</sup>lt;sup>36</sup> Ibid., xxvii.

created conditions for building and controlling knowledge through a grounding in the notion of the word of God or of Reason and Truth.<sup>37</sup>

Further, decoloniality requires recognition of the simultaneous existence of multiple perspectives and realities. More specifically, a "pluriversal" articulation of the colonial experience wherein a multiplicity of understandings, including acknowledgement of extra-European temporalities, is necessary to disrupt the colonial matrix of power.<sup>38</sup> Although Mignolo and Walsh clearly advocate for a disruption of Western thought, their ultimate objective is to not just dismantle it, but rather to transcend Western ideas through decoloniality.<sup>39</sup> This notion of disruption and transcendence as well as acknowledgement of multiple ontologies and pluriversal realities is central to the decolonial lens adopted in this study.

My approach is also informed by Chakrabarty's postcolonial thinking wherein he calls for the "provincialization" of Europe by challenging the notion that European ideas and approaches to knowledge are universal.<sup>40</sup> In this study, the universality of European ideals specific to defensive and militaristic architecture is countered through recognition of parallel critical developments in Mesoamerican architecture. Thus, I argue that European and Indigenous architectural practices should be considered in tandem and on equal footing in efforts to better understand the architecture of sixteenth-century colonial Mexico. This establishes a foundation

<sup>&</sup>lt;sup>37</sup> Ibid., xv.

<sup>&</sup>lt;sup>38</sup> Walter D. Mignolo and Catherine E. Walsh, *On Decoloniality: Concepts, Analytics, Praxis* (Durham: Duke University Press, 2018), 3.

<sup>&</sup>lt;sup>39</sup> Ibid., 7. It should be added that Mignolo's work in *The Darker Side of the Renaissance* and *Local Histories/Global Designs: Coloniality, Subaltern Knowledges, and Border Thinking,* could also be integrated to make this consideration of decoloniality more robust.

<sup>&</sup>lt;sup>40</sup> European ideas may not necessarily have universal validity and further the process of questioning the universality of knowledge, for Chakrabarty, is related to issues of place. Although Chakrabarty is primarily interested in the colonial experience of southeast Asia, his notion of "provincializing Europe" has validity in complicating our understandings of the colonial Mexican context as well. Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton and Oxford: Princeton University Press, 2000), xiii.

for the examination of how the structures of my study may have been received and leveraged in negotiations of power between Europeans and Indigenous peoples, and the possible messages they conveyed.

## "Utilitarian" Architecture and "Arte and Artificio" in the Spanish American Colonial Context

Scholarship on defensive architecture in colonial Latin America is notably limited. Meanwhile, studies of Medieval and Early Modern fortifications focus almost exclusively on the military purpose of these edifices, relegating them to the space of the "utilitarian" and denying them classification as "architecture."<sup>41</sup> The resultant categorization of fortifications as functional but not artistically or culturally relevant is largely informed by European ideas about what constitutes "art" or "architecture."

This distinction and implied value judgment is evident, for example, in Eugène-Emmanuel Viollet-le-Duc's "An Essay on the Architecture of the Middle Ages," originally published in 1860.<sup>42</sup> It nominally allows for an understanding of defensive design as an "art," thus semantically suggesting that the architecture of fortifications warrants contemplation within the broader scope of art and architectural history. Yet, his examination of European Medieval defensive architecture largely focuses on the technical developments that occurred in building design as a response to changes in the practice of warfare. Thus, Viollet-le-Duc's study is ultimately more of an examination of engineering than it is a study of "art."

<sup>&</sup>lt;sup>41</sup> This approach to understanding defensive design is evident, for example, in the scholarship of Christopher Duffy, Sidney Toy, Dennys Pringle, Simon Pepper and Nicholas Adams, Ian Hogg, and J.R. Hale.

<sup>&</sup>lt;sup>42</sup> Eugène-Emmanuel Viollet-le-Duc, *Castles & Warfare in the Middle Ages*, trans. M. Macdermott (Mineola, New York: Dover Publications, Inc., 2018), 3.

Many of the other scholars who follow Viollet-le-Duc in analyzing the design of defensive structures built in the Middle Ages and beyond consider fortifications only within the realm of engineering or science as well. Dennys Pringle, for example, positions the architecture of defensive structures in the science of militarism wherein function drives all structural aspects of design.<sup>43</sup> Similarly, architectural historian Sidney Toy focuses on the development and evolution of fortification design as a form of military engineering.<sup>44</sup> According to Simon Pepper and Nicholas Adams, this relegation of fortification design to the space of engineering was, in part, a result of the lack of titular distinction between *ingegneri* and *architetti* in the sixteenth century.<sup>45</sup> Christopher Duffy further argues that the development of the basic principles of fortification design in Europe were directly and exclusively tied to advancements in military technology, including specifically the use of gunpowder artillery and the techniques of siege

<sup>&</sup>lt;sup>43</sup> Dennys Pringle, *Fortification and Settlement in Crusader Palestine* (Burlington, Vermont: Ashgate, 2000) 9, 11, 107. Pringle's study of the fortifications of Crusader Palestine offers insight into the forms common to fortifications encountered in the region during the twelfth and thirteenth centuries. These include extraordinarily large rectangular towers, primarily built of lime-mortared ashlar enclosing a rubbled course that was bonded with lime, concrete, or clay. According to Pringle, these towers were relatively simple and unadorned, though they occasionally include pointed arches at entry points and boxy machicolations on upper levels. Despite considering this architecture in detail in his study, Pringle remains adamant that fortresses are best understood as works of engineering, not of "art" or "architecture. Related scholarship from Ian Hogg does the same. Ian Hogg, *Fortress: A History of Military Defense.* (New York: St. Martin's Press, 1977), 8.

<sup>&</sup>lt;sup>44</sup> Much like Duffy's study, Toy in his *A History of Fortification from 3000 BC to AD 1700* (Melbourne, London, and Toronto: William Heinemann Ltd., 1995) emphasizes the development of specific tactical architectural features of fortifications, beginning with ancient structures and continuing through fortresses built in the early eighteenth century. In all instances, he argues that fortresses are merely structural responses to changes in the practice of warfare.

<sup>&</sup>lt;sup>45</sup> Simon Pepper and Nicholas Adams, *Firearms and Fortifications: Military Architecture and Siege Warfare in Sixteenth-Century Siena* (Chicago and London: University of Chicago Press, 1986), 174-175, 177. Pepper and Adams assert that the lack of distinction in the meaning of these terms led to the rise of a modern category of architect-builders referred to by many authors as "military engineers." The tendency to limit consideration of defensive architecture to the space of engineering or science seems to have been reinforced further through acknowledgement of the increased focus on the "militarization of military architecture," which appeared in treatises written in sixteenth-century Europe. They also note that defensive construction demanded numerous areas of special expertise, including understanding of the principles and tools of war, which necessarily removed it from the space of "art" or "architecture."

warfare, thus making it a form of engineering.<sup>46</sup> Among the most notable of these architectural responses was the "invention" of the Italian angle bastion, which Duffy calls the hallmark of the Italian School or "New Italian School" of fortification design.<sup>47</sup>

Although architectural features like the angle bastion and other defensive forms were technological responses to changes in the practice of warfare in Europe, the inclusion of functional or "utilitarian" aspects in fortresses should not preclude us from considering the artistic and architectural relevance of these structures. Recognizing the architectural relevance of fortifications in this study, I counter much of the scholarship that only nominally considers the "art" of fortification design.<sup>48</sup> Those minimal allusions to "art" in this context primarily consist of glancing references to "architectural decoration"<sup>49</sup> and to "beautiful" spaces inside

<sup>&</sup>lt;sup>46</sup> Christopher Duffy, *Siege Warfare: The Fortress in the Early Modern World 1494-1600* (New York: Routledge, 1996), 23, 27-29. Duffy cites the beginning of Early Modern fortress warfare to the year 1494, just seven years after what he terms the "invention" of the Italian angle bastion. He highlights the fortresses designed by Francesco di Giorgio, including the northern tower of Mont Saint-Michel and the outer enceinte of the Castle of Lucera, and the Giuliano and Antonio Sangallo reconstruction of the fort of Civita Castellana for Pope Alexander VI as demonstrative of the architectural response to the changes in the technical practice of warfare that occurred in fifteenth-century Europe.

<sup>&</sup>lt;sup>47</sup> Ibid., 11, 34. "Invention" intentionally appears in parenthesis here because, as will be argued in later chapters of this study, this Eurocentric view does not account for comparable architectural developments that occurred elsewhere in the world, including in Mesoamerica.

<sup>&</sup>lt;sup>48</sup> In his seminal text, *A History of Fortification from 3000 B.C. to A.D. 1700*, Toy remarks that he is undertaking a study of the "art of fortification," which he defines as an examination of fortresses built for defense against artillery attack and the details of structure and method that are specific to these edifices' military aspects. Although he references "art" when describing his analysis of fortifications, Toy's focus is on function. Sidney Toy, *A History of Fortification from 3000 BC to AD 1700* (Melbourne, London, and Toronto: William Heinemann Ltd., 1995), xxii.

<sup>&</sup>lt;sup>49</sup> Ibid., 31. For example, in his study of the Porta Nuova at Verona, which was designed and built by Sanmicheli, Duffy examines the triumphal arch that acts as the primary gateway to this defensive structure, noting that this archway as "an effective architectural decoration." This alludes to the possibility that there are elements of fortification design that are artistic and that are not merely responsive advancements in military technology. Duffy also references artistic or decorative elements in his discussion of the Citadel da Basso, built by Antonio da Sangallo the Younger. Citadel da Basso, according to Duffy, is an "aggressive-looking polygonal fort, with narrow curtains, and acute bastions" but is also an edifice adorned with "disc and diamond decorations." Though not noted by the author, the disc and diamond shapes that ornament the walls at the Citadel da Basso do not serve a specific functional purpose. Given Duffy's general inclination to characterize fortifications as works of engineering and science, his emphasis on artistic embellishments in defensive architecture departs from the more common approach that these defensive structures are more than solely works of engineering after all.

fortifications, such as the vaulted chapel of St. John in the Tower of London and the chapel at the Château de Vincennes, located in a fortified bailey.<sup>50</sup>

Although much modern scholarship on defensive architecture appears monolithic in its assertion that defensive design cannot be characterized as "art" or "architecture," some scholarship has challenged this approach, albeit to a limited extent. One of the most notable scholars to do so was J.R. Hale. In his *Renaissance Fortification: Art or Engineering?*, he states, in "the mainstream of architectural history fortifications are accorded but a fitful or embarrassed attention."<sup>51</sup> Although recognizing these structures' historical importance, he questions whether they can be considered beautiful, asking "are they a proper concern for the historian of art, or should they be left to that perhaps drabber figure, the chronicler of engineering?"<sup>52</sup>

Hale then turns to the architects and treatise authors of the Italian Renaissance and focuses specifically on their treatment of the concept of "beauty" as an indicator or perhaps even determinant of defensive architecture's artistic or architectural relevance. Buselli, for example, describes the fortress of Sarzanello as "very strong and beautiful,"<sup>53</sup> and Vasari notes that Sanmicheli's fortress of S. Andrea in Venice was 'marvellous…with the beauty of its walls [representing] the grandeur and majesty of the most famous buildings of [ancient] Roman greatness."<sup>54</sup> Similarly, Alberti suggests that while "'delicate cornices and incrustations are not

<sup>52</sup> Ibid., 7.

<sup>53</sup> Ibid., 7.

<sup>54</sup> Ibid., 7.

<sup>&</sup>lt;sup>50</sup> Toy, *A History of Fortification*, 78, 230. In these descriptions of the religious architecture of the chapel of St. John and that at the Château de Vincennes, Toy makes clear that the distinction between "art" and function is directly related to the concept of "beauty." He only uses the word "beauty" to describe the religious architecture of spaces within larger fortified structures. Therefore, Toy draws a bright line between what aspects of building design might be considered "art" or "architecture" and that which is best understood under the auspices solely of science and engineering.

<sup>&</sup>lt;sup>51</sup> Hale, *Renaissance Fortifications: Art or Engineering*, 7.

proper for the walls of a town...beauty [in fortresses] will have such an effect upon an enraged enemy that it will disarm his anger...insomuch that I will be bold to say, there can be no greater security...than beauty and dignity.<sup>3755</sup> These commentaries imply that the fortified structures of the Italian Renaissance were understood to be more than merely functional as defenses because they featured some architectural aspects or embellishments that were considered "beautiful.<sup>356</sup> If we adopt this notion as a determinant of art historical relevance, at least in part, then acknowledging the "beauty" of these fortifications suggests that they warrant a broader scholarly contemplation within the field of art and architectural history.<sup>57</sup>

Artists, specifically painters, sculptors, and the designers of the celebrated churches and palaces of this same period were all important contributors to the construction of fortified structures too.<sup>58</sup> For example, Vasari notes "we seldom find a man distinguishing himself in one branch of art who cannot readily acquire the knowledge of others which…proceed, as it were,

<sup>&</sup>lt;sup>55</sup> Ibid., 36.

<sup>&</sup>lt;sup>56</sup> Renaissance treatise writer Belluzi emphatically asserted in the fifteenth century that "'fortresses need no architects because they need no cornices or architraves or swags of flowers or other carved work which the cannon would send up in smoke; they need good flanks." This suggests that ornamental architectural features are particularly vulnerable to impact by gunpowder artillery and therefore were to be suppressed in defensive designs. It further implies a distinction between the responsibility of the architect as it relates to ornamental elements and the creation of functional structures. Maggi, by contrast, argues that though fortifications require little ornament, some ornamentation "'may be added so long as it appears impressive rather than simply pleasant to the eye, such as footings [at the base of the scarp], cordons with carved strips below them, and ashlar finishing, rusticated, though not too deeply, at the corners of the bastions." Serlio also addresses the issue of ornament suggesting that a mixture of Tuscan and Rustic orders should be used and that lions' head adornments could be incorporated into fortification façades as they were symbols of power, and their sculpted mouths could also be used as placement points for muskets. Hale, *Renaissance Fortifications: Art or Engineering*, 36-38. Given just these few examples, it is clear that not all Italian Renaissance treatise authors objected to the incorporation of non-functional ornament or artistic elements in defensive design.

<sup>&</sup>lt;sup>57</sup> This emphasis on the idea of beauty by fifteenth-century Italian writers suggests that perhaps the characterization of defensive edifices as works of engineering alone is a construction of the modern scholar. Granted, the notion of "beauty" in concept can carry various and varied meanings. And, the meaning and definition of "beauty" has certainly evolved over time.

<sup>&</sup>lt;sup>58</sup> Hale, *Renaissance Fortifications: Art or Engineering*, 12.

from the same source.<sup>359</sup> Thus, the separation that much modern scholarship imposes when categorizing buildings as either works of engineering or science created by engineers for utilitarian purposes, in the case of fortifications, or as works of art created by artists, in instances of structures with other purposes, is rather artificial.

To this end, many Italian Renaissance creators, including Leon Battista Alberti, Filarete, Francesco di Giorgio, Vasari the Younger, and Vincenzo Scamozzi, among others were authors of treatises on military architecture.<sup>60</sup> They do not characterize defensive architecture as "lesser than" or inferior to other types of architecture.<sup>61</sup> This lack of differentiation between military and non-military architecture in terms of importance suggests that these Italian Renaissance architect-authors did not establish a value-distinction between defensive architecture and other forms of architecture based on its utilitarian function. Thus, it may be concluded that the tendency to relegate military architecture to the realm of science or engineering or the "utilitarian" such that it precludes its consideration as a form of "art" or "architecture" is a modern one.

In Spanish America, the question of function versus art is also relevant. As Spaniards arrived in the Americas in the sixteenth century, they brought with them the idea that there existed a notable difference between "*arte*" and "*artificio*," or artifice, meaning that which is

<sup>&</sup>lt;sup>59</sup> Ibid., 14. Vasari is specifically referring to *disegno*, or the sense of design and skill in drawing, which has direct application to the drafting of architectural plans and treatises.

<sup>&</sup>lt;sup>60</sup> Ibid., 21-23.

<sup>&</sup>lt;sup>61</sup> Ibid., 20. To develop this argument, Hale points to Vasari's discussion of the three stages of the evolution of architecture: necessity, ornament, and machinery. Vasari wrote "artists are compelled to prove their ingenuity and industry by the discovery of tractile forces, the invention of hydraulic machines, engines of war, catapults and every other sort of laborious contrivance which, under the name of architectural and warlike machinery, contribute to disconcert one's enemies...and render the world more beautiful and more enjoyable." If we take Vasari's words as indicative of Renaissance period sentiments regarding military machinery and related architecture, we can conclude that characterization of fortifications as works of engineering should not automatically diminish their artistic or architectural importance.

lesser than art. In Juan de Betanzos's account of Cusco written in 1551, for example, he acknowledges the quality of urban planning and construction undertaken by the Inka, but suggests that he found nothing that approached "*arte*" in his observation of pre-Hispanic creations.<sup>62</sup> Betanzos and his contemporaries' observations were, of course, informed by Early Modern European assumptions and attitudes about art and architecture that were grounded in conceptual hierarchies associated with specific architectural forms, materials, and construction techniques. As a result, it is unsurprising that European chroniclers' accounts of the Indigenous art and architecture characterize it not as "art" but rather as something of lesser importance or value when it is compared to European examples.<sup>63</sup>

Though such chroniclers often praised the skill of Indigenous craftsmen in the practice of construction, they suggest at the same time that Indigenous creators "have not grasped the Art of Architecture."<sup>64</sup> The Spanish Dominican friar, Martín de Murúa, for example, states that "it is absolutely indubitable that had the Inca arrived at an understanding of the form and "*arte*" with which one builds and erects the arches for stone bridges, they would have done it most excellently."<sup>65</sup> Similarly, another anonymous colonial chronicler stated that "if the Indians had reached an understanding of the "*arte*" of architecture and the "*arte*" of building bridges and buildings, then they would have outshone all the nations of the world."<sup>66</sup>

As Valerie Fraser makes clear in her analysis of these accounts, the key word used here is *"arte"* and the conceptual link drawn by these European chroniclers between that which is

<sup>&</sup>lt;sup>62</sup> Cited in Fraser, The Architecture of Conquest, 24.

<sup>63</sup> Ibid., 25.

<sup>64</sup> Ibid., 34.

<sup>65</sup> Ibid., 34.

<sup>&</sup>lt;sup>66</sup> Ibid., 34.

considered "*arte*" and the specific form and principle of the arch. This structural element was not used by the Inka in their architecture, and thus from the European viewpoint, those buildings without arches could not be understood as conforming to the European principles that assign value to specific forms under the umbrella of the Art of Architecture.<sup>67</sup> At issue here, in the sixteenth century just as much as in modern scholarship on certain styles of architecture, is the assigning of value to particular types of buildings based on a limited set of features and their alignment, or lack thereof, to norms or standards that are prescriptively narrow.

The tendency to make categorical distinctions between the "utilitarian" and "architecture" or "*arte*" and "artificio" speaks to a broader issue that is critical to this study: classification. In his 2008 "Romanesque Art 2000: A Worn Out Notion?," Willibald Sauerländer argues that the vagueness of the term "Romanesque" and what may be defined or identified as such is indicative of the many problems associated with such stylistic classifications.<sup>68</sup> Though his argument is specific to style, its application to scholarly consideration of the place of defensive architecture within the broader art historical canon is invaluable. In arguing that art and architectural historians, ought to be less concerned with traditional stylistic classifications like the Romanesque in Sauerländer's argument, or high and low art, or engineering and architecture in the context of this study, our capacity for understanding the buildings constructed in any period is vastly expanded.

The problematic categorization of buildings is particularly relevant to this study given its relation to the cultural differences associated with various objects and structures in the colonial

<sup>&</sup>lt;sup>67</sup> Ibid., 34.

<sup>&</sup>lt;sup>68</sup> Sauerländer notes that there are numerous aspects of the term "Romanesque" that have not been clarified, nor have the chronological borders of this style been clearly defined. Willibald Sauerländer, "Romanesque Art 2000: A Worn Out Notion?" in *Romanesque: Art and Thought in the Twelfth Century*, ed. Colum Hourihane (State College: Index of Christian Art, Department of Art & Archaeology Princeton University with Penn State University Press, 2008), 41.

context. As Dean notes in "The Trouble with (the Term) Art," many of the objects that we call "art" today, were not made as art.<sup>69</sup> The art and architecture that the Spanish encountered in the Americas and analyzed through their own European-informed lens and associated conceptual hierarchies was not created solely as something artistic or architecturally noteworthy. Objects and structures also had purpose and function. Said more simply, they were "utilitarian." And, as such, the Spaniards who invaded the Americas in the sixteenth century understood them to be "not art" as they did not align to the conceptual standards with which they were familiar in the European context.

Today, such an arbitrary value judgment is even more problematic when we acknowledge that instances of applying the term "art" to non-European objects and monuments can be a colonizing act. Recognizing something as "art" can be a reconstruction of the privileged points of view of the colonizing West, particularly when such works are seen as "different" in a way that makes them insufficient when compared to Western standards.<sup>70</sup> This act of colonization is further exacerbated when adjectives like "primitive" or "exotic" are added as descriptors, or rather qualifiers, to that which might be considered "art."<sup>71</sup> As such, in reconstructing our understanding of defensive and militaristic architecture in Spanish America and the fortified sites that predate the Spanish invasion in the sixteenth century, it is not the "utilitarian" buildings that should be relegated to the sidelines. Rather, it is the terminology that we so often use in art and architectural history to describe such buildings that we must challenge. The limitations of the

<sup>&</sup>lt;sup>69</sup> Carolyn Dean, "The Trouble with (the Term) Art," Art Journal (Summer 2006), 25.

<sup>&</sup>lt;sup>70</sup> Ibid., 27. Dean states: "The recognition of "art" can be seen as an attempt to reconstruct other visual cultures in the image of the colonizing West, different only in ways that render them somehow insufficient."

<sup>&</sup>lt;sup>71</sup> Ibid., 25. Also, as Sherry Errington notes, the distinction between high art and craft, which is largely based in the notion of functionality, is an eighteenth-century construct. Sherry Errington, "What Became Authentic Primitive Art," *Cultural Anthropology* 9, no. 2 (1994): 212.

artificial distinctions between art and craft, high and low, "architecture" and "utilitarian" buildings do not serve us as we seek to complicate histories of defensive and militaristic structures. Instead, it is imperative that we disrupt the binaries so often applied in the space of art and architectural history to create new, decolonial paths for understanding the defensive and militaristic structures of colonial Mexico as complex cultural artifacts reflective of an amalgamation of pre-Hispanic and European architectural traditions and belief systems.

#### Decolonizing Defensive and Militaristic Architecture: A Study in Four Parts

My argument in this dissertation takes shape across four chapters. In chapter one, I examine the history of the European development of standard design principles in defensive architecture. My primary objective is to examine the strong theoretical and practical traditions in defensive architecture, stemming from the Italian Renaissance and from Early Modern Spain, that would partially inform the design of defensive structures in the Americas. This chapter also contextualizes defensive and militaristic buildings in Italian Renaissance theories of fortification design. I examine foundational Italian Renaissance treatises on this topic, including Alberti's *De re aedificatoria* and Vitruvius's *Ten Books on Architecture*. Additionally, I include a brief analysis of several defensive constructions associated with the aforementioned treatises, including select examples built by the Sangallo family, Lanci, Peruzzi, and others in Italy. These theoretical and practical foundations establish the basis for European standards of defensive design. I then examine Spanish architectural standardization of defensive structures in the writings of two architect-builders working in Early Modern Spain, Giovanni Battista Antonelli and Cristóbal de Rojas. Efforts at standardization are demonstrative of the tension between

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architectural theory and practice that would become particularly evident in the Spanish Americas.

My study of European theory and practice is intended to establish a clear picture of the European foundations or standards that have traditionally informed analysis and interpretation of defensive architecture in the Americas. However, in subsequent chapters, I will present evidence that challenges the notion that such standard architectural forms are exclusively European in origin. When we acknowledge that the forms of architecture that we see in colonial Spanish America cannot be understood to be exclusively "European," we have the opportunity to complicate our interpretation of colonial defensive architecture, understanding it instead as hybrid architecture that is reflective of both European and pre-Hispanic architectural traditions.

Chapter two examines the defensive and militaristic architectural traditions of pre-Hispanic Mesoamerica and their direct association with ritualized militarism at the sites of Teotihuacan, Xochicalco, Cacaxtla, and Malinalco. I argue that, upon invasion, the Spanish encountered a robust architectural tradition in Mesoamerica that reflected architectural and iconographic developments specific to militarism originating at Teotihuacan (150-650 CE) and that were elaborated upon across centuries, culminating in those evident at sites like Malinalco and Tenochtitlan. My examination combines archaeological studies with visual analysis and includes examination of sixteenth-century primary source accounts of pre-Hispanic structures as well. The ritualized militarism and ancient defensive and militaristic architecture studied here establishes the groundwork for recognizing more precisely, in subsequent chapters, Indigenous contributions to early colonial defensive and militaristic structures.<sup>72</sup>

<sup>&</sup>lt;sup>72</sup> The extensiveness of pre-Hispanic defensive and militaristic architectural traditions was not limited to Mesoamerica. Well-developed pre-Hispanic fortification practices existed across California, Florida, and the Andes. The scholarship of Elizabeth Arkush, Steven Wernke, Dean, Webster, Cohen-Aponte, and Nair is particularly relevant to the Andes. Though Andean defensive and militaristic architecture is not considered in depth in this study, the decolonial frameworks developed by these authors are of particular importance.

Chapter three examines specific examples of defensive architecture constructed in sixteenth-century Mexico. I begin with a study of the fortification of San Juan de Ulúa in Veracruz because of its centrality to the colonial objectives of the Spanish in Mexico.<sup>73</sup> Because it deviates from European architectural standards in defensive design, I argue it is best understood as a hybrid cultural artifact reflective of the colonial context in which it was built. I then compare its design to that of the fortification of San Diego in Acapulco (1615-1617), El Morro (1589-1630), and La Punta (1590-1630), to make the case for a pattern of architectural innovations in colonial structures. In the end, I argue that the unique modifications of European standards in colonial fortresses reflect the nascent development of an American style of defensive architecture that is best understood as a hybrid style, and not one solely derived from precedents set in Europe.

To build this argument, I examine the construction process used to renovate San Juan de Ulúa beginning in 1590, highlighting the extent to which Indigenous creators, Indigenous design principles, and Indigenous materials shaped the structure. Although San Juan de Ulúa may "look European," acknowledging its visible and invisible hybridities brings into sharper focus its European and Indigenous building traditions. Additionally, I connect this site with Mesoamerican ritualized militarism and its historical relation to power. Accounting for these Indigenous contributions complicates the standard understanding of San Juan de Ulúa as a symbol of Spanish power and expands our view. To support this reading, I draw on Chakrabarty's call for a "provincializing" of Europe and the postcolonial thinking of Bhabha to reinterpret the power dynamics that we typically associate with defensive structures. This

<sup>&</sup>lt;sup>73</sup> Veracruz served as the primary Atlantic port for the Spanish throughout the colonial period. Thus, the function of San Juan de Ulúa as a literal defense of the port was critically important from a tactical as well as economic perspective.

intervention is critical given that military structures are infrequently interpreted as multivalent edifices in which power between conquering and conquered entities can be negotiated.

In the final chapter, I analyze sixteenth-century Mexican fortress-style architecture, including civic buildings, like the Palace of Cortés in Cuernavaca, and the fortress monasteries of the mendicant orders including San Miguel el Arcángel in Huejotzingo and San Salvador at Malinalco. I examine these specific sites because of their geographic and, in some cases, temporal proximity, to related pre-Hispanic sites. My decolonial approach reinterprets these structures as hybrid microcosms of European and Indigenous architectural traditions and belief systems and represents them as spaces that challenged the colonial matrix of power.

Having built a case for a decolonial understanding of defensive and militaristic architecture in colonial Mexico, I conclude this study with a call for approaching the architectural history of colonial Mexico from a global perspective that elevates the Global South. This effort draws on the scholarship of Farago and Cohen-Aponte, both of whom make decolonial calls for approaching the Renaissance, and more importantly the study of art and architectural history, more broadly. Specifically, each encourages a rewriting of our approach to art and architectural history, casting it from a global perspective that acknowledges the importance of the Global South and the extra-European perspectives and epistemologies therein.

In concluding this study, I return to art and architectural history's preoccupation with categorization, and in particular the notion of "high" and "low," which leads the discipline to neglect the evolution of defensive and militaristic architecture as a critical lens for understanding cultures in contact. This binary, classification-based approach to architecture also denies the critically important decolonial possibilities that lie at the foundations of fortifications and militaristic edifices across the Spanish empire. In short, these buildings are much more complex

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than their standard classification as merely utilitarian military outposts would imply. To build on the wisdom of Dean, who in writing about portraits of Inka royals painted by Indigenous elites and about presentational stones in Peru, encourages us to ask what these portraits and these stones want and, further, whether we, as modern viewers and scholars, are willing to give it to them.<sup>74</sup> Through this study, I ask a similar question about defensive and militaristic architecture of colonial Mexico. Fortifications and militaristic edifices are indeed more than military, but are we willing to give that to them?

<sup>&</sup>lt;sup>74</sup> Carolyn Dean, "Reviewing Representation: The Subject-object in Pre-Hispanic and Colonial Inka Visual Culture," *Colonial Latin American Review* 23, no. 3 (December 8, 2014): 313.

## **CHAPTER ONE**

# ITALIAN MODELS AND SPANISH VARIANTS AND THE ISSUE OF STANDARDIZATION

In building a case for understanding sixteenth-century American defensive architecture as reflective of both European as well as Indigenous architectural traditions, it is imperative to identify specific European architectural principles that impacted the design of Spanish colonial fortifications. To this end, this chapter examines select architectural treatises of the Italian School and their Early Modern Spanish evolutions. These works are foundational to the development of standards in defensive architecture that the Spanish brought to the Americas; and they would subsequently be iterated upon, and hybridized, in the colonial context.

Additionally, I situate my broader study in relation to modern scholarship on military architecture. Studies on defensive design have tended to relegate military architecture to the space of the "utilitarian," thereby also relegating defensive design principles outside of the realm of "art" or "architecture." My approach directly challenges this demotion to the "utilitarian" and calls on scholarship to adopt a more complex understanding of such architecture and its implications for our understanding of cultures in conflict, particularly in colonial contexts.

This chapter sets the stage for reframing Spanish colonial defensive and militaristic architecture from a decolonial perspective in the context of the Americas. For example, many of the architectural forms common to defensive design have frequently been assigned the label of "European invention." However, as will be shown later, these forms are far from European inventions alone. Thus, discussion of them here is intended to establish a common understanding of what has traditionally been termed "European" so that these forms may be complicated in the

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analysis that I conduct in subsequent chapters. To add to the argument for complicating defensive architecture beyond its relegation to the space of the "utilitarian" in scholarship, I also examine the ways in which it intersects with issues of power and the extent to which it has performative and symbolic qualities. Establishing these relationships is essential to the argument that I make later regarding the multivalent possibilities associated with structures built in this style in the American colonial context.

#### Architectural Theory: Italian and Spanish Precedents

Knowledge of European architectural theory is essential to establishing the relevance of structures within the discipline of architectural history. Roman architectural theorist Vitruvius (80-70 BCE-c.15 CE) wrote the first book on architectural theory, *Ten Books on Architecture*, wherein he codified practical architectural knowledge through his articulation of prescriptive guidance for the creation of buildings. This guidance is based on the three fundamental principles of *firmitas, utilitas,* and *venustas,* translated as strength or stability, utility, and beauty.<sup>75</sup> Beyond this foundational "Vitruvian triad," he further stipulated that specific attention must be paid to principles of proportion and symmetry, and that geometry is a critical tool to be used in architectural creation.<sup>76</sup> Taken together, these elements alongside specific guidance around ideal siting, materials, structural elements, and layout, constitute Vitruvius's theoretical framework for defensive architecture.

Leon Battista Alberti (1404-1472 CE) expanded on Vitruvius's architectural theory, producing the second most important Italian architectural treatise relevant to this study, *De re* 

<sup>&</sup>lt;sup>75</sup> Vitruvius, *Ten Books on Architecture*, trans. Morris Hicky Morgan (Cambridge: Harvard University Press, 1914), 17.

<sup>&</sup>lt;sup>76</sup> Ibid., 6, 17.

*aedificatoria*, in the fifteenth century. Vitruvius's and Alberti's design standards were based on notions of specific geometries, proportion, and symmetry as well as the concepts of the "Vitruvian triad." Together they became the basis for further developments in architectural theory of the Italian Renaissance. These theories were expanded upon in Early Modern Spain as well and subsequently informed the design of Spanish colonial fortifications in the Americas. Given the Spanish imperial interest in architectural standardization and the importance of architecture as a tool of conquest, it is critical to understand this connection.

## Italy

Vitruvius addresses defensive architecture in the first and tenth books of his series. In the first, he considers the siting and protection of cities through construction of defensive structures, providing prescriptive recommendations regarding their placement and structure. For example, he notes the importance of location as a primary defensive function (i.e. placement atop high hills in temperate climates without marshy land adjacent).<sup>77</sup> Once an appropriate site for a fortified town is identified, he suggests that the architect must turn attention to the construction of walls and towers. Towers must protrude beyond the line of the wall and must not be set more than a bowshot apart (Fig. 1.1). They further must be round or polygonal because, per Vitruvius, a square tower is no match for military machinery. The walls of fortifications must be thick enough to support the transit of armed men across them without interference, and all must be protected by earthen ramparts at a minimum.<sup>78</sup> In his tenth book, he briefly considers machines of war, such as the catapult, as well as other militaristic features often associated with fortresses

<sup>77</sup> Ibid., 17-18.

<sup>&</sup>lt;sup>78</sup> Ibid., 22-23.

including moats and mines.<sup>79</sup> And, he articulates the value of ramparts in relation to the walls of defenses, suggesting that "the freedom of states [has] been preserved by the cunning of architects" who design such features around their fortresses.<sup>80</sup>

On materials, Vitruvius suggests that the architect may be enterprising and use whatever materials are available, including stone, flint, rubble, burnt or unburnt brick. His exact guidance regarding materials is to "use them as you find them. For it is not every neighborhood or particular locality that can have a wall built of burnt brick like that at Babylon, where there was plenty of asphalt to take the place of lime and sand, and yet possibly each may be provided with materials of equal usefulness so that out of them a faultless wall may be built to last forever."<sup>81</sup> Given the breadth and depth of Vitruvius's commentary on architecture, it is somewhat surprising that his treatment of defensive architecture is so brief. Nonetheless, it provided a theoretical foundation for the way the architect-builders of the Italian Renaissance regarded defensive architecture in their own treatises.

Primary among them was Alberti, whose contributions to the canon of Renaissance architecture are extensive, yet his consideration of military architecture is often overlooked. He was among the first Italian architect-builders to provide specific mathematical descriptions of the ideal shape, measurement, and proportions of fortifications and to consider how defensive and offensive tactics influenced such designs.<sup>82</sup> In so doing, he expanded upon Virtruvius to further define theoretical principles of defensive architecture. Alberti also makes clear that the

<sup>&</sup>lt;sup>79</sup> Ibid., 315-318.

<sup>80</sup> Ibid., 318-319.

<sup>&</sup>lt;sup>81</sup> Ibid., 23-24.

<sup>&</sup>lt;sup>82</sup> Marco Giorgio Bevilacqua and Kim Williams, "Alberti and Military Architecture in Transition" *Nexus Network Journal*, 16, no. 3 (2014): 523-525.

architect-builder's role in defensive design and construction was deeply important particularly given that fortresses "protect and strengthen the liberty of our country, and the good and honor of the state, to extend and confirm its dominion."<sup>83</sup> This comment speaks to the critical role of fortresses in demonstrating or performing power as well.

As he develops theoretical standards for fortification design in his treatise, Alberti is clear about the structural and design elements that are necessary in effective defensive constructions. For example, he asserts that all citadels must have an "unobstructed outlet" and that the most appropriate shape of these strongholds is in the form of an "O, which is either in turn grasped, but not enclosed, by a huge C with bent horns…or from which several radial walls emanate to the circumference."<sup>84</sup> Alberti goes on to articulate that walls of fortifications must be flanked by round towers that protrude above the height of the wall in keeping with Vitruvius's recommendation. These must also act as buttresses set at intervals of fifty cubits.<sup>85</sup> Unlike Vitruvius, Alberti is more specific about materials to be used in construction of fortifications, suggesting that citadels must be built of "huge stones" and that walls "must have an inclined surface" with scarped bases.<sup>86</sup> He also notes that the cornices of towers and walls can "act both as ornaments and as a bond to strengthen them,"<sup>87</sup> thus alluding to the possibility that some aspects of fortification design need not be entirely utilitarian.

<sup>&</sup>lt;sup>83</sup>Leon Battista Alberti, *On the Art of Building in Ten Books*, eds. Joseph Rykwert, Neil Leach, and Robert Taveror (Cambridge: MIT Press, 1988), 4.

<sup>&</sup>lt;sup>84</sup> Ibid., 123.

<sup>85</sup> Ibid., 104.

<sup>86</sup> Ibid., 105, 123.

<sup>&</sup>lt;sup>87</sup> Ibid., 105.

What is clear from an examination of Alberti's commentary on military architecture is that he extends his analysis and design recommendations well beyond that undertaken by Vitruvius. It is likely that Alberti may have accessed other sources on military architecture to formulate his treatise.<sup>88</sup> For example, he was likely aware of Brunelleschi's fortresses, the most well-known of which is Rocca di Vicopisano, on which construction began in 1435.<sup>89</sup> Its design (Fig. 1.2) is strikingly similar to the fortification elements described by Alberti, including the specific structure of outside towers, corbels and crenellations, among other defensive elements. The tower, for instance, is topped by an ornamental cornice (Fig. 1.3). Thus, Alberti's writing on fortification must be understood not just as a reinterpretation of Vitruvius, but as a new contribution to the canon of military architecture that drew upon his knowledge of architecture theory and actual contemporary military design.

The evolution of principles of defensive design from Vitruvius to Alberti's *De re aedificatoria* is also best understood when considered in its historical context. The discovery of gunpowder by the Chinese between the ninth and eleventh centuries fundamentally altered the art and science of fortification design because it allowed for the development of new techniques of warfare. Prior to the introduction of gunpowder to Europe, Medieval fortifications were built primarily to withstand ramming and mining, meaning that considerable emphasis was placed on the design of walls specific to their shape, height, and thickness.<sup>90</sup> Viollet-le-Duc analyzes these foundational principles of fortification design in his "Essay on the Military Architecture of the Middle Ages." He asserts that the designs of Medieval European fortifications evolved from the

<sup>&</sup>lt;sup>88</sup> Bevilacqua and Williams, "Alberti and Military Architecture in Transition," 537.

<sup>89</sup> Ibid., 538.

<sup>&</sup>lt;sup>90</sup> Ibid., 540.

fortification practices of the "Barbarians" and the Romans.<sup>91</sup> And, by the early Middle Ages, these practices had been elaborated upon to include more substantive walls, larger towers, and curtains in fortresses and castles. These defensive structures were also increasingly surrounded by ditches or earthen ramparts.<sup>92</sup>

According to Viollet-le-Duc, following the first Crusades, engineers from Western European countries "brought back with them to France, Italy, England, and Germany some improvements in the art of fortification."<sup>93</sup> This statement is intriguing for two reasons. First, it nominally implies that fortification design might be considered an art, not purely a science, and second, it suggests that non-European fortification architecture may have had some impact on the designs of Europe in the centuries that followed the first Crusades. Unfortunately, Viollet-le-Duc does not elaborate on the specific improvements in design that may be the results of these cultural interactions.<sup>94</sup>

Though the exact influence of the exposure to different forms of defensive architecture afforded by the Crusades is not elaborated upon in Viollet-le-Duc's essay, he does provide a detailed analysis of the changes in European fortification design that began in the twelfth century and continued through the fourteenth century. He notes, for example, the development of projecting galleries in fortress layouts to manage attack more effectively<sup>95</sup> as well as a general

95 Ibid., 60.

<sup>&</sup>lt;sup>91</sup> Viollet-le-Duc, *Castles & Warfare in the Middle Ages*, 3. Viollet-le-Duc's examination of this evolution begins with a consideration of Visigothic and Gallo-Roman fortifications that were built using local materials and in accordance with local traditions and consisted primarily of timber constructions accompanied by earthenworks.

<sup>&</sup>lt;sup>92</sup> Ibid., 13.

<sup>&</sup>lt;sup>93</sup> Ibid., 27.

<sup>&</sup>lt;sup>94</sup> Ibid., 27. Viollet-le-Duc instead notes that fortifications built in Europe from the twelfth to the fourteenth centuries "continued stronger than the attack" and that this state remained unchanged with the introduction of gunpowder artillery.

increased reliance on fortified gates, moats, and external defenses.<sup>96</sup> By the thirteenth century, the donjon was the primary castle form used in Europe. These were built on square plans strengthened by buttresses of rectangular or semicircular form.<sup>97</sup> Evidence of these common architectural practices in Medieval defensive design can be found at the castles of Langeais, Loches, Beaugency-sur-Loire, and Chauvigny (Fig. 1.4).<sup>98</sup> While arguing that square plans were more prominent in the thirteenth century, Viollet-le-Duc also points to some examples of circular layouts,<sup>99</sup> such as that evident in the keep of Coucy (Fig. 1.5). By the close of the thirteenth century, tower diameters were increasing in new constructions and projecting angles were being added to fortress foundations more frequently as well.<sup>100</sup> And, by the fourteenth century, more elaborate gateways, portcullises, and machicolations were also being incorporated into fortresses. The enceinte of Avignon, which includes many of these structural features, serves as a sort of pinnacle in the development of what might be characterized as Medieval standards in fortification design (Fig. 1.6).<sup>101</sup>

According to Viollet-le-Duc, the reliance on these foundational Medieval approaches continued across both Italy and France during the Renaissance and into the Early Modern period.<sup>102</sup> However, as noted above, the introduction of gunpowder artillery to Europe in the late

99 Ibid., 105.

<sup>100</sup> Ibid., 121.

<sup>96</sup> Ibid., 96.

<sup>97</sup> Ibid., 97.

<sup>&</sup>lt;sup>98</sup> Ibid., 98. In each of these examples, donjons and rectangular as well as semi-circular buttresses are prominent structural defensive features.

<sup>&</sup>lt;sup>101</sup> Ibid., 98, 125, 147. In his consideration of Avignon, Viollet-le-Duc suggests its design indicates that "this period [in] the art of fortification was complete" (147).

<sup>&</sup>lt;sup>102</sup> Eugène-Emmanuel Viollet-le-Duc, *Dictionnaire raisonnée de l'architecture française du XIe au XVIe siècle* (Paris: Imprimeries Réunies, 1856) section under "boulevard." The use of concentric wall systems and rounded towers designed to withstand common tactics of Medieval warfare are evident, for example, in Francesco di

thirteenth and early fourteenth centuries, most notably during the Hundred Years' War, had a significant impact on the fundamental principles of fortification design.<sup>103</sup> By the time Alberti was composing *De re aedificatoria* in the mid-fifteenth century, the use of firearms had become a ubiquitous wartime strategy.<sup>104</sup> Thus, Alberti's recommendation to add buttresses, earthen ramparts, and ditches to the defensive designs he presents in his treatise suggests a strong awareness of the new need to respond to technological developments in the practice of warfare. This need would subsequently lead to more significant evolutions in the principles of military architecture beginning in the fifteenth century and extending through the Early Modern period.

To best understand this evolution as a response to the new threat of gunpowder artillery, the fortifications of the republic of Siena offer a particularly productive case study. During the late fifteenth and early sixteenth centuries, the landscape of Siena was transformed by the defensive constructions largely designed and built by Baldassarre Peruzzi (1481-1536 CE), Antonio da Sangallo the Elder (1453-1534 CE), Giuliano da Sangallo (1445-1516 CE), and Baldassarre Lanci (1510-1571 CE). Most of the fortresses they designed prominently feature the structural form known as the angle bastion (Fig. 1.7).<sup>105</sup> The angle bastion in Europe is a critical architectural response to the increased prevalence of gunpowder artillery as a tool of warfare. Angle bastions make walls notably stronger and more structurally stable, and thus less likely to collapse if attacked with such artillery. The use of the angle bastion was so prominent in the

<sup>104</sup> Ibid., 527.

Giorgio's rendering of a fortress project and the Castel Nuovo in Naples as depicted by Francisco de Holanda in 1540, both of which are noted in Pepper and Adams, *Firearms and Fortifications*, 18-21.

<sup>&</sup>lt;sup>103</sup> Bevilacqua and Williams, "Alberti and Military Architecture in Transition," 527. In Europe, Roger Bacon is credited with having encoded the formula for gunpowder in the thirteenth century and the first European firearms appeared in the late thirteenth and early fourteenth centuries.

<sup>&</sup>lt;sup>105</sup> Examples of Sienese fortresses built by these architect-builders that feature angle bastions include the Fortress of Poggio Imperiale built by Giuliano da Sangallo and Antonio da Sangallo the Elder, Peruzzi's Fortino at Porta Camollia, and Lanci's Fortress of Santa Barbara.

fortifications constructed in this period that, according to much of the scholarship on European defensive design, it became a hallmark of Italian defensive architecture.<sup>106</sup>

Italian fortresses, including those in Siena, also increasingly featured triangular, polygonal, or star-patterned foundations as opposed to the more rounded or squared bases favored in earlier periods of European defensive architecture.<sup>107</sup> These design features are evident, for example, at the Castel Sant'Angelo in Rome, where Antonio da Sangallo the Elder added octagonal bastions to extant rounded towers during the Italian Renaissance creating a much larger polygonal footprint (Fig. 1.8). The effectiveness of gunpowder artillery in dismantling the tall, flat walls of Medieval fortifications also led to the development of the *trace italienne*, or low-lying thick walls that were built to sustain artillery bombardment.<sup>108</sup> The bastioned walls of fortresses were widened during this period to accommodate the large guns that became featured tools of war too. The result, from an architectural perspective, was the creation of gigantic, squat fortified structures,<sup>109</sup> like the Fortress of Poggio Imperiale built by Giuliano da Sangallo and Antonio da Sangallo the Elder (Fig. 1.9) or the Fortress of Nettuno (Fig. 1.10), also built by the da Sangallo family of architect-builders.

Over the course of the late fifteenth and early sixteenth century, these architectural features would become the fundamental design standards of the Italian School of fortification. These standards were predicated on the theoretical specifications of geometries and proportions

<sup>&</sup>lt;sup>106</sup> Pepper and Adams in *Firearms and Fortifications* (1986), Duffy in *Siege Warfare* (1996), Parrott in "The Utility of Fortifications" (2000), and Toy in *A History of Fortification* (1995) all characterize the angle bastion as an integral element and invention of Italian defensive architecture during this period.

<sup>&</sup>lt;sup>107</sup> Pepper and Adams, *Firearms and Fortifications*, 3.

<sup>&</sup>lt;sup>108</sup> David Parrott, "The Utility of Fortifications in Early Modern Europe: Italian Princes and Their Citadels, 1540-1640" *War in History* 7, no. 2 (April 2000): 128.

<sup>&</sup>lt;sup>109</sup> Pepper and Adams, *Firearms and Fortifications*, 6.

as well as prescribed forms, structures, materials, and layouts articulated by Vitruvius and elaborated upon by Alberti and other Italian architect-authors into the sixteenth century.<sup>110</sup> And, they would subsequently spread across Europe, including to the Iberian Peninsula, via circulation of treatises<sup>111</sup> and the movement of architect-builders during the Early Modern period.

## Spain

The spread of Italian theoretical principles in fortification architecture<sup>112</sup> in Early Modern Spain was facilitated in part by one of the most prominent architects working in this region during the sixteenth century, Juan de Herrera (1530-1597 CE). Herrera served as the royal architect to King Philip II of Spain. He is also notable because he is the first to have commissioned a Castilian translation of Alberti's *De re aedificatoria*, which was subsequently published in Spain in 1582.<sup>113</sup> Prior to the introduction of Alberti's translated treatise, other architectural treatises written in Italian by various Renaissance authors had been circulating in Spain for some time. And, the prevalence of translations and distribution of these theoretical works across Iberia suggests a keen interest among the Spanish in implementing the classical

<sup>&</sup>lt;sup>110</sup> These include Cataneo in his 1554 *I Primi Quattro Libri dell'Architettura di Pietro Cataneo Senese* (Venezia) and Giovanni Battista de' Zanchi in his 1554 *Del Modo di Fortificar le Città* as well as Sebastiano Serlio. There are other Italian architect-authors who were writing theoretical treatises at this time too. These three are specifically referenced due to the influence they have on designs discussed later in this chapter and in subsequent chapters of this study.

<sup>&</sup>lt;sup>111</sup> Sandro Parrinello and Silvia Bertacchi, "Geometric Proportioning in Sixteenth-Century Fortifications: The Design Proposals of Italian Military Engineer Giovanni Battista Antonelli," *Nexus Network Journal*, 17 (2015): 399.

<sup>&</sup>lt;sup>112</sup> As noted above, these principles are predicated on the specifications articulated by Vitruvius, Alberti, and others, including issues of specific geometries, proportions, and prescriptive design elements and layouts.

<sup>&</sup>lt;sup>113</sup> Laura Fernández-González, "Architectural Hybrids? Building, Law and Architectural Design in the Early Modern Iberian World" *Renaissance Studies*, 34, no. 4 (2020): 550.

architectural languages of Italy, as further refined during the Renaissance and by the Italian School of fortification design, into their own architecture.<sup>114</sup>

As interest in the design standards established by Italian architectural treatises grew in Spain, the extent to which urban development regulations were imposed by the Spanish imperial administration also expanded. These regulations were specifically aimed at controlling architectural production and at ensuring consistency in building practice across the Iberian world.<sup>115</sup> Bureaucratic agencies known as *alarifes* were initially established by King Alfonso X of Castile in the thirteenth century and their specific charge was to regulate the building trades through an emphasis on standardization. In subsequent centuries, *alarifes* were opened across Spain and, by the fifteenth century, as a result of the standardization efforts enforced by these entities, continuities in the building trades were evident across the Iberian Peninsula.<sup>116</sup>

In addition to the regulations and building codes established and enforced by the *alarifes*, Italian Renaissance ideals in architecture, as articulated in the likes of the previously-discussed treatises, were also codified in law. For example, the 1527 *Ordenanzas de Sevilla* (Ordinances of Seville) issued by Charles V regulated local guilds and defined specific statutes for building practice. The *Ordenanzas de Sevilla* represent a codification of previous building orders executed in Spain and they included specific requirements for the technologies and materials to be used in the construction of all types of buildings, including fortifications, too.<sup>117</sup>

The architectural traditions that were codified via Iberian regulatory entities and legislation like the *Ordenanzas de Sevilla*, among other regulatory proclamations, were intended

<sup>&</sup>lt;sup>114</sup> Ibid., 550.

<sup>&</sup>lt;sup>115</sup> Ibid., 552.

<sup>&</sup>lt;sup>116</sup> Ibid., 555.

<sup>&</sup>lt;sup>117</sup> Ibid., 557.

to be implemented across the Iberian empire. These regulations applied, for example, to the guilds of carpenters and masons that were founded in Lima in 1549, in Mexico City in 1557, and in Puebla in 1570.<sup>118</sup> It is important to note that these regulations were not haphazard nor generalized. For example, in some cases, sixteenth-century regulations adopted in Spain went so far as to clearly dictate the types of materials to be used in colonial constructions. This is evident in the stipulation that permanent edifices in the Spanish colony of Santo Domingo, for example, be built with stone and *tapia* (a building material made of clay or rammed earth) walls.<sup>119</sup> Similarly, the primary defensive structure in Santa Marta in the Kingdom of New Granada<sup>120</sup> was required to be built specifically of stone, *tapia*, mortar, wood, and bricks as dictated by a Spanish regulatory body in 1533.<sup>121</sup> Examples such as these reveal the extent to which Iberian imperial powers sought to control the building of structures not just in Europe, but in their American territories as well. It also further reinforces the extent to which the theories of architecture developed in Renaissance and the Early Modern period, with their clear specifications about geometry, proportion, structural elements, materials, and layout, were intended to serve as the formal foundation for various types of construction, including fortification, in the Spanish colonial world.

In addition to the circulation and adoption of Italian Renaissance architectural principles, architects and engineers working on the Iberian Peninsula were creating their own architectural treatises as well. Among the most prominent was Giovanni Battista Antonelli (1527-1588 CE),

<sup>&</sup>lt;sup>118</sup> Ibid., 557.

<sup>&</sup>lt;sup>119</sup> Ramon Gutiérrez, *Arquitectura Colonial Teoría y Praxis (S. XVI-XIX)* (Buenos Aires: Instituto Argentino de Investigaciones en la Historia de la Arquitectura y Urbanismo, 1980), 14.

<sup>&</sup>lt;sup>120</sup> The Kingdom of New Granada corresponded mainly to the territory of modern-day Colombia.

<sup>&</sup>lt;sup>121</sup> Letter from the Royal Officials of St. Marta to Charles V, 15th July 1533, Justicia, Leg. 1112. *Archivo General de Indias,* Sevilla, Spain.

the eldest in a family of military architects. Antonelli participated in the Picardy military campaigns of 1557, where he gained familiarity with military encampment and fortification principles practiced elsewhere in Europe.<sup>122</sup> After participation in this campaign, he rose to prominence as one of the most prolific Italian architect-engineers employed by the kings of Spain during the sixteenth century. Antonelli was assigned to complete numerous fortification projects for the Spanish Crown, including the replacement of the old city walls of Alicante with angle bastions, the construction of a new fortified wall at Cartagena, and the design and construction of the fortress at Bernia in Alicante as well.<sup>123</sup>

While working as an architect-builder for the Spanish Crown, Antonelli authored his treatise on defensive architecture entitled *Epitomi delle fortificationi moderne di Giovambatta Antonelli*.<sup>124</sup> The manuscript, though never published, was written as a sort of proof of Antonelli's experience as a military engineer.<sup>125</sup> It consists of three sections wherein he discusses fortification, artillery, and army quartering. The first section of the treatise is primarily concerned with the standard elements necessary to fortify cities and citadels as well as with the details of properly citing a fortress within particular landscapes. The specifications that Antonelli offers here are largely aligned to those articulated by Vitruvius. This section also specifically addresses the design features that Antonelli deems essential to defensive architecture, including notably the angle bastion that is prevalently featured in Italian School precedents.<sup>126</sup> The second section of

<sup>&</sup>lt;sup>122</sup> Parrinello and Bertacchi, "Geometric Proportioning," 401.

<sup>&</sup>lt;sup>123</sup> Ibid., 401.

<sup>&</sup>lt;sup>124</sup> This document exists as a handwritten manuscript with several illustrations and is currently housed in the *Museo de Ejército* in Toledo, Spain. The manuscript is also accessible via a 2004 reprint produced by Mario Sartor. Mario Sartor, *Giovanni Battista Antonelli, Epitomi delle fortificazioni moderne* (Udine: Forum, 2004).

<sup>&</sup>lt;sup>125</sup> Sandro Parrinello and Silvia Bertacchi, "The Fort of Bernia by Giovanni Battista Antonelli" *Nexus Network Journal*, 16 (2014): 701-702.

<sup>&</sup>lt;sup>126</sup> Giovanni Battista Antonelli, *Epitome delle fortificazioni moderne di Giovambatta Antonelli*. 1560. Antonelli 1560, folio 22r, no. EMH\_1534 and folio 22v, no. EMH\_1689. Museo de Ejército, Toledo, Spain.

the treatise considers artillery and specifically the production of firearms and gunpowder. In it, Antonelli provides several illustrations depicting firearms in detail and he discusses their implications for the architectural design of fortresses.<sup>127</sup> And, the third and final section of the treatise is focused on military encampments, including siting and structural features that Antonelli thought should be sought in sites that could be used for this purpose.<sup>128</sup>

As noted above, the Italian School angle bastion became a hallmark of defensive architecture during this period, appearing in fortresses built across Europe. As a testament to the ongoing importance of the angle bastion as an architectural feature in the Early Modern context, Antonelli includes two drawings of it in the first section of his treatise (Fig. 1.11 and Fig. 1.12).<sup>129</sup> These drawings are not specific to any particular fortification, but rather model this defensive architectural form in concept. The images are accompanied by text that emphasizes the importance of its specific geometries and proportions while also presenting such bastions as a critical technical development responsive to evolutions in the practice of warfare.<sup>130</sup> Antonelli's treatment of the angle bastion is similar to the ways in which both Vitruvius and Alberti discuss specific forms as ideal inclusions in defensive designs in their theoretical treatises.

As Sandro Parrinello and Silvia Bertacchi note in their research on Antonelli's *Epitome della fortificazioni moderne di Giovambatta Antonelli*,<sup>131</sup> the treatise is organized as a manual.

<sup>&</sup>lt;sup>127</sup> Section two of Antonelli's *Epitome delle fortificazioni moderne* consists of folios 41v through 122v. This section is dedicated specifically to King Philip II and though it is a lengthy section, it also appears incomplete per the research conducted by Parrinello and Bertacchi, with several paragraphs seemingly missing as noted in "Geometric Proportioning," 402.

<sup>&</sup>lt;sup>128</sup> Section three of Antonelli's *Epitome delle fortificazioni moderne* includes folios 123r through 146v and is the shortest section. It is also abundantly illustrated.

<sup>&</sup>lt;sup>129</sup> Antonelli, *Epitome delle fortificazioni moderne di Giovambatta Antonelli*, folio 22r and 22v.

<sup>&</sup>lt;sup>130</sup> Ibid., folios 22r and 22v.

<sup>&</sup>lt;sup>131</sup> Parrinello and Bertacchi, "Geometric Proportioning," 404.

However, because it also includes several comprehensive explanations of design concepts and practical construction principles, it is better understood as more theoretical in nature. For example, Antonelli includes specific stipulations regarding standard geometries and mathematical proportions to be used in fortifications that align to those established as early as Vitruvius's treatise.<sup>132</sup> Similarly, his prescriptive approach to articulating specifics of form, materials, and proportions recalls Alberti's treatise and his treatment of ideal inclusions in fortified architecture. Thus, it is clear that Antonelli was creating a treatise that was intended, at least in part, to function as a theoretical basis or guide for constructing fortifications in Spain.

It is also clear that Antonelli's treatise is influenced by the work of several other Italian treatise-writers including Pietro di Giacomo Cataneo (c. 1510-c. 1574 CE) and Giovanni Battista de' Zanchi (1515-1586 CE), both of whom worked as military architect-engineers.<sup>133</sup> Of particular note is the emphasis that Antonelli places on standards of geometry in his treatise that are strikingly similar to those highlighted by Zanchi in his 1554 treatise entitled *Del Modo di Fortificar le Città*.<sup>134</sup> Zanchi, like many of his Italian counterparts, was also drawing on the theoretical standards specific to geometry, symmetry, and proportion established by Vitruvius and elaborated upon by Alberti. Similar assertions about the importance of specific geometries in fortification design are also made by Spanish engineer Cristóbal de Rojas, whose 1598 treatise on fortification design is also explored later in this chapter.<sup>135</sup>

<sup>&</sup>lt;sup>132</sup> Antonelli, Epitome delle fortificazioni moderne di Giovambatta Antonelli. 1560. Unpublished manuscript.

<sup>&</sup>lt;sup>133</sup> Pietro Cataneo's 1554 *I Primi Quattro Libri dell'Architettura di Pietro Cataneo Senese* (Venezia) and Giovanni Battista de' Zanchi's 1554 *Del Modo di Fortificar le Città* (Venezia: Plinio Pietrasanta) are notable influences on Antonelli's work reflecting the transit of theoretical ideas across Europe, specifically those related to standardized geometries, symmetry, and proportion. Parrinello and Bertacchi in "Geometric Proportioning," 406, suggest that these similarities are evident and that Antonelli may also have drawn ideas from others, including his colleagues who may also have been writing treatises concurrently.

<sup>&</sup>lt;sup>134</sup> Zanchi, 1554 Del Modo di Fortificar le Città, 57.

<sup>&</sup>lt;sup>135</sup> Cristóbal de Rojas indicates in his *Teoría y práctica de fortificación, conforme las medidas y defensas destos tiempos, repartidas en tres partes por el capitán Christoval de Rojas, Ingegnero del Rey Nuestra Senor Don Felipe* 

Where Antonelli diverges somewhat from his Italian Renaissance counterparts in his theoretical approach is his emphasis on including as many angle bastions as possible in the ground plans of his fortresses. Although Italian Renaissance architects including Zanchi and Girolamo Maggi and Giacomo Castriotto, for example, advocate for use of numerous bastions over triangular or quadrilateral layouts,<sup>136</sup> Antonelli is even more insistent that many-sided fortifications should have "five, six, seven, eight or more angles…the more there are, the better they are, and the less they are, the worse they are."<sup>137</sup> This insistence on an abundance of bastions clearly distinguishes Antonelli's theoretical approach in comparison to those of his Italian counterparts.

Antonelli goes on to provide other information about the necessary geometric proportions of several design elements common to fortifications including bastions, curtains, scarps, gates, and moats. He also makes recommendations specific to the use of rammed earth as a building material.<sup>138</sup> In each of these cases, Antonelli's work is evidently influenced by the Italian Renaissance theoretical treatises to which he would have had exposure. However, he also elaborates on this theoretical foundation by providing his own recommendations specific to aspects like geometry, proportion, shape, and structural inclusions, thus making his *Epitome* a novel contribution to defensive architectural theory in the Iberian context.

*III* (Madrid: Luis Sanchez, 1598) that "La Primera de las tres cosas que han de concurrir en el Ingeniero, es la Geometria" (II, 1v). A digitized version of this manuscript is available online from the Sociedad Española de Historia y de la Construcción located in Madrid, Spain.

<sup>&</sup>lt;sup>136</sup> Giovanni Battista de' Zanchi's 1554 *Del Modo di Fortificar le Città* and Girolamo Maggi and Giacomo Castriotto's 1564 *Della Fortificatione delle Città* (Venezia: Rutilio Borgominiero) reference the importance of multiple bastions but do not go so far as to suggest using as many as possible as does Antonelli.

<sup>&</sup>lt;sup>137</sup> Giovanni Battista Antonelli, *Epitome delle fortificazioni moderne*, Folio 11r.

<sup>&</sup>lt;sup>138</sup> These details can be found in folios 12v, 28r, 13r-v, 14v-16v, 33r-41r in *Epitome delle fortificazioni moderne di Giovambatta Antonelli*. 1560.

One such innovative recommendation, which would have implications for fortress design in the Americas, was Antonelli's attempt to establish what he termed a "universal model" of fortification design. This "universal model" was derived, according to Antonelli, from the use of specific geometries, proportions, and measurements that resulted in fortified architecture that could be built on any location.<sup>139</sup> In crafting his "universal model," he drew from Italian Renaissance precedents, including likely the treatises of Zanchi, Cataneo, Maggi and Castriotto, and potentially others as well. However, he expands on these Italian precedents by specifying that the "universal model" of fortress design consists of multiple angle-bastioned walls that create a ground plan or fortress footprint of four bastioned corners, which are set using specific measurements and proportions. For example, Antonelli recommends the use of whole numbers for measurements when building "universal model" fortifications. Specifically, he asserts that all exterior fortress walls should be constructed at a thickness of ten feet with buttress walls built at thicknesses of three feet and dividing walls at six feet. All of the quadrilateral spaces included in Antonelli's "universal model" design are perfect squares and all are exactly perpendicular to the line of the curtain walls also included in this standardized approach to fortress design.<sup>140</sup>

When charged by the Spanish Crown with building the fortification at Bernia in Alicante, Spain, Antonelli set out to build exactly this "universal model." Interestingly, however, although this "universal model's" geometry and proportions were functional on paper and it was theoretically in keeping with the Spanish interest in standardized construction, the application of Antonelli's theoretical architectural model was far less successful in practice.

<sup>&</sup>lt;sup>139</sup> Parrinello and Bertacchi,"The Fort of Bernia," 703.

<sup>&</sup>lt;sup>140</sup> Ibid., 720.

Construction began on the fortress of Bernia in 1562 at the command of the Spanish Crown, which insisted that a fortress was a necessary response to perceived threats from the morisco (once-Muslim converts to Christianity residing in Spain) population in Alicante.<sup>141</sup> In keeping with the specifications of Antonelli's "universal model," the Fort of Bernia (Fig. 1.13) was a symmetrical construction with four angle-bastioned corners. It was built with dimensions exactly aligned to Antonelli's treatise, which he stipulated were required for the structure to withstand attack by artillery. Although Antonelli's design is specifically intended to resist this type of attack, Bernia's location atop a mountain would have precluded any artillery advance because the hill on which it was built was far too steep and rocky for large-scale artillery elements to have been leveraged. Furthermore, the fortress is constructed so high on the mountain that its isolation would likely have made it largely irrelevant in an armed conflict of any sort. Thus, the choice to build this fortress in the "universal model" at this particular location seems to have been an effort on the part of Antonelli to prove his theoretical claims about the universal applicability of certain fortress design principles as outlined in his treatise. It perhaps was also an effort to demonstrate that the architectural standardization of such importance to the Spanish in this period was practically functional as well.

The location of the Fort of Bernia was not the only challenge associated with the implementation of the "universal model" of fortress design. In his treatise, Antonelli advocates for the use of specific building materials. Yet, the materials used at Bernia were of such poor quality that the structure of this fortress deteriorated notably quickly.<sup>142</sup> The issues with Antonelli's "universal model" did not go unnoticed by Spanish authorities, despite their general

<sup>&</sup>lt;sup>141</sup> Ibid., 703-704.

<sup>142</sup> Ibid., 706-707.

interest in promoting the kind of architectural standardization premised in this design. For example, an official report written by the Viceroy Vespasiano Gonzaga on a visit to the site in 1575 notes Bernia's many structural insufficiencies while openly criticizing the ineptitude of the design. Viceroy Gonzaga goes so far in this report as to state that he believed Bernia to be an indefensible fortification.<sup>143</sup> Given all of these shortcomings, Antonelli's fortress was quickly abandoned. However, the abandonment of this exemplar of the "universal model" in practice did not dissuade the Spanish from continuing to invest in the notion of standardized design. The theoretical principles espoused by Giovanni Battista Antonelli as well as those of the Italian School of fortification design would continue to be employed in the Early Modern period in Europe and in Spanish America.

Although Antonelli was among the most prominent architects specializing in defensive design in Spain in the Early Modern period, he was not the only architect-builder elaborating on Italian Renaissance approaches to contribute to standardization efforts in the Iberian context. Cristóbal de Rojas (1555-1614 CE), a Spanish military engineer and architect, was also frequently commissioned to build Spanish fortifications. Rojas was a pupil of Tiburcio Spannocchi and also worked as an assistant to Juan de Herrera on the construction of El Escorial prior to being commissioned to build defensive structures for the Spanish Crown.<sup>144</sup> While working for King Philip II and King Philip III, Cristóbal de Rojas was charged with the fortification of the city of Cádiz, including construction of its primary fortress, the Castillo de Santa Catalina (Fig. 1.14). Construction of the Castillo began in 1598, which was the same year Rojas published his treatise on fortification architecture entitled *Teoría y práctica de* 

<sup>&</sup>lt;sup>143</sup> Ibid., 708.

<sup>&</sup>lt;sup>144</sup> Pedro Luengo, "Cristóbal de Rojas: Nuevos datos sobre su biografía y primeras obras," *Archivo Español de Arte,* XCI, 362 (Abril-junio 2018), 126.

fortificación, conforme las medidas y defensas destos tiempos, repartidas en tres partes por el capitán Christoval de Rojas, Ingegnero del Rey Nuestro Señor Don Felipe III.<sup>145</sup>

Like Antonelli's *Epitome*, Rojas's treatise on military architecture consists of three sections. It is, however, considerably longer and more detailed than Antonelli's work and it is also robustly illustrated. The first section of this treatise emphasizes the skills of the military engineer necessary for fortification design and construction. He includes a particular focus on mathematics and geometry, which echoes the similar emphasis placed on these disciplines in Italian Renaissance architectural theory.<sup>146</sup> Section one of Rojas's treatise also includes discussion of the importance of siting fortifications to support their function and articulates various standard measurements and proportions to be implemented in fortress constructions.

The second section presents specific discussion of the works of Italian military architects including Carlo Teti (1529-1589 CE) and Cataneo,<sup>147</sup> whose designs Rojas explores at some length while offering his own commentary. In this section of the treatise, Rojas identifies several ideal fortification layouts consisting of numerous different numbers of angle bastions (Fig. 1.15 and Fig.1.16).<sup>148</sup> He also specifically defines the measurements and proportions that he recommends for building stronghold structures,<sup>149</sup> much in the same way that Antonelli specifies dimensions and geometric proportions in his "universal model."

In the third section of the treatise, Rojas focuses on the importance of using particular building materials, explaining how these materials are to be prepared for use in constructing

<sup>&</sup>lt;sup>145</sup> Rojas's *Teoría y práctica de fortificación* was originally printed in Madrid in 1598.

<sup>&</sup>lt;sup>146</sup> Ibid., 10-13.

<sup>&</sup>lt;sup>147</sup> Ibid., 32-34.

<sup>&</sup>lt;sup>148</sup> Ibid., 39-48.

<sup>&</sup>lt;sup>149</sup> Ibid., 39-48, 53-67.

defensive structures.<sup>150</sup> As is the case in Antonelli's treatise, Rojas clearly develops his own ideas about ideal forms of defensive architecture while building on Italian theoretical foundations, to which he often makes specific reference throughout his own work.

Rojas's theoretical approach to fortification design as articulated in his 1598 treatise was put into practice in the construction of the Castillo de Santa Catalina in Cádiz, Spain. In keeping with the design principles that he articulates, the Castillo de Santa Catalina's ground plan takes the shape of a multi-bastioned star with gently scarped walls. This layout, with its three full bastions and two half-bastions affixed to the shore, aligns to the structural recommendations that Rojas makes in his treatise, wherein he advocates for the functional effectiveness of five-bastioned star layouts specifically.<sup>151</sup> Thus, in the design of Santa Catalina, we again see a strong practical implementation of theoretical architectural recommendations, which importantly are also very much in keeping with the Spanish interest in standardizing design features.

#### Standardization and Power in the Americas from the European Perspective

As we consider each of these theoretical and practical examples of fortification design principles from Antonelli and Rojas, it is important to also return to the role of *alarifes* and other architectural regulations in governing construction in Iberia and subsequently in the Americas. *Alarifes*, as bureaucratic regulatory entities, were responsible for ensuring the implementation of codified architectural standards included in the *Ordenanzas de Sevilla* and other Spanish decrees.<sup>152</sup> These *ordenanzas* drew heavily on architectural theory articulated by Italian Renaissance architect-authors and reiterated by Antonelli and Rojas. In so doing they

<sup>&</sup>lt;sup>150</sup> Ibid., 89-91.

<sup>&</sup>lt;sup>151</sup> Ibid., 39-48.

<sup>&</sup>lt;sup>152</sup> Fernández-González, 550.

standardized specific approaches to architecture, including understandings of order, materials and building techniques, as well as the distinction between skill and "art."<sup>153</sup> These European approaches to architecture, as they manifest in the treatises of Early Modern Europe and subsequently in the standards promoted by the *ordenanzas* and enforced by the *alarifes*, are critically important to our interpretation of colonial architecture because they articulate clearly how Europeans likely viewed the structures they commissioned as well as those they encountered in colonial Mexico. They also inform our understanding of what Europeans in the Americas would have understood to be "*arte*" or "architecture" and what sorts of structures were viewed as lesser than.

The importance of following established standards in architectural practice in the Americas is very clear in first-hand accounts of the architecture of Peru written by Bernabé Cobo, a Spanish Jesuit missionary, for example. As Cobo described the architecture of the Americas, he asserts that it unilaterally falls short of meeting what the Europeans understood to be the true standards of architecture as defined by classical design principles and their elaboration in Renaissance and Early Modern Europe.<sup>154</sup> More specifically, these European design principles emphasize the importance of orderliness as well as establish a clear hierarchy of materials and building techniques, wherein stone architecture is understood to be superior to wood, reed, or mud architecture, for example. For Cobo, it is clear that understanding European architectural design standards allows one to make clear distinctions between "skill" and "art" when evaluating buildings. This distinction is predicated on notions of order and hierarchy of materials as well as on the assertion that only one architectural style - the classical with the

<sup>&</sup>lt;sup>153</sup> Fraser, *The Architecture of Conquest*, 35.

<sup>&</sup>lt;sup>154</sup> Ibid., 35.

addition of the technology of the arch, which is further defined by notions of order and proportion - was deemed to be "art."<sup>155</sup>

Of particular importance to the study of colonial Latin American architecture is the extent to which these European design standards and their relevance in the context of the "Art of Architecture," to use Fraser's term, were expressly mandated by the Spanish Crown. For example, as early as 1513, guidance was issued by the King of Spain, Ferdinand I, to Pedrarias Dávila expressly articulating how towns were to be founded and constructed in the newly-acquired Spanish territory of Panamá. Similar guidance was also issued to Hernán Cortés in 1523 for his implementation in Mexico City.<sup>156</sup> In each of these examples, among many others across the Spanish Americas, the Crown made clear that colonial cities and structures were to be built in accordance with European standards, which were influenced by various Italian Renaissance architectural treatises, including those of Vitruvius, Alberti, and Sebastiano Serlio specifically.<sup>157</sup> Thus, it is clear that in relying on European architectural standards, the Spanish were actively seeking to recreate European-style cities and buildings in the Americas.

This guidance also reflects the Spanish imperial belief that prescribed urban planning and specific architectural and material models could be intentionally engaged as colonizing tools. The Spanish actively used the development and organization of cities and the standardization of form and materials for the buildings erected within them as a means of dominating and imposing European norms on what they deemed to be their "savage surroundings."<sup>158</sup> Initially, as Ángel

<sup>&</sup>lt;sup>155</sup> Ibid., 35.

<sup>&</sup>lt;sup>156</sup> Ibid., 36-37.

<sup>&</sup>lt;sup>157</sup> Alfonso Ortiz Crespo, "The Spanish American Colonial City: Its Origins, Development, and Functions," *The Arts in Latin America: 1492-1820*, eds. Joseph J. Rishel and Suzanne Stratton-Pruitt (Philadelphia: Philadelphia Museum of Art, 2006), 25.

<sup>&</sup>lt;sup>158</sup> Ángel Rama, *The Lettered City*, trans. John Charles Chasteen (Durham: Duke University Press, 1996), 13.

Rama notes in *The Lettered City*, Spanish colonial cities were built specifically to function as fortresses, wherein walled precincts were used as a literal mechanism of control. In addition to literally fortifying cities, specific urban planning and management efforts were also directly linked to the "superior civilizing responsibilities" that the city and the Spanish were "destined to fulfill."<sup>159</sup> Thus, in addition to constructing standalone fortresses ostensibly for the purposes of practical defense, the imposition of European-style city structures in the Americas was, for the Spanish, also an ideologically-driven effort intended to garner control of and maintain power over Indigenous populations in the Spanish American colonies.

The implied power of imposing city models that were European in derivation from the perspective of the Spanish was clearly internalized by the European mendicants and chroniclers writing in the colonial period as well. For example, Cobo also noted in his first-hand account of Spanish colonization in the Americas that with "so many towns built in our design, so many rich buildings of stone and mortar, so many stones worked with the skill and art of Europe, in the shape of columns, bases and all manner of carvings and moldings," there would be no reason for Spanish culture (and architecture) not to become so well entrenched in the colonies that it would become impossible to eradicate.<sup>160</sup> As this example makes clear, the Spanish had a well-developed sense of what they deemed to be the Spanish style of urban development and they evidently believed that this approach to urban order could be uniformly imposed across their new territories as a means of gaining and maintaining power.<sup>161</sup>

<sup>&</sup>lt;sup>159</sup> Ibid., 13.

<sup>&</sup>lt;sup>160</sup> Fraser, *The Architecture of Conquest*, 21. Translated from the Spanish in Cobo's *Historia del Nuevo Mundo 2:* 52: "tantos pueblos edificados a nuestra traza,...tantos edificios suntuosos de cal y canto,...muchas piedras labradas con el primor y arte que se labran en Europa en forma de columnas, basas y todo género de labores y molduras.

<sup>&</sup>lt;sup>161</sup> To be clear, the Spanish imposed a particular style of city structure that they deemed to be European in origin. Their perspective on these cities and their structures does not take into account Indigenous perspectives or city planning precedents in Mesoamerica that predated Spanish invasion. This is an important distinction in the context

The Spanish emphasis on building colonial cities and the structures therein in accordance with European standards continued well into the first century of the colonial period. For example, Philip II's issuance of the 1573 *Ordenanzas sobre descubrimiento nuevo y población* continued to codify European design principles while also asserting that architecture built to the European standard was imbued with a particular power that could control the Indigenous populations of the Americas.<sup>162</sup> This association between architecture and power in the colonial context is critically important to understanding how all structures, including defensive and militaristic edifices, in the Americas would likely have been interpreted by European colonists. It also makes clear the European belief in the performative power of architecture in colonial contexts as well.

Establishing this foundational understanding of European perspectives and standards associated with architecture is essential to complicating our understanding of defensive and militaristic colonial architecture. In order to advocate for a decolonial reading of such architecture in the Americas, it is necessary to create space for and acknowledge multiple possible interpretations of fortresses and other militaristic constructions, including those informed by the European perspectives discussed in this chapter. These European perspectives, however, are not the only applicable interpretations of defensive and militaristic architecture nor of urban planning implemented during the colonial period in the Americas.<sup>163</sup> As will be

of the decolonial argument presented in this study. There are several scholars including Mundy in the *The Death of Aztec Tenochtitlan, the Life of Mexico City* (Austin, Texas: The University of Texas Press, 2015), Boone in "This New World Now Revealed: Hernán Cortés and the Presentation of Mexico to Europe," in *Word & Image*, 27 no. 1 (January-March 2011) 31-46., and Michael E. Smith in "The Teotihuacan Anomaly: The Historical Trajectory of Urban Design in Ancient Central Mexico." Open Archaeology 3 (2017): 175-193, who articulate Indigenous origins for city structures that were thought by the Spanish to have been European imports.

<sup>&</sup>lt;sup>162</sup> Fraser, *The Architecture of Conquest*, 49.

<sup>&</sup>lt;sup>163</sup> In her *The Death of Aztec Tenochtitlan, the Life of Mexico City,* Mundy advocates for acknowledging the agency of Indigenous residents in the creation and re-creation of Mexico City, following the fall of Tenochtitlan. This acknowledgement is grounded in the history of urban design that preceded Spanish invasion, which is evident in the pre-Hispanic city structures of Tenochtitlan. The urban design of the colonial city is not solely European in origin.

explored in subsequent chapters of this study, space must also be made for Indigenous perspectives, architectural precedents, and knowledge as well.

Similarly, evidence articulated by Michael E. Smith in "The Teotihuacan Anomaly," which considers the trajectory of urban design in Mesoamerica, indicates that Teotihuacan was also built on a grid. To unilaterally categorize American cities as being modeled on European precedent alone and more specifically the notion that the grid plan is European in origin, denies the critical agency and history of urban planning in Mesoamerica. Europeans viewed what they understood to be the imposition of the grid plan in colonial cities as a demonstration of European power through the shaping of urban spaces. This perspective, however, is only one side of the story. Subsequent chapters of this study articulate more complicated interpretations of such city structures and associated architecture that acknowledges and makes space for possibilities informed by Indigenous experiences and histories in the Americas.

## **CHAPTER TWO**

## INDIGENOUS ARCHITECTURAL TRADITIONS AND RITUALIZED MILITARISM

This chapter examines the robust tradition in defensive architecture and the associated culture of ritualized militarism in Mesoamerica prior to and at the time of the Spanish invasion (150-1519 CE). It provides an important foundation and launching point for examining defensive and militaristic architecture in colonial Mexico in the following chapters. As demonstrated in chapter one, the Spanish brought with them to the Americas, from their perspective, a standardized and notably regulated approach to city planning and architecture that was based in both Italian Renaissance and Early Modern Spanish architectural theory and practice.<sup>164</sup> What the Spanish encountered in Mesoamerica was a similarly robust tradition that reflects architectural and iconographic developments specific to militarism that originated at Teotihuacan (150-650 CE) (Fig. 2.1) and were elaborated upon across centuries, culminating in those evident at sites like Malinalco and Tenochtitlan.

The militarism that informed the architecture and iconography of the sites considered here was both literal and symbolic. The abundance of Mesoamerican defensive architecture built between the rise of Teotihuacan and the invasion of the Spanish is a testament to the importance of warfare as a mechanism for establishing and maintaining power as well as protecting settlements and their populations.<sup>165</sup> Warfare in Mesoamerica took place not just on battlefields

<sup>&</sup>lt;sup>164</sup> This assertion is based on the statements made in colonial primary source records written by Europeans regarding the implementation of European-style city plans and related scholarship on this topic. See chapter one. Well-established city planning traditions that coincide with those implemented in Europe (i.e. the use of the grid plan) were also evident in pre-Hispanic Mesoamerica as discussed by Boone, Mundy, and Smith as noted in chapter one. My statement here is not intended to preclude this Indigenous tradition, rather to make clear there are multiple viable perspectives.

<sup>&</sup>lt;sup>165</sup> Warfare and archaeological evidence thereof is discussed in depth by several scholars. The work of the following scholars is particularly relevant: Travis W. Stanton and M. Kathryn Brown in "Studying Warfare in Ancient Mesoamerica," in *Ancient Mesoamerican Warfare*, eds. M. Kathryn Brown and Travis W. Stanton (Walnut Creek,

and in literal clashes with enemies, but was also symbolic and was enacted in various ritualized spaces like temples, which are often located within the fortified precincts of settlements. An important aspect of this ritualized militarism in Mesoamerica was the practice of capturing enemies for the purposes of human sacrifice. The empire-building Mexica, for example, relied on the *xochiyaoyotl*, or "flower wars," as a mechanism for securing captives for ritualized sacrifice. <sup>166</sup> Warfare in the Mesoamerican context was, thus, a complex and multifaceted practice that manifested literally and symbolically in the architecture and iconography of numerous pre-Hispanic sites.

I have intentionally chosen a select few of these sites to examine in this study, including Teotihuacan, Xochicalco, Cacaxtla, and Malinalco. These have been selected because of their deep connection to pre-Hispanic ritualized militarism, their fortified nature, and close proximity

Lanham, New York and Oxford: Altamira Press, 2003), 1-16; Arthur A. Joyce, "Imperialism in Pre-Aztec Mesoamerica: Monte Albán, Teotihuacan, and the Lower Río Verde Valley," in *Ancient Mesoamerican Warfare*, eds. M. Kathryn Brown and Travis W. Stanton (Walnut Creek, Lanham, New York and Oxford: Altamira Press, 2003), 49-72; and Payson D. Sheets, "Warfare in Ancient Mesoamerica: A Summary View," in *Ancient Mesoamerican Warfare*, eds. M. Kathryn Brown and Travis W. Stanton (Walnut Creek, Lanham, New York and Oxford: Altamira Press, 2003), 287-302. Warfare in some instances may have achieved an imperial or hegemonic aim in addition to facilitating the acquisition of human captives for ritualized sacrifice. As Joyce argues, territorial conquest was often not the primary objective of warfare. Rather, the dominant power-acquiring strategy employed by Central Mexican polities was that of "indirect hegemonic control," wherein regions were coerced into imperial subjugation through the threat of warfare, not the actual practice of it (Joyce 68). In such cases, there is often little physical evidence of the imposition of an imperial power, such as the creation of administrative facilities or dramatic changes in the archaeological remains of material culture. Indirect hegemonic control was largely achieved through the building of alliances, mercantile exchange, and through the threat of violence (Joyce 68). As such, when considering the role of warfare in ancient Mesoamerica, we must be cognizant of the dominant approach to its practice as well as its purpose, which in many cases appears to have been primarily symbolic or ritualistic in nature.

<sup>&</sup>lt;sup>166</sup> Ross Hassig's work on Mexica warfare, and the "flower wars" in particular, and James Maffie's study of Aztec philosophy are notably relevant. Warfare was not always empire-building or hegemonic conquest. For example, in Post-Classic (c. 900-1521) Central Mexico, the practice of *xochiyaoyotl*, or "flowery wars," existed to take captives for use in ritual human sacrifice. Hassig (1995, 7) offers a crucial examination of the practice of "flower wars" or "flowery wars." Stanton and Brown (2003) also discuss this practice. Ross Hassig, *Aztec Warfare: Imperial Expansion and Political Control* (Tulsa: University of Oklahoma Press, 1995). Also in Ross Hassig, *Aztec Warfare* (Norman: University of Oklahoma Press, 1988): 10, 119-121, 128-130, 254-256. James Maffie, *Aztec Philosophy: Understanding a World in Motion* (Boulder: University Press of Colorado, 2014). Maffie uses the term 'Aztec' in his study, but it is intentionally substituted in this study for 'Mexica' as the more specific term. Brittenham discusses the importance of this ritualized warfare as well in *The Murals of Cacaxtla*, 117. Mónica Domínguez Torres also notes the importance of enemy capture for Mexica (Aztec) warriors in *Military Ethos and Visual Culture in Post-Conquest Mexico* (New York: Routledge, 2013), 23.

to colonial militaristic constructions, such as the fortress monasteries of Huejotzingo and Malinalco, which will be analyzed in later chapters of this study. The fortified Mexica (Aztec) site at Malinalco is also specifically highlighted here not just because of its geographic proximity to the colonial fortress monastery in Malinalco, but also because it was under construction and in active use at the time of Spanish invasion in 1519. Furthermore, Malinalco was occupied by the Mexica in the late fifteenth and early sixteenth centuries and as such it represents not only an important temporal connection between pre-Hispanic Mesoamerica and the period of the Spanish invasion but also a political and cultural connection to Tenochtitlan, the Mexica capital. These connections are important because the most robust available records that specifically address the intersection of Spanish and Indigenous political, social, and cultural interests in the sixteenth century were produced in and around Tenochtitlan-Mexico City. As such, they offer the opportunity to connect pre-Hispanic and early colonial ritualized militarism.

My examination of pre-Hispanic defensive and militaristic architecture combines archaeological studies with visual analysis.<sup>167</sup> Key sixteenth-century primary sources also offer critical insight into the Indigenous architecture and belief systems associated with the sites central to this study. Diego Muñoz Camargo's *Historia de Tlaxcala*, for example, includes a

<sup>&</sup>lt;sup>167</sup> The scholarship of Pedro Armillas, Annabeth Headrick, Kenneth G. Hirth, Ellen T. Baird, Andrea Stone, Saburo Sugiyama, George Kubler, Claudia Brittenham, Karl Taube, and Andrew D. Turner, cited in the bibliography of this study, is particularly relevant. These scholars offer valuable insight into the architectural and iconographic traditions that were established at Teotihuacan and the ways in which these traditions were further developed during the Epiclassic period at Xochicalco and Cacaxtla (c. 650-950 CE) and into the sixteenth century across Central Mexico. Additionally, they offer insight into the prevalence of ritualized militarism as a driving social, political, and cultural force across settlements in pre-Hispanic Mesoamerica over the span of fourteen centuries. The ritualized fortified site at Malinalco, Structure I, also known as the Temple of the Eagle Warriors, exemplifies the continued architectural and iconographic conflation of ritual and militarism into the sixteenth century. Scholarship of particular relevance to this site includes José García Payón, *Malinalco: Official Guide* (Mexico City: Instituto Nacional de Antropología e Historia, 1958); Richard F. Townsend, "Malinalco and the Lords of Tenochtitlan" in *The Art and Iconography of Late Post-Classic Central Mexico*, ed. Elizabeth Hill Boone (Washington DC: Dumbarton Oaks, 1982), 111-140; Patrick Thomas Hajovsky, *On the Lips of Others: Moteuczoma's Fame in Aztec Monuments and Rituals* (Austin: University of Texas Press, 2015), 29; Jeanette Favrot Peterson, *The Paradise Garden Murals of Malinalco: Utopia and Empire in Sixteenth-Century Mexico*. Austin: University of Texas Press, 1993.

description of Cacaxtla and its fortified structures that illuminates the extent to which militarism was embodied in the architecture of this period.<sup>168</sup> Early colonial perspectives on defensive and militaristic architecture, and more expansively on the ritualized militarism of pre-Hispanic Mesoamerica, are also articulated in Diego Durán's *La Historia de las Indias de Nueva España e Islas de Tierra Firme* and in Bernardino de Sahagún's *Florentine Codex*, and aspects of each are discussed throughout this study. Although the inherent Eurocentric bias of these accounts must be acknowledged, they also offer invaluable insights into the world that the Spanish encountered and their reception and observation of Mesoamerican ritualized militarism in the sixteenth century.

Using these methods, I examine the sites presented in this chapter chronologically to demonstrate the continuity evident in their defensive architectural features. Through this analysis, I comment on the parallels between the defensive architecture of Mesoamerica and that of Europe. In noting their comparable structural forms, I argue that parallels in Mesoamerican and European defensive architecture are best understood as analog developments that must be collectively considered when interpreting the colonial constructions that resulted from their intersection. Further, in analyzing the themes that recur at these pre-Hispanic sites, I argue that they constitute an architectural and iconographic tradition specific to ritualized militarism that serves as a critical foundation for interpreting the defensive and militaristic edifices built during the colonial period as well.

<sup>&</sup>lt;sup>168</sup> Diego Muñoz Camargo, Historia de Tlaxcala (Lingua Ediciones, S.L., 2010),

<sup>&</sup>lt;u>https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4719035</u>. Camargo makes reference to Cacaxtla as the sea of the "Olmeca" or "Olmeca Xicalanca," noting specifically the power of this group in relation to Teotihuacan and other smaller states in what is now Central Mexico.

## Teotihuacan and Early Militarism in Mesoamerica

As the most prominent Mesoamerican city to develop during the Classic period (c. 150-650 CE), Teotihuacan's cultural and artistic influence echoed across Central Mesoamerica during its height and in the more than seven centuries between its collapse and the invasion of the Spanish. It is, therefore, an apt starting point for understanding how militarism manifested in art and architecture and how it subsequently spread across this region following Teotihuacan's decline. At Teotihuacan, and at the later sites to be analyzed in this chapter, we find defensive architecture, or that which could have been used to protect the settlement or portions thereof during armed conflict. And, we also find militaristic architecture, which is better understood as a performative and symbolic testament to the importance of ritualized militarism and its connection to power. Teotihuacan's Ciudadela and the Temple of the Feathered Serpent found therein are examples of this conflation.

Spanish for 'citadel,' Teotihuacan's Ciudadela is a fortified precinct located at the southern end of the Avenue of the Dead that is surrounded by high protective walls bordering a large courtyard. Access to this courtyard is limited through a single point of entry, which is flanked by pyramidal structures that appear to guard it (Fig. 2.2). Inside the courtyard, is the ritually-significant Temple of the Feathered Serpent, two large housing complexes, and the Adosada platform (Fig. 2.3). Though the entirety of the settlement at Teotihuacan was not laid out as a wholly fortified space, the large walled courtyard of the Ciudadela could have been defensively functional, with the capability of sheltering a portion of the site's approximately 100,000 residents.<sup>169</sup> Importantly however, despite the structural defensive capacity of the

<sup>&</sup>lt;sup>169</sup> "Digital Stories: Teotihuacan: City of Water, City of Fire," De Young Museum, September 2017-February 2018. <u>https://digitalstories.famsf.org/teo/#start</u>. This story refers to this fortified precinct of the city being capable of sheltering a significant portion of the settlement's 100,000 residents should it have been needed in a truly defensive capacity.

Ciudadela, it does not appear to have been used for such a purpose as archaeological evidence does not indicate that actual battles were ever fought in this space. Thus, though its architecture includes defensive features, the militarism of the Ciudadela appears to have been primarily symbolic or performative.

This interpretation is reinforced by the performative militarism of the architecture and iconography of the Temple of the Feathered Serpent (Fig. 2.4). Also known as the Temple of Quetzalcoatl by the Mexica, this structure is a six-level step pyramid built in the Teotihuacan *talud-tablero* style.<sup>170</sup> It features numerous symbolic as well as literal references to war and warriors in its architecture and iconography. These references include the repeated rendering of the eponymous feathered serpent, a "War Serpent," and stylized butterflies, which are emblematic of the souls of warriors. Additionally, allusions to the costumes of warriors common in this period can be found in the visage of the "War Serpent" and literally among ritually sacrificed warriors or warrior impersonators who have been found buried at the temple's base. These iconographic and architectural features, combined with the cache of the ritually-sacrificed and the location of this structure inside the fortified Ciudadela precinct, establish strong connections between the Temple of the Feathered Serpent, ritualized warfare, and its relationship to power at Teotihuacan. This association established a pre-Hispanic architectural tradition in Central Mexico wherein the performance of power is associated with ritualized militaristic spaces. This tradition extended beyond the fall of Teotihuacan across Mesoamerica through the Epiclassic, Post-Classic, and into the early colonial period.

<sup>&</sup>lt;sup>170</sup> *Talud-tablero* is an architectural style commonly found in pre-Hispanic Mesoamerican architecture. It consists of a steeply sloped wall, called a *talud*, atop which a flat table-like panel sits perpendicular to the ground called the *tablero*.

Primary among the symbolic references to the connection between ritualized warfare and power found at the Temple of the Feathered Serpent are repeated renderings of the supernatural feathered serpent. The visage of this powerful mythological creature, with its serpent-like head, feathered eyes, a curling snout, and a wide mouth with fangs and a bifurcated tongue, emerges repeatedly from each of the six levels of the pyramid and along the balustrades (Fig. 2.5 and 2.6). And, its feathered body is also evident as it winds around the temple in two-dimensional relief. The power of Quetzalcoatl as a supernatural entity is associated with the wind, the dawn and Venus as the Morning Star.<sup>171</sup> And, at Teotihuacan in particular, the feathered serpent was not just emblematic of divine power, but of political power as well. This was so much the case that, according to Davíd Carrasco and Alfredo López Austin, images of the feathered serpent were associated with rituals conducted for the purposes of political legitimization.<sup>172</sup> Quetzalcoatl was associated with religious leadership as well.<sup>173</sup> The connection between political power and ritual is particularly noteworthy because these were also often directly linked to militarism, warfare, and human sacrifice at Teotihuacan.<sup>174</sup> As such, the figure of the feathered serpent became a visual embodiment of the conflation of ritual with political power and militarism in such a way

<sup>&</sup>lt;sup>171</sup> Saburo Sugiyama, "Teotihuacan as an Origin for Postclassic Feathered Serpent Symbolism," *Mesoamerica's Classic Heritage: From Teotihuacan to the Aztecs.* eds. David Carrasco, Lindsay Jones, and Scott Sessions (Boulder, Colorado: University of Colorado Press, 2000), 117. Quetzalcoatl is also associated with Venus in the third book of Sahagún's *Florentine Codex.* Fray Bernardino de Sahagún, *Florentine Codex: General History of the Things of New Spain, Book 3,* trans. A.J.O. Anderson and C.E. Dibble (Santa Fe, New Mexico: The School of American Research, 1978). And, this association is made in the *Codex Chimalpopoca. History and Mythology of the Aztecs: The Codex Chimalpopoca,* trans. J. Bierhorst. Tucson: University of Arizona Press, 1992.

<sup>&</sup>lt;sup>172</sup> Reference to the feathered serpent as emblematic of divine and political power is made by Carrasco in Davíd Carrasco, *Quetzalcoatl and the Irony of Empire: Myths and Prophecies in the Aztec Tradition* (Chicago: University of Chicago Press, 1982); and by López Austin in Alfredo López Austin, *Hombre-dios: Religión y política en el mundo náhuatl* (Mexico: UNAM, 1973).

<sup>&</sup>lt;sup>173</sup> Some priests, for example, were referred to as Quetzalcoatl by the Mexica, who described a Toltec priest of some renown as both a ruler and a god. H.B. Nicholson's *Topiltzin Quetzalcoatl: The Once and Future Lord of the Toltecs* (Boulder: University of Colorado, Boulder 2001) is a relevant monograph that offers a survey and discussion of Quetzalcoatl and the relationship thereof to the Toltecs.

<sup>&</sup>lt;sup>174</sup> Sugiyama, "Teotihuacan as an Origin," 118.

that it was difficult if not impossible to separate politics from the sacred.<sup>175</sup> Therefore, as we interpret the Temple of the Feathered Serpent and its specific context inside the fortified Ciudadela, we must understand it to be a testament not just to the supernatural power of Quetzalcoatl as a divine entity but also to the importance of ritualized militarism as a critical political construct directly associated with power at Teotihuacan.

The connection between the feathered serpent, power, and ritualized militarism at Teotihuacan is further evident in the contents of the archaeological cache found at the base of this temple.<sup>176</sup> This cache included the remains of more than two hundred soldiers, or soldier impersonators, and soldier-priests who were sacrificed and buried at the time of the site's dedication around 200 CE. Many of the objects found buried with the sacrificed here, including more than 1,200 projectile points, necklaces of human maxillae, obsidian knives and perforators, curved blades used in human and self-sacrifice, and slate disks common in the costume of Teotihuacano warriors, point to the identification of these individuals as warriors and connect them to the ritual practice of sacrifice.<sup>177</sup> Further, many of these individuals were found with their hands tied behind their backs, suggesting that they were likely buried unwillingly, a condition that coincides with the practice of acquiring captives through warfare for the purposes of ritualized sacrifice.

The objects in the cache also suggest a connection between the Temple of the Feathered Serpent and the rulers of Teotihuacan. More specifically, among the objects found was a wooden staff, possibly used as a scepter by a ruler. And, the arrangement of the burial complex indicates

<sup>&</sup>lt;sup>175</sup> Ibid., 117.

<sup>&</sup>lt;sup>176</sup> This cache was excavated by the Quetzalcoatl Project (1989-1991).

<sup>&</sup>lt;sup>177</sup> Sugiyama, "Teotihuacan as an Origin," 126-127.

that it may have accommodated royal tombs.<sup>178</sup> The material evidence of objects associated with self-sacrifice, including the aforementioned obsidian knives and blades, also suggests the presence of a ruler or ruling group among the buried here, for whom autosacrifice was expected as part of their duty to the gods.<sup>179</sup> The probable internment of a ruler among ritually-sacrificed warriors or warrior impersonators at the base of this temple is further testament to the close association of power with ritualized militarism at Teotihuacan.

This interpretation is further reinforced in the iconography of the sculptural renderings of the "War Serpent" on the temple's façade (Fig. 2.7).<sup>180</sup> The "War Serpent," with its "pillbox helmet" and rounded goggles, both of which were common aspects of military dress for warriors from this site and across the region during the Classic period, can be interpreted as a stylized rendering of the Teotihuacano warrior (Fig. 2.8).<sup>181</sup> The goggles worn by the "War Serpent," also connect it, and the warriors it represents, to the storm god, referred to as Tlaloc in Nahuatl but who is unnamed at Teotihuacan, who wears the same circular eyewear. This connection between warriors and the supernatural storm god at Teotihuacan is further substantiated by the appearance of lightning bolts as weapons of war in the form *atlatl* darts in the mural in the Tetitla compound at this site.<sup>182</sup>

<sup>182</sup> Ibid., 274.

<sup>&</sup>lt;sup>178</sup> Ibid., 128.

<sup>&</sup>lt;sup>179</sup> Ibid., 128.

<sup>&</sup>lt;sup>180</sup> Karl Taube, "The Turquoise Hearth: Fire, Self Sacrifice, and the Central Mexican Cult of War," in *Mesoamerica's Classic Heritage: From Teotihuacan to the Aztecs*, eds. David Carrasco, Lindsay Jones, and Scott Sessions (Boulder, Colorado: University of Colorado Press, 2000), 271.

<sup>&</sup>lt;sup>181</sup> Visual evidence of the "pillbox helmet" of warriors from Teotihuacan is found in the renderings of these warriors at Piedras Negras and a number of Maya sites, according to Taube. Ibid., 272-274.

Not only does the "War Serpent" wear the attire of a Teotihuacano warrior, but it also has a jaguar-like bearing with its squared fangs and broad muzzle.<sup>183</sup> Jaguars, as well as eagles, were emblematic of various military orders common across Classic, Epiclassic, and Post-Classic Mesoamerica. Such military orders valued attributes of bravery and selflessness, so much so that warriors were expected to offer their lives in service of the common good and the good of the state.<sup>184</sup> Allusions to this expectation of self-sacrifice are symbolically evident in the spots of jaguars and the dark bodies of eagles, which according to Book Seven of the *Florentine Codex*, were visual testaments to exposure to sacrificial pyres.<sup>185</sup> Thus, to find sculptural renderings of jaguars on the Temple of the Feathered Serpent and in close proximity to a cache of ritually-sacrificed warriors further reinforces the link between the architecture and iconography of this structure and the importance of ritualized militarism.

Iconography and architectural features that speak to the importance of ritualized warfare are notably diverse at Teotihuacan as the feathered serpent, storm god, and jaguar-like "War Serpent" examples indicate. Beyond these, the inhabitants of Teotihuacan also associated images of butterflies with warfare, considering butterflies to be the embodiments of the souls of deceased warriors. This association is clearly articulated in Book Ten of the *Florentine Codex* wherein it is stated:

And so they named the place Teotihuacan, because it was the burial place of the rulers. For it was said: When we die, it is not true that we die, we are resurrected...In this manner they spoke to the dead when one died;..."Awaken! It hath reddened; the dawn

<sup>&</sup>lt;sup>183</sup> Taube, "The Turquoise Hearth," 281.

<sup>&</sup>lt;sup>184</sup> Ibid., 302.

<sup>&</sup>lt;sup>185</sup> Fray Bernardino de Sahagún, *Florentine Codex: General History of the Things of New Spain, Book 7*, trans. A.J.O. Anderson and C.E. Dibble (Santa Fe, New Mexico: The School of American Research, 1950-1982), 6.

hath set in. Already singeth the flame-colored cock, the flame-colored swallow; already flieth the flame-colored butterfly.<sup>186</sup>

Here, Sahagún's Indigenous sources clearly link the resurrection or rebirth of the dead with birds and butterflies, which are juxtaposed with sunrise or the dawn. This association is also evident in Book Six of the *Florentine Codex* wherein deceased warriors offer four years of service to the

sun and then are transformed into birds and butterflies:

The brave warriors, the eagle-ocelot warriors, those who died in war, went there to the house of the sun. And they lived there in the east, where the sun arose. And when the sun was about to emerge, when it was still dark, they arrayed themselves, they armed themselves as for war, met the sun as it emerged, brought it forth, came giving cries for it, came gladdening it, came skirmishing. Before it they came rejoicing; they came to leave it there at the zenith, called the midday sun.<sup>187</sup>

And when they had passed four years there [in the home of the sun], then they changed into precious birds, hummingbirds, orioles, yellow birds, yellow birds blackened about the eyes, chalky butterflies, feather down butterflies, gourd bowl butterflies.<sup>188</sup>

This sixteenth-century record implies that warriors who served the state in life would be rewarded in death through transformation into butterflies with access to a privileged realm. The connection between self-sacrifice and butterflies can thus be understood as a propagandistic tool used intentionally at Teotihuacan to reinforce the duty of male Teotihuacanos in defending the state.<sup>189</sup> This notion further institutionalizes the connection between militarism, ritualized sacrifice, and power.

<sup>188</sup> Ibid., 49.

<sup>&</sup>lt;sup>186</sup> Fray Bernardino de Sahagún, *Florentine Codex: General History of the Things of New Spain, Book 10*, trans. A.J.O. Anderson and C.E. Dibble (Santa Fe, New Mexico: The School of American Research, 1950-1982), 192.

<sup>&</sup>lt;sup>187</sup> Fray Bernardino de. Sahagún, *Florentine Codex: General History of the Things of New Spain, Book 6,* trans. A.J.O. Anderson and C.E. Dibble (Santa Fe, New Mexico: The School of American Research, 1950-1982), 162.

<sup>&</sup>lt;sup>189</sup> Annabeth Headrick, "Butterfly War at Teotihuacan," in *Ancient Mesoamerican Warfare*, eds. M. Kathryn Brown and Travis W. Stanton (Walnut Creek, Lanham, New York and Oxford: Altamira Press, 2003), 150.

The prevalence of butterfly symbolism and its association with ritualized self-sacrifice, military service, and the rewards of the afterlife is notable given that it recurs in ceramics and murals at Teotihuacan too.<sup>190</sup> In a mural painted on the white patio of Atetelco, for example, the rounded goggles of Tlaloc and of Teotihuacano warriors are evident. They are coupled with butterfly antennae that are visually reminiscent of the *atlatl* darts that were prominent weapons of war as well (Fig. 2.9).<sup>191</sup> In the Tepantitla Mural, a Great Deity appears among the flowering branches and butterflies of the paradise to which those warriors who died in battle were entitled (Fig. 2.10).<sup>192</sup> Depictions of humans - presumably warriors - dressed in butterfly costumes indicated by a prominent proboscis, Tlaloc-like goggles, and feathered or fletched antennae also appear on vases found at this site (Fig. 2.11).<sup>193</sup> And, Teotihuacano *incensarios* (censers) frequently feature faces wearing butterfly nose ornaments, at times adorned with renderings of human skulls, which indicate a link between butterfly imagery, funerary rites, and death as a form of ritualized self-sacrifice (Fig. 2.12).<sup>194</sup>

The predominant style of architecture at Teotihuacan - *talud-tablero* - can also be read as a visual and structural allusion to ritualized militarism because it takes the form of a stylized butterfly.<sup>195</sup> As Headrick argues, the horizontal *tableros* that sit atop sloping *taluds* resemble the butterfly-shaped nose ornaments that are common to renderings of warriors at Teotihuacan (Fig.

<sup>&</sup>lt;sup>190</sup> Ibid., 149-150.

<sup>&</sup>lt;sup>191</sup> Ibid., 151.

<sup>&</sup>lt;sup>192</sup> Ibid., 164.

<sup>&</sup>lt;sup>193</sup> Ibid., 152.

<sup>&</sup>lt;sup>194</sup> Ibid., 59-160. This association is observed by Berlo (1983:30-31, 1984: 60-63), Kubler (1985: 270), Taube (1998: 269-340), and von Winning (1987: 115-124).

<sup>&</sup>lt;sup>195</sup> Headrick, "Butterfly War at Teotihuacan," 167.

13).<sup>196</sup> Thus, we can interpret the *talud-tablero* architecture of most of Teotihuacan's structures as implicitly referencing the connection between butterflies, ritualized militarism, and subsequently power. Taking these symbolic references together with those articulated above, what we see at Teotihuacan is a diverse visual vocabulary specific to militarism that places great emphasis on the role of the warrior in statecraft, politics, as well as ritual.

This vocabulary and associated cultural investment in ritualized militarism subsequently spread across Central Mesoamerica as new centers of power were established in the aftermath of Teotihuacan's collapse.<sup>197</sup> Many of these new centers of power, including Xochicalco, Cacaxtla, and Malinalco, which will be discussed further in this chapter, consisted of ceremonial centers that were also co-located with residential areas. These sites also importantly exude a defensive character in their layouts, featuring numerous defensive architectural elements that would have been useful for protection. However, with the exception of Cacaxtla, their militaristic nature appears to have been more symbolic than functional. Thus, what we see develop at Teotihuacan and in the aftermath of its fall is the creation of an enduring Indigenous architectural tradition

<sup>&</sup>lt;sup>196</sup> Ibid., 167.

<sup>&</sup>lt;sup>197</sup> Archaeological evidence indicates that portions of Teotihuacan burned toward the end of the Metepec period (650-750 CE) and that the city subsequently entered a prolonged period of collapse. This collapse precipitated significant population dispersal across Mesoamerica that led to the establishment of new centers of power. According to Richard Blanton, Henry B. Nicholson, Wigberto Jiménez Moreno, and Malcolm Webb, the political competition resulting from this collapse was so extensive that a reliance on state-sponsored militarism, and related defensive architecture, necessarily became central to almost all aspects of life in Mesoamerica. The studies mentioned here include Blanton's examination of the Texcoco Region published in American Antiquity in 1975, Moreno's examination of Mesoamerica before the Toltecs published in Ancient Oaxaca in 1966, Nicholson's consideration of Mixteca society published in Man and Cultures: Selected Papers of the Fifth International Congress of Anthropological and Ethnological Sciences in 1960, and Webb's contemplation of the Epiclassic period published in Cultural Continuity in Mesoamerica in 1978. Architectural responses to this new reality included the construction of frontier fortifications, which seem to have served a purely defensive purpose and the building of settlements in more militarily-advantageous locations, such as atop high hills, and with more substantive functionally defensive structures. According to Armillas (1951, 80), systems of frontier fortresses were built in Mesoamerica to facilitate wars between various groups. These frontier fortresses were not spaces of permanent habitation, but rather seem to have been used on an as-needed basis in response to regional conflict. Stanton and Brown (2007), 9, also speak to the importance of settlement pattern data and the indicators of attention to building in militarily advantageous locations.

wherein ritualized militarism, and its critical cultural, social, and political importance, is prominently featured in both architecture and iconography across a broad geographic and temporal expanse. It is this robust Indigenous architectural tradition and associated belief systems that serve as the Mesoamerican complement to the European traditions articulated in chapter one of this study. Taken together, these two traditions form the foundation that allows for more complex readings of sixteenth-century defensive and militaristic architecture in colonial Mexico.

## Xochicalco

One of the most prominent centers of power to rise in the wake of Teotihuacan's collapse that exhibits these architectural and iconographic characteristics was Xochicalco, which reached its apogee as an urban center with 20,000 residents between approximately 700 and 900 CE.<sup>198</sup> Located in western Morelos, approximately 75 miles from present-day Mexico City and 25 miles from Cuernavaca (Fig. 2.14), Xochicalco is positioned atop a steep hill that is protected by a number of defensive architectural features.<sup>199</sup> The site consists primarily of an administrative center, living spaces, and a ritual complex, which is home to the Temple of the Feathered Serpent (Fig. 2.15). All of these spaces are located within a functionally fortified zone that is protected by low-lying walls, dry moats, and ramparts. A citadel sits adjacent to the ritual complex at a higher elevation and is connected to it by paved, walled pathways. To the north, a residential site

<sup>&</sup>lt;sup>198</sup> Brittenham, *The Murals of Cacaxtla*, 79. Xochicalco's rise to prominence was spurred by the fall of Teotihuacan and it remained a site of political significance through the rise of Tula.

<sup>&</sup>lt;sup>199</sup> Pedro Armillas's comprehensive archaeological study of Xochicalco published in 1951 focuses on an overview of the defensive architectural elements of the site. A similar emphasis is evident in Jaime Litvak King's numerous studies and in Román Piña Chan's commentaries on it, which were published in the 1970s. The studies include Chan's *Quetzalcoatl serpiente emplumada* (Fondo de Cultura Económica, México: 1977); King's "Xochicalco en la caída del clásico: Una hipotesis," *Anales de Antropología* 7: 131-144; and Armillas,'s "Mesoamerican Fortifications," *Antiquity* 25, no. 98 (June 1951): 77-86.

is protected by natural defenses, including several ravines. Barrier walls that range in height from six to twelve feet as well as moats and trenches, which are in some cases cut up to nine feet into the bedrock of the site, are prominent defensive features at Xochicalco. Terraces and platforms that include downslope façades ranging in height from nine to fifteen feet are also common across the site (Fig. 2.16). These defensive architectural features coupled with the many ditches and ramparts found at the base of the hill on which Xochicalco is located would have made the settlement quite difficult to access.<sup>200</sup> Thus, from a functional perspective, to say that Xochicalco is architecturally defensible is perhaps an understatement.<sup>201</sup>

The defensive characteristics of Xochicalco are apparent to the modern day visitor and have also been noted by a handful of travelers to the site as well as various scholars over time. In 1777, for example, Joseph Antonio Alzate y Ramirez characterized the site as a "military fortress."<sup>202</sup> In Juan B. Togno's description of Xochicalco, penned in 1892 and published in 1903, he described the layout of the defenses as a version of the polygonal fortress plan common in

<sup>&</sup>lt;sup>200</sup> When observed from above, as is made clear in the renderings produced by Kenneth G. Hirth in his topographical examination of Xochicalco conducted in the 1980s, the site is well-fortified via a pattern of concentric defenses of various types (i.e. walls, moats, trenches, and ramparts), strategically placed such that they complement the natural defenses of the hilltop location. From a practical standpoint, this concentric arrangement of defensive structures would have allowed for compartmentalization of any attack such that vertical movement through the site, toward the ceremonial center, could have been limited. Kenneth G. Hirth, "Militarism and Social Organization at Xochicalco, Morelos," in *Mesoamerica After the Decline of Teotihuacan, A.D. 700-900*, ed. Janet Catherine Berlo and Richard A. Diehl (Washington, D.C.: Dumbarton Oaks, 1989), 70-71.

<sup>&</sup>lt;sup>201</sup> Additionally, in lieu of building atop the landscape without regard for it, the defensive architecture at Xochicalco responds to its setting, seamlessly integrating with and capitalizing on natural defensive features through the addition of manmade fortification where necessary. The intentionality of the defensive scheme at Xochicalco extends to several adjacent smaller precincts, including the nearby outposts of La Bodega, La Silla, Temascal, La Fosa, La Maqueta, and Tlacuatzingo. Each of these sites is located within a distance of approximately one kilometer from the ritual and fortified center at Xochicalco and all of them are practically fortified via a combination of various defensive platforms, moats, ramparts, and walls. The significant investment in defensive architecture in this region speaks to the need to protect this space from a practical standpoint and to the implementation of a comprehensive architectural plan for doing so. Ibid., 71.

<sup>&</sup>lt;sup>202</sup> Joseph Antonio Alzate y Ramirez, *Descripción de las antigüedades de Xochicalco dedicada a los señores de la actual expedición marítima al rededor del orbe*. (Suplemento a la Gazeta de Literatura México, 1791), 10.

Europe.<sup>203</sup> In walking this site in its current state, it is unclear which structure Togno is describing as a polygonal fortress in the European model because the site consists of several practically fortified zones and several polygonal structures. Togno's description is, however, particularly interesting in the context of this study because it is a testament to the extent to which the architecture of fortified Xochicalco can be likened to that of European defensive models from the perspective of Western observers.

The parity between the architectural defenses at Xochicalco and elements commonly found in Europe is not limited to the polygonal nature of many of the site's structures. The form of the ramparts, walls, and moats, for example, are comparable to those found in Europe. And, although it is most appropriate to describe the angular features of the *talud-tablero* architecture of many of Xochicalco's structures using this Mesoamerican-specific terminology, they could just as easily be described as angle bastions (Fig. 2.17). As discussed in chapter one of this study, the angle bastion is a defensive feature prominent in fortification design that has been characterized as an "invention" of the Italian Renaissance.<sup>204</sup> Although it is undeniable that fortification design in Renaissance and Early Modern Europe did indeed adapt to artillery-based warfare via the use of angle bastions as a defensive architectural feature, to characterize this form as an "invention" of the Italian fortress-builders of this period is short-sighted.

Artillery-based warfare was not introduced to Mesoamerica until the arrival of the Spanish in the sixteenth century. And, though the angular *taluds* of the façades of the Temple of the Feathered Serpent at Xochicalco were clearly not built in response to artillery-based warfare,

<sup>&</sup>lt;sup>203</sup> Juan B. Togno, "Xochicalco, 1892" in *Colección de documentos para la historia mexicana*, ed. Antonio Peñafiel, (Secretaría de Fomento, México, 1903), 6. Cited in Kenneth G. Hirth, "Urbanism, Militarism, and Architectural Design: An Analysis of Epiclassic Sociopolitical Structure at Xochicalco," *Ancient Mesoamerica*, 6 (1995): 237-250.

<sup>&</sup>lt;sup>204</sup> Pepper and Adams in *Firearms and Fortifications* (1986), Duffy in *Siege Warfare* (1996), Parrott in "The Utility of Fortifications" (2000), and Toy in *A History of Fortification* (1995) all characterize the angle bastion as an integral element and invention of Italian defensive architecture during this period.

they nonetheless feature defensive architectural forms that are visually and structurally quite similar to the angle bastion used in European fortresses. The prevalence of planar walls that meet in what can be described as a form of angle bastion are not exclusive to the Temple of the Feathered Serpent at Xochicalco either. On the same site, the Templo de las Estelas (Fig. 2.18) and the several unnamed pyramids (2.19) as well as the ball courts all prominently feature what could be described as angle-bastioned walls, particularly given their context within a fortified site. The same characterization could also be applied to Teotihuacan's *talud-tablero* architecture too. Thus, it would be challenging to argue that the angle bastion's provenance is strictly limited to Renaissance Italy.

I highlight this attribution challenge here in part because of its inaccuracy. To describe the angle bastion as an "Italian invention" is fundamentally Eurocentric in that it does not acknowledge other potential concurrent or even preceding developments of this form as a hallmark of defensive architecture elsewhere in the world. I also call attention to this issue because of the likelihood that Indigenous peoples across Mesoamerica would have been familiar with such architectural features when they were "introduced" by the Spanish in the sixteenth century, as will be discussed in subsequent chapters of this study. As such, it is reasonable to assume that Indigenous creators charged with constructing angle bastions in Spanish fortifications and other structures built in fortress-style during the colonial period could have associated them with the familiar and structurally similar architectural forms common at fortified sites like Xochicalco, Cacaxtla, Malinalco, and many others across Mesoamerica. This familiarity is important when we consider how sixteenth-century Spanish fortifications, like San Juan de Ulúa, which will be discussed in more detail in the next chapter, may have been received by the Indigenous peoples building and viewing them in the colonial context.

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Returning to the structural defenses of Xochicalco specifically, although the architectural features of the site suggest that it could have been practically protected in instances of bellicose conflict, like Teotihuacan before it, there is a lack of substantive physical or archaeological evidence of such conflict. This is true of the neighboring fortified precincts as well.<sup>205</sup> Thus, it is probable that Xochicalco's more prominent function was as a ritualized militaristic space. This interpretation is reinforced by the prominent iconography of ritualized militarism found on the Temple of the Feathered Serpent. Encircling the base of this structure are eight mythical feathered serpents carved in high relief (Fig. 2.20). The large-scale feathered serpents at Xochicalco feature many of the same visual characteristics observed at Teotihuacan on the temple of the same name. The feathered serpents at Xochicalco are dramatically plumed along their snake-like bodies and they also exhibit forked tongues and fangs, which protrude from their open mouths across the sculptural frieze in the lower *talud* of the temple (Fig. 2.21).

Although there are similarities to the feathered serpent iconography at Teotihuacan, what we see at Xochicalco is an important evolution in depictions of militarism in Mesoamerica. Unlike Teotihuacan, where the feathered serpent and the "War Serpent" allude symbolically to warfare connecting the practice thereof to the supernatural, at Xochicalco the feathered serpent winds around twelve seated warriors carved in low relief (Fig. 2.22). This imagery establishes a

<sup>&</sup>lt;sup>205</sup> Kubler notes the dearth of evidence of weaponry at Xochicalco in his commentary on this site, but does not contemplate a rationale for it. George Kubler, *The Art and Architecture of Ancient America* (New Haven: Yale University Press, 1962), 68. One possible interpretation of a dearth of archaeological evidence of weaponry is that warfare did not take place at this site. Although this is certainly possible, the absence of material evidence does not preclude the probability of warfare having taken place at or near Xochicalco. This is particularly true given the considerable political and social instability that coincided with Xochicalco's rise to power during the Epiclassic period. Further, the defensive architectural arrangement at this site is not haphazard and its tactical features correspond to what some Spanish and colonial chroniclers described as prevalent aspects of pre-Hispanic warfare. Hirth references Robert Chamberlain, and specifically commentary by Dávila included in Chamberlain's *The Conquest and Colonization of Yucatan 1517-1550*. Pub. 582. (Washington DC: Carnegie Institution of Washington: 1948), 114, in discussing the defensive arrangement. We can assume given the prominence of Xochicalco's fortified architectural features and its high-hill location, that the site was at least intended to be, on some level, defensively functional regardless of whether it was used for this purpose in actuality.

direct visual connection between the supernatural and the primary actors responsible for both practical and ritualized warfare.<sup>206</sup> If we understand war to be a process, warriors are the primary actors, conquest is a primary goal, and tribute is an outcome. In the frieze of Xochicalco's Temple of the Feathered Serpent, each of these aspects of warfare is clearly depicted in literal and symbolic terms.<sup>207</sup> As such, it builds on the iconographic foundation established at Teotihuacan and is a testament to the ongoing centrality of warfare as a critically important political and cultural construct in Mesoamerica.

Xochicalco's warriors on the Temple of the Feathered Serpent are identified as such via their goggled facial armor, which as discussed in the context of Teotihuacan's "War Serpent," was a common aspect of military dress that is also associated with images of the storm god or Tlaloc.<sup>208</sup> Given their prominence on such an important ritual structure, it is unlikely that the

<sup>208</sup> Taube, "The Turquoise Hearth," 214. This association with goggled eyewear is discussed above in the context of Teotihuacan and the imagery found there. As noted in the work of Pasztory, we also see similar images of goggled figures who are associated with war and with human sacrifice at Teotihuacan. Esther Pasztory, "The Iconography of the Teotihuacan Tlaloc." in *Studies in Pre-Columbian Art and Archaeology* 15 (Washington D.C.: Dumbarton Oaks. 1974), 14. At Cacaxtla, warriors appear with masks suspended just in front of their faces in the Battle Mural, which is discussed later in this chapter. Understanding these figures to be warriors is further reinforced by their association with year sign headdresses, which like Tlaloc imagery, according to Linda Schele and Mary Miller as well as Clara Millon were associated with warfare and human sacrifice. Linda Schele and Mary Miller, The Blood of Kings: Dynasty and Ritual in Maya Art (Fort Worth and New York: Kimball Art Museum and George Braziller, 1986), 177. Clara Millon, "Painting, Writing and Polity at Teotihuacan, Mexico" American Antiquity 38: 294-314. This visual theme and connection between Tlaloc imagery, year sign headdresses, and warriors is one that Andrea Stone also observes in Maya iconography produced at the likes of Piedras Negras in this period. Andrea Stone, "Disconnection, Foreign Insignia, and Political Expansion: Teotihuacan and the Warrior Stelae of Piedras Negras," in Mesoamerica After the Decline of Teotihuacan, A.D. 700-900, ed. Janet Catherino Berlo and Richard A. Diehl, (Washington, D.C.: Dumbarton Oaks, 1989), 153-172. As established at Teotihuacan and continued here, warriors and the practice of warfare were closely linked to expectations of self-sacrifice as well as the ritualized sacrifice of captives. This association between warriors and ritual is reminiscent of a similar relationship evident at the Temple of the Feathered Serpent at Teotihuacan, where we see supernatural entities like the feathered serpent and the "War Serpent" associated with a cache of weapons, auto-sacrificial tools, and sacrificed soldiers or soldier-impersonators. No such cache of human remains or ritualistic weaponry has been found at Xochicalco, but the prevalence of images

<sup>&</sup>lt;sup>206</sup> It is possible that other references to warfare and warriors beyond these twelve may have once been found on this structure as well. However, significant portions of this section of the pyramid have been destroyed and thus cannot be analyzed.

<sup>&</sup>lt;sup>207</sup> This interpretation builds on that put forward by Hirth in "Militarism and Social Organization at Xochicalco, Morelos," in *Mesoamerica After the Decline of Teotihuacan, A.D. 700-900,* edited by Janet Catherino Berlo and Richard A. Diehl. Washington, D.C.: Dumbarton Oaks, 1989: 73, wherein he argues that portions of the frieze associate warriors with the practice of collecting tribute as an outcome of warfare.

warriors depicted here represent average combatants. Instead, it is more likely that these warriors were of particular importance or were rulers donning warrior costumes.<sup>209</sup> This latter interpretation is supported by the prevalence of similar images of a ruling figure depicted in the attire of a warrior in the approximately contemporaneous Battle Mural at Cacaxtla. Given these visual markers at Xochicalco and the association of these seated figures with the feathered serpent, it is clear that these warriors, or warrior-rulers, are the primary actors in the visual narrative of warfare that is taking place in the frieze of this temple.

Further support for this interpretation of the frieze can be found in the symbolism of glyphs that appear near smaller seated figures in the reliefs on the upper façade or the *tablero* (Fig. 2.23). These glyphs have been interpreted in multiple ways, with one of the most common being that they are calendric designations.<sup>210</sup> Although they could be designations of time, given the context of the militaristic narrative that is playing out across this portion of the Temple of the Feathered Serpent, they are better understood as toponyms indicating specific places. This alternate reading has also been proposed by Leopoldo Barthes<sup>211</sup> and is reinforced by Hirth.<sup>212</sup> For example, on the north *tablero*, we find a carving of a flower (*xochitl* in Nahuatl) that is accompanied by a curved staff (*topilli*). When combined, these glyphs can be read as the name of a place: Xochitopilan (place of the flowered staff).<sup>213</sup> Similarly, another glyph that appears on the

<sup>213</sup> Ibid., 74.

of warriors on the walls of this temple clearly indicate the importance of militarism and its link to a ritual context, thus suggesting a continuity between this site and Teotihuacan.

<sup>&</sup>lt;sup>209</sup> Hirth, "Militarism and Social Organization at Xochicalco," 73.

<sup>&</sup>lt;sup>210</sup> Antonio Peñafiel, *Monumentos del arte mexicano antiguo*, (Berlin: A. Asher, 1890); Francisco Abadino, "Xochicalco-Chicomoztoc-Culhuacan" in *Do monografías arqueológicas* (Mexico: 1910): 13-25; and J. Ceballos Novelo Roque, "Teopoztlan, Teopanzolco y Xochicalco," in *Estado actual de los principales edificios arqueológicos de México* (Mexico: Secretaria de Educación Pública, 1928): 100-116.

<sup>&</sup>lt;sup>211</sup> Leopoldo Barthes, "Les ruines de Xochicalco au Mexique" La nature 14 (1886): 308-310.

<sup>&</sup>lt;sup>212</sup> Hirth, "Militarism and Social Organization at Xochicalco," 73-74.

north *tablero* depicts an arm holding or throwing a spear. This combination could be a reference to Tlacochcalco (place of the house of spears) or Miacatlan (abundant place of spears), which is the name of a hill approximately five miles from Xochicalco.<sup>214</sup> Applying this same interpretive methodology to the remaining five toponyms that are still legible on the façade of the temple, several other place names become clear. Contextualizing this sequence and interpretation within the militaristic narrative that is unfolding around the temple's façade more broadly, it is possible to read these images as naming and portraying towns that had been conquered and were paying tribute to Xochicalco during the period in which the temple was built.

The practice of paying tribute, as an outcome of warfare and conquest, is iconographically represented in the narrative of Xochicalco's frieze as well. The recurring seated figures along the *tablero* resemble the larger warriors depicted in the *talud* amidst the curves of the feathered serpent. These smaller figures are holding rectangular objects adorned with cords, which could represent a bag or a jar containing something that is being offered.<sup>215</sup> These figures, who I argue are also warriors representing the polities named in the aforementioned toponyms, are seated adjacent to a four-part circle that an open mouth, in some cases with evident teeth, appears to be consuming (Fig. 2.24).<sup>216</sup> The four-part circle, or *kan*, is an indicator of something precious or valuable.<sup>217</sup> This "something precious" or valuable could be goods offered in tribute.

<sup>&</sup>lt;sup>214</sup> Ibid., 74.

<sup>&</sup>lt;sup>215</sup> A number of scholars, including Hirth, Piña Chan, Antonio Peñafiel, and Eduardo Noguera, have offered interpretations of the iconography on this part of the temple that highlight its ritual significance and link to the idea and act of paying tribute. Hirth, "Militarism and Social Organization at Xochicalco," (1989, 73); Piña Chan's *Quetzalcoatl serpiente emplumpada* published (1977); Antonio Peñafiel's *Catalogo alfabético de los nombres de lugar pertenecientes al idioma "nahuatl." Estudio jeroglífico de la Matrícula de los Tributos del Códice Mendocino* (Secretaria de Fomento, Mexico, 1855); and Eduardo Noguera's "Cultura Xochicalco" *México prehispánico: Antología de Esta Semana, This Week, 1935-1946*, ed. Jorge Vivo: 185-193.

<sup>&</sup>lt;sup>216</sup> Hirth, "Militarism and Social Organization at Xochicalco," 73.

<sup>&</sup>lt;sup>217</sup> J. Eric S. Thompson, *Maya Hieroglyphic Writing* (Norman, Oklahoma: University of Oklahoma Press, 1971).

The adjacency of this symbol to images of warriors and their associated toponyms, I argue, depicts the act of paying tribute on behalf of the polities represented.

This interpretation is further supported by Hirth's observation that the seated figures of the frieze are depicted with speech symbols next to their mouths. This symbol implies that the seated warriors are in the process of speaking and their proximity to the symbol of *kan*, or "something precious," suggests that they are likely speaking about that object or concept specifically. In Nahuatl, per Hirth, the verb *calaquia* means to "put something precious inside."<sup>218</sup> To voice this verb, the seated warriors would have said *nitlacalaquia*, meaning "to pay tribute."<sup>219</sup> Thus, each of these scenes can be read as one in which the seated figure is verbally and physically offering tribute in the form of "something precious." Accepting Hirth's reading of the linguistic implications of this iconography furthers the notion that the scenes depicted here are parts of an active, or perhaps even spoken narrative, that articulates the process of warfare, conquest, and its outcome in the form of tribute.

Another relevant form of tribute in this context is sacrifice. As noted at Teotihuacan, there existed a clear relationship between self-sacrifice, human sacrifice, and ritualized militarism. And, the idea of "being consumed" or "eaten" implies a form of sacrifice as well.<sup>220</sup> Thus, the warriors and their proximity to the four-part circle indicating "something precious" that is being consumed or eaten can be interpreted as an allusion to sacrifice as a form of tribute.

The viability of this interpretation is bolstered by the fact that we see a similar combination of images of warriors alongside the four-part circle and a symbol that represents

<sup>&</sup>lt;sup>218</sup> Hirth, "Militarism and Social Organization at Xochicalco," 73.

<sup>&</sup>lt;sup>219</sup> Ibid., 73. Hirth draws on the scholarship of Alfonso de Molina in his *Vocabulario en lengua castellana y mexicana y mexicana y castellana* (Editorial Porrúa, 1977) in his reference to Nahuatl verbs and their potential interpretation in this context.

<sup>&</sup>lt;sup>220</sup> Ibid., 75.

blood or a heart in the roughly contemporaneous Battle Mural at Cacaxtla (Fig. 2.25). And, it is further supported by the sculptural evidence of human sacrifice found in the form of a dismembered torso with an evident deep incision in the chest from the central plaza at Xochicalco (Fig. 2.26).<sup>221</sup> This incision, and the empty space it creates, implies that the heart of this individual has been removed in an act of human sacrifice.<sup>222</sup> The knotted cord on the right shoulder of this sculpture also symbolically implies that this individual was a captive who was ritually sacrificed, in keeping with similar iconography commonly used across Mesoamerica.

Additionally, since this sculpture is of a torso only - the lower portion of the arms and legs have been removed - we may also understand it as a testament to the taking of war trophies in the form of limbs as a ritual act associated with warfare.<sup>223</sup> The practice of taking limbs as war trophies is acknowledged in Diego Durán's sixteenth-century *Historia de las Indias*. Durán notes that the Mexica believed that taking such trophies validated the critical role of warriors in acquiring captives for the specific purpose of sacrifice to appease the gods. And, in some cases, such trophies were also believed to be endowed with specific mystical powers.<sup>224</sup> Although the Mexica practice that Durán describes is that of pre-Hispanic Tenochtitlan, it is reasonable to believe that similar practices would likely have existed at Xochicalco as well.<sup>225</sup> This assumption

<sup>223</sup> Ibid., 75-76.

<sup>224</sup> Diego Durán, *The History of the Indies of New Spain*, translated by Doris Heyden and Fernando Horcasitas (New York: Orion Press, 1964), 164.

<sup>&</sup>lt;sup>221</sup> Peñafiel's late nineteenth-century descriptions and illustrations of Xochicalco include renderings of what appear to be loose stone carvings in the central plaza, among them is the referenced sculpture in the round. Peñafiel 1890.

<sup>&</sup>lt;sup>222</sup> Hirth, "Militarism and Social Organization at Xochicalco," 75.

<sup>&</sup>lt;sup>225</sup> The act of taking trophies in the form of human bones and their role as objects with particular powers is notably similar to the practice of collecting, preserving, and showcasing relics in the Christian tradition. Although Mesoamerican war trophies fundamentally differ from Euro-Christian relics, like the bones of saints, in terms of their source, their purpose is similar. Both are associated with powers and are a link between a particular belief system and ritual practice. For Mesoamerican warriors, the practice of warfare was a ritual experience. The capturing of enemies for sacrifice was a ritual or spiritual experience and the maintenance of trophies in the form of the bones of these enemies reinforces the importance of this ritual practice as associated with warfare. In the Euro-Christian tradition, relics are also associated with the notion of sacrifice as well. These similarities are

is further substantiated by the inclusion of skeletal trophies, including a warrior wearing a human femur as part of his costume (Fig. 2.27), in the Battle Mural at nearby Cacaxtla, which flourished in roughly the same period as Xochicalco. Since dismembered limbs are not a standard element of military uniforms, we can infer that they are a trophy worn into battle not only to indicate that this particular soldier is experienced but perhaps as a sort of talisman with specific powers, as recorded by Durán.

Given this abundant visual evidence, it is clear that militarism, both literally and symbolically, is a defining feature that actively informs the architecture of Xochicalco as well as the iconography of one its most important buildings, the Temple of the Feathered Serpent. Beyond the defensive architectural features of the site and the testament to ritualized militarism on the Temple of the Feathered Serpent's frieze, there are other subtle nods to the importance of militarism to be found at Xochicalco as well. Namely, Brittenham's examination of the site suggests that it was a cosmopolitan destination that facilitated considerable trade. To substantiate this assertion, she notes that the style of the sculpture of the Temple of the Feathered Serpent appears to be intentionally eclectic drawing from stylistic references to Oaxaca, Teotihuacan, the Gulf Coast, the Maya region, and West Mexico in its design.<sup>226</sup>

I argue that the eclecticism seen in Xochicalco's architecture and material objects is indicative of two scenarios. The site's numerous artistic styles could imply that Xochicalco was a

particularly important as we consider the intersection of Mesoamerican belief systems and Euro-Christian ones in the colonial period in Latin America.

<sup>&</sup>lt;sup>226</sup> Brittenham, *The Murals of Cacaxtla*, 37-38. Debra Nagao also notes the influence of various regional styles in the sculptural relief at Xochicalco. She, however, suggests that this relief presents a stiff reinterpretation of Maya forms, not an intentional effort to create a new style. Since these reliefs recall drawings of seated Maya figures from Chichen Itza among other sources, and they are so standardized, Nagao concludes that the those rendered at Xochicalco must be replications of models, not original interpretations or creations in a Xochicalco-specific style. From my perspective, this interpretation is too narrow and does not acknowledge the complexities of Xochicalco and its works of art and architecture. Debra Nagao, "Public Proclamation in Cacaxtla," in *Mesoamerica After the Decline of Teotihuacan, A.D. 700-900*, eds. Janet Catherino Berlo and Richard A. Diehl (Washington, D.C.: Dumbarton Oaks, 1989), 94.

gathering place whose leaders wished to emphasize their cosmopolitanism. Another interpretation, more in line with the prevalent role of ritualized militarism, is that the presence of multiple regional styles indicates exchange driven by the processes of conquest and tribute. In lieu of understanding the blend of artistic and architectural styles evident at Xochicalco as derivative of the prevalence of mercantile cosmopolitanism, we might instead or even concurrently see it as a reflection of the militarism that fueled the conquering of various polities that subsequently provided tribute to the center of power. This interpretation aligns closely to that which identifies the warriors on the upper façade on the Temple of the Feathered Serpent as representatives of conquered polities named by toponyms who are paying tribute in the form of goods, services, or, perhaps even more likely in this case, human life.

When we take Xochicalco's iconography, as a narrative testament to warfare, conquest, and tribute, and its numerous defensive architectural features together, it becomes clear that this site is one that speaks comprehensively to the importance of militarism after the fall of Teotihuacan. Like Teotihuacan before it, this combination of architecture and iconography speaks to the performance of power that is directly connected to ritualized militarism. It also significantly builds on the symbolic representations of the importance of ritualized militarism established at Teotihuacan, developing them in more complex directions in the narrative and style of the Temple of the Feathered Serpent in particular. This increased complexity and commitment to portraying the process of warfare would be further developed at nearby Cacaxtla.

## Cacaxtla

Unlike Xochicalco, there is little doubt that the primary function of Cacaxtla was defensive, though its architecture and iconography also include references to ritualized

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militarism. Located in southwestern Tlaxcala, at the crossroads between the Gulf Coast and Veracruz and the Valley of Mexico, at its apex,<sup>227</sup> Cacaxtla was part of a larger settlement complex, including the surrounding hills of Xochitécatl, Atlachino, Nativitas, and Mixco Viejo (Fig. 2.28). The fortified structures at Cacaxtla were built in at least eight construction phases.<sup>228</sup> According to Brittenham, whose study of Cacaxtla is one of the most comprehensive, the architecture of this site can be described as employing a "rhetoric of height and hierarchy," with local materials being used to build distinct spaces at different levels of the fortress that were only accessible based on one's status in society.<sup>229</sup> In short, it was built to embody the power of the elite.

The fortress consists of a central acropolis used for administrative and ceremonial activities, several residential areas, a number of ritual spaces as well as rooms specifically used by warriors for military rites<sup>230</sup> (Fig. 2.29). Archaeological evidence of caches of obsidian points suggests that several of the rooms surrounding Cacaxtla's acropolis were likely used to stockpile weapons as well.<sup>231</sup> Additionally, there is an aviary within the fortress (Fig. 2.30) where the husbandry of various parrot species was undertaken as a means of acquiring feathers to adorn the garb of the warriors who defended Cacaxtla.<sup>232</sup> The inclusion of these spaces and the

<sup>228</sup> Ibid., 12.

<sup>229</sup> Ibid., 12.

<sup>&</sup>lt;sup>227</sup> The ridge on which Cacaxtla sits was occupied as early as 100 BCE, but it did not become a site of notable prominence until the period between 650 and 950 CE. Brittenham, *The Murals of Cacaxtla*, 11.

<sup>&</sup>lt;sup>230</sup> Moving from the upper ceremonial platform at Cacaxtla to the north and east, one encounters a series of rooms that appear to be dedicated to specific military rites. Brittenham, *The Murals of Cacaxtla*, 185-215. This use is also noted in the space descriptions from the Instituto Nacional de Antropología e Historia (INAH)'s on-site.

<sup>&</sup>lt;sup>231</sup> Information about obsidian points found in this space at Cacaxtla comes from the Instituto Nacional de Antropología e Historia (INAH)'s on-site descriptions of this room.

<sup>&</sup>lt;sup>232</sup> Information about remains found in the ceremonial space and the aviary at Cacaxtla come from the Instituto Nacional de Antropología e Historia (INAH)'s on-site descriptions of these spaces.

archaeological evidence associated with them are a testament to the truly defensive function of this edifice.

These and other defensive features were also highlighted by colonial chroniclers who encountered Cacaxtla in the sixteenth century.<sup>233</sup> For example, in his 1585 *Historia de Tlaxcala,* Diego Muñoz Camargo provides a first-hand description of what remained of the site when the Spanish encountered it. By then, Cacaxtla was no longer a prominent population center, but its adjacency to the more substantive and active sixteenth-century population center at Huejotzingo

is notable. Muñoz Camargo writes:

Here, in that site, the Olmecas made their principal seat and settled, as today the ruins of their buildings demonstrate to us, which, according to the signs, were large and strong. And thus, the walls and barbicans, fortifications, trenches, and bastions show signs of having been the strongest thing in the world and having been made by countless hands. A great number of people came there to settle, because where they had their principal seat and fortress is a hill or outcropping, which is almost two leagues in circumference. Around this outcrop, by the entrances and slopes, before arriving at its highest point, there are five fortifications and many other holes and trenches more than twenty steps wide, and the earth taken out of this trench served as a bastion or wall for a very strong embankment, and the depth of said holes must have been very deep, because even with being, as they are, ruined long ago, they are more than a pike's height tall; because I have entered into some on horseback and I have measured them industriously and even with a lance I did not reach the top in many parts, with having been filled with earth with [the passage of] time and with the floods of water of more than 360 years in these parts. These trenches and fortifications encircled the entire circumference of the hill, which cannot have been weak or faulty in those times.<sup>234</sup>

<sup>&</sup>lt;sup>233</sup> Brittenham, The Murals of Cacaxtla, 12, 24-25.

<sup>&</sup>lt;sup>234</sup> Diego Muñoz Camargo, *Historia de Tlaxcala*, ed. Germán Vásquez Chamorro. *Crónicas de América* (Madrid: Dastan, 1986), 79-80. "Aquí en este sitio, hicieron los olmecas su principal asiento y poblaron, como el día de hoy nos manifiestan las ruinas de sus edificios, que, según las muestras, fueron grandes y fuertes. Y ansí, las fuerzas y barbacanas, albarradas, fosas y baluartes muestran indicios de haber sido la cosa más fuerte del mundo y ser obrada por mando de innumerables. Gran copia de gentes [fue] la que vino a poblar, porque donde tuvieron su principal asiento y fortaleza es un cerro o peñol, que tiene casi dos leguas de circuito. En torno de este peñol, por las entradas y subidas, antes de llegar a lo alto de él, tiene cinco albarradas y otras tantas cavas y fosas de más de veinte pasos de ancho, y la tierra sacada de esta fosa servía de bastión o muralla de un terrapleno muy fuerte, y la hondura de las dichas cavas debía de ser de gran profundidad, porque con estar, com están, arruinadas de tanto tiempo atrás, tienen más de una pica en alto; porque yo he entrado dentro de algunas de ellas a caballo y de industria las he medido, que un hombre a caballo y con una lanza aún no alcanza a lo alto en muchas partes, con haberse tornado a henchir de tierra con el tiempo y con las avenidas de aguas de más de trescientos y sesenta años a esta parte. Las cuales fosas y albarradas ciñen toda la redondez del cerro, que no debió de ser poca fuerza ni menos reparo en aquellos tiempos. Translation by Claudia Brittenham, *The Murals of Cacaxtla*, 24-25.

Based on this description and the archaeological remains of the site, it is clear that Cacaxtla was well-fortified, relying on various defensive structures as well as its isolation atop a steep hill for its protection.

As a military site, access to Cacaxtla was strictly controlled. At its height, the site was defended by five parallel moats, which cut across the rock of the hill to prevent access and protect against attack (Fig. 2.31). And, though no longer visible, according to Camargo, these moats were also once protected by walls.<sup>235</sup> To approach the base of the acropolis complex at Cacaxtla, visitors pass between two sentinel pyramids (Fig. 2.32), which appear to function almost as gate posts or checkpoints from which access to the base of the fortress could have been granted or denied. In this way, they are functionally similar to the pyramids that flanked the single point of entry to Teotihuacan's Ciudadela. If visitors were permitted through these checkpoints, they would have been confronted by the aggressively angled walls of Cacaxtla's façade and subsequently would have gained access to the upper echelons of the fortress through a series of strategically-oriented stairways and ramps (Fig. 2.33). This use of controlled progression guided by defensive architectural forms is similar to that which governed access to Xochicalco's central plaza and as such, it speaks to the continued development of a Mesoamerican tradition in defensive architecture after the collapse of Teotihuacan.

In addition to Cacaxtla's structural elements pointing to its primary purpose as a defensive space, the most significant visual testaments to the importance of militarism at this site are the murals found throughout its multileveled construction. These murals, like the sculptural frieze at Xochicalco, also present a narrative of warfare, conquest, and tribute, albeit one that is more individualized and naturalistic than its predecessors at both Xochicalco and Teotihuacan. In

<sup>&</sup>lt;sup>235</sup> Cited in Armillas, "Mesoamerican Fortifications," 81.

the architecture and iconography at Cacaxtla, we also find several symbolic references to war and warfare, including for example, renderings of Venus as the Morning Star, which draw on precedents set at Teotihuacan, again suggesting an important continuity in the iconography of ritualized militarism across centuries and geographies on which the Cacaxtlans elaborated in their own testaments to the ongoing centrality of militarism.

As at Xochicalco, Cacaxtla's architectural and iconographic narrative of warfare features several depictions of warriors. Four of the most prominent flank the entrance to Structure A, which is a room to the north of the acropolis that appears to have been associated with warrior rites.<sup>236</sup> Here, we find two jaguar-shrouded warriors, one of which carries weaponry in the form of a bundle of spears while wearing a knotted cord alluding to self-sacrifice across his chest (Fig. 2.34). The other carries no weapons and instead pours water from a jar decorated with the image of Tlaloc, the rain god (Fig. 2.35). As discussed in the context of both Xochicalco and Teotihuacan, Tlaloc, with goggled eyes, is frequently associated with depictions of warriors who wear similar facial armor<sup>237</sup> and this appears to be a continuation of that iconographic tradition. Additionally, the jar that this warrior holds recalls the imagery of the bag-holding warriors on the façade of the Temple of the Feathered Serpent at Xochicalco (Fig. 2.36).

Opposite these two jaguar-clad warriors on the same door frame are two figures in bird costumes. One is wearing feathers, a bird headdress, and bird feet, and holds a long blue bar, which could be a weapon, while standing atop a feathered serpent (Fig. 2.37). In front of this bird warrior's visage is a rectangular glyph of three stars, representing Venus. This is a possible allusion to the House of Venus or Temple of Venus, which is among the ritual spaces in the

<sup>&</sup>lt;sup>236</sup> Brittenham, *The Murals of Cacaxtla*, 185-215. Information about the use of specific spaces at Cacaxtla also comes from the Instituto Nacional de Antropología e Historia (INAH)'s on-site descriptions of the fortress.

<sup>&</sup>lt;sup>237</sup> See reference to Taube's characterization in "The Turquoise Hearth" (214) presented earlier in this chapter.

acropolis at Cacaxtla and which is also frequently associated with ritualized warfare, including at Teotihuacan and at Maya sites.<sup>238</sup> The bird warrior's companion figure, who appears in the door jamb, is painted black and carries what looks like a shell from which a red-headed figure emerges (Fig. 2.38). Behind the head of this jamb figure is the glyph for Three Deer Antler, who was the warrior leader of Cacaxtla, and who appears in multiple iterations in the Battle Mural on the north wall of the acropolis as well.

Three Deer Antler is among the many warriors who are featured prominently in Cacaxtla's Battle Mural. This massive scene, which stretches over sixty feet in length and approximately five feet high, depicts warriors dressed in jaguar costumes defeating warriors in bird costumes in a visual narrative of warfare, conquest, and tribute. The scale of this mural and its placement within the central acropolis at Cacaxtla is a testament to its importance and to the importance of warfare and ritualized militarism at this site more broadly. The warriors rendered here would have been nearly life-sized to those viewers who resided at Cacaxtla when they were painted and as such they are generally quite imposing, especially within the shallow compositional space of the mural. The scene presented is a chaotic one that recreates the frantic

<sup>&</sup>lt;sup>238</sup> Stanton and Brown, 11. The iconography of warfare, including the importance of stars as symbols of Venus associated with the practice of war, is also discussed by Ellen T. Baird, "Stars and War at Cacaxtla," in Mesoamerica After the Decline of Teotihuacan, A.D. 700-900, eds. Janet Catherino Berlo and Richard A. Diehl (Washington, D.C.; Dumbarton Oaks, 1989), 105-122, Baird notes that, at Teotihuacan, these star shapes typically have five points with a circle or an eye in the center, representing the four cardinal directions and the *intramundo*. This star motif appears primarily in ceramics and in mural paintings and is often depicted alongside jaguars and images of the rain deity, both of which are frequently associated with cults of warriors and their costumes. The star shape appears in a militaristic and sacrificial context at Teotihuacan. For example, stars dot the border of a mural from the Palace of the Jaguars and appear in the bands that criss-cross the central figure's circular form in this image. At Cacaxtla, star-shapes recur in the murals of Structure A, where three appear inside of a rectangular shape that may reference a Temple of Venus. They also appear in the Battle Mural and in the garb of a blue-skinned male and female figure painted at the entrance of Cacaxtla's Temple of Venus, inside the fortress. The recurrence of this iconography points to the central importance of war and ritualized militarism at this site and establishes a continuity between it and Teotihuacan. In the Battle Mural, stars appear alongside the warriors who are shown wearing bird helmets too. That most of the bird warriors are already dead or in the process of dying in this image, confirms a link between star symbols, warfare, and death at Cacaxtla. This thematically, again, appears to be an extension of similar associations found at Teotihuacan and in the iconography of Maya sites. Baird notes in "Stars and War at Cacaxtla" (1989, 112) that five-pointed stars occur on Stela I at Lacanha, near Bonampak as well as on the shields of Maya warriors depicted at Piedras Negras, among other locations in the Yucatán.

energy that would be experienced in battle. The immediacy of the image also draws the viewer into its action, creating a connection that one cannot help but feel when viewing it and its prominence within the space of the fortress speaks to the centrality of warfare and the immediacy of it at Cacaxtla.

The vibrancy of the action in this visual narrative of warfare is a notably more dramatic and realistic depiction of warriors in action than the more static and symbolic narrative of warfare, conquest, and tribute found at Xochicalco. In one scene, for example, a dart has pierced the cheek of a combatant and he is shown pulling it from his bleeding face. Another figure is bleeding from the mouth, the result of a spear piercing his visage, and yet another is crouched behind a dismembered torso oozing blood (Fig. 2.39).<sup>239</sup> Notably the dismembered state of this torso iconographically recalls that of the dismembered sculpture of a sacrificed captive found at the base of the Temple of the Feathered Serpent at Xochicalco. The dismembered state of the torso in the Battle Mural similarly suggests that the practice of taking war trophies in the form of human limbs was common at Cacaxtla, which as a practice associated with ritualized human sacrifice can be understood as a form of tribute. An example of such a war trophy in the form of a human femur is evident in the costume of one of the victorious jaguar warriors here (Fig. 2.40), indicating that he has been successful in taking such trophies in previous conflicts.<sup>240</sup>

In the murals, the association of ritual and sacrifice is frequently highlighted. This is so much the case that some scholars have interpreted this scene as one of sacrifice as opposed to a rendering of an active battle.<sup>241</sup> As such, it may also be understood as a depiction of tribute in the

<sup>&</sup>lt;sup>239</sup> Brittenham, The Murals of Cacaxtla, 113.

<sup>&</sup>lt;sup>240</sup> Hirth, "Militarism and Social Organization at Xochicalco," 77.

<sup>&</sup>lt;sup>241</sup> Brittenham, *The Murals of Cacaxtla*, 117. Scholars include Baird, Carlson, Lombard, Piña Chan, G. Stuart, Uriarte, and Velásquez.

form of human life as an outcome of warfare. Visual and symbolic testaments to sacrifice include recurring images of sacrificial hearts, which are reminiscent of similar glyphs found at Teotihuacan<sup>242</sup> and of the limbless torso from Xochicalco. At Cacaxtla, the association between the heart glyph, bloodshed, and warfare are unmistakable in the Battle Mural where images of the sacrificial heart (Fig. 2.41) are frequently repeated and the notion of blood sacrifice is literally presented in the graphic shedding of blood that occurs across this scene (Fig. 2.42).

The ritual sacrificial practice of blood-letting is alluded to symbolically with the prevalence of the triple knots and triple knotted bow-ties in the costumes of the warriors in the Battle Mural and in Structure A at Cacaxtla as well.<sup>243</sup> They recall similar imagery in Maya contexts, wherein triple knots and repeated heart imagery imply ritual bloodletting and identify blood as a precious substance.<sup>244</sup> The preciousness of blood as depicted at Cacaxtla is also reminiscent of the symbolism of *kan* or "something precious," which is being consumed on the walls of the Temple of the Feathered Serpent at Xochicalco. The Battle Mural's inclusion of several scenes of bound captives further implies that preparations are underway for blood sacrifices, thus visually confirming the association between warfare and the ritual of blood sacrifice, perhaps as a form of tribute, here too.

References to ritual bloodletting are also evident in the costume of Three Deer Antler, who appears and is named twice in the Battle Mural (Fig. 2.43).<sup>245</sup> In each of the images of Three Deer Antler, he is shown wearing a triple knot implying self-sacrifice or blood sacrifice and is holding a weapon of war. In one image he bears an *atlatl* and a dart, and in the other, he is

<sup>&</sup>lt;sup>242</sup> Baird, "Stars and War at Cacaxtla," 117.

<sup>&</sup>lt;sup>243</sup> Ibid., 117.

<sup>&</sup>lt;sup>244</sup> Ibid., 117.

<sup>&</sup>lt;sup>245</sup> Brittenham, The Murals of Cacaxtla, 127.

holding a long spear. In both images, he is shrouded in a jaguar skin and wears a goggle-eyed rain deity mask or is depicted in close proximity to a rain deity mask. Three Deer Antler also wears a year sign in his headdress as an indication that he is not just a warrior but likely a ruler as well.<sup>246</sup> Identifying Three Deer Antler by name in the Battle Mural confirms that he is a person of importance and suggests that this scene may be a commemoration of specific or heroic single combatants.<sup>247</sup> The naming may also be an indication that the mural was commissioned by Three Deer Antler as a ruler seeking to clarify his own military victories as well as to record recent history.<sup>248</sup> As such, the realism of the visual narrative of warfare, conquest, and tribute that is playing out in this scene speaks even more directly to the importance of militarism as a social, political, and ritual construct at Cacaxtla. And, it suggests that the Battle Mural and its context within a fortified site wherein ritualized militarism was central, is also a performance of power, perhaps of Three Deer Antler and certainly of the victorious jaguar warriors of this scene.

In the context of interpreting the Battle Mural as a narrative of warfare and the performance of power, the iconography of the Battle Mural also reflects the stylistic influence of multiple regions.<sup>249</sup> I argue that this hybridity at Cacaxtla, just as at Xochicalco, speaks to the cosmopolitan nature of this site and also to the narrative of warfare, conquest, and tribute that is depicted in the site's murals. We see these stylistic conflations, for example, in the decorative

<sup>&</sup>lt;sup>246</sup> Baird, "Stars and War at Cacaxtla," 114.

<sup>&</sup>lt;sup>247</sup> Brittanham suggests this interpretation reflects the timocratic society of Cacaxtla wherein notions of individual honor were paramount. Brittenham, *The Murals of Cacaxtla*, 118.

<sup>&</sup>lt;sup>248</sup> Ibid., 131.

<sup>&</sup>lt;sup>249</sup> This possibility is reinforced by various scholarly interpretations of the Cacaxtla murals wherein it has been argued that the murals demonstrate a mixture of styles and motifs adopted from the Maya, Teotihuacan, Xochicalco, and Oaxaca. Baird, "Stars and War at Cacaxtla," 105. Per Kubler, for example, the Battle Mural at Cacaxtla references a variety of styles associated with Veracruz and the southern Maya lowlands. Kubler, *The Art and Architecture of Ancient America*, 74. This association is also suggested by Nagao. Nagao, "Public Proclamation at Cacaxtla," 88.

borders that surround warrior figures at the site, which feature various aquatic creatures, including frogs, turtles, snakes, and snails, among others (Fig. 2.44). The abundance of aquatic imagery points to the influence of Maya art, where similar themes are evident at the likes of Palenque, Dzibilchaltun, Altun Ha, Oxkintok, and Xpuhil.<sup>250</sup> Aquatic themes are also found at Teotihuacan.<sup>251</sup> Other evidence of Maya influence in the murals at Cacaxtla includes the footwear worn by the warrior figures as well as in the shape and flatness of the visages depicted. The specific cranial deformation that is implied in this facial flatness suggests that the conflict of the Battle Mural is one based on ethnic differences.<sup>252</sup> Maya blue pigment is also used frequently. Taken together, this visual evidence suggests that Cacaxtla, like Xochicalco, was a metropolitan center that would have had contact and potentially conflict with other neighboring peoples and polities, thus supporting the interpretation of the murals to be visual testaments to narratives of warfare, conquest, and tribute.

The conflation of militarism and ritual evident at Cacaxtla - both architecturally and culturally - would continue to be a defining force in the cultural, social, and political developments of the centuries that followed the decline of the site. For example, the settlement of Huejotzingo, which is near Cacaxtla, had become a population center by the sixteenth century and was a place where militarism continued to be celebrated. The celebration of militarism is evident in the *Cantares mexicanos*, which are believed to have been written by Italian Jesuits in the sixteenth century. This text includes specific reference to war cries and a song from

<sup>&</sup>lt;sup>250</sup> Clemency C. Coggins, *The Stucco Decoration and Architectural Assemblage of Structure 1-sub, Dzibilchaltun, Yucatan, Mexico* (New Orleans: Tulane University, 1983), 48-49.

<sup>&</sup>lt;sup>251</sup> Visual reference to aquatic motifs is evident, for example, in the mural of the Great Deity at Teotihuacan and on the Temple of the Feathered Serpent at the same site. Baird notes that the aquatic creatures appearing in the mural at Cacaxtla are depicted in a style similar to Teotihuacan's. Baird, "Stars and War at Cacaxtla," 108.

<sup>&</sup>lt;sup>252</sup> This implication is noted in Baird's interpretation of the Battle Mural as a commentary on a conflict based in ethnic differences, wherein the jaguar warriors of Central Mesoamerican origin are pitted against bird warriors, who display a specific cranial deformation often associated with the ethnically Maya. Ibid., 133.

Huejotzingo that heralds warriors. This song, intended to be sung to a ritualistic drum beat, suggests that militarism was not merely associated with literal warfare at Huejotzingo, but continued as a prevalent symbolic and culturally important practice into the early colonial period too.<sup>253</sup>

## Malinalco

The continuity between the pre-Hispanic emphasis on ritualized militarism and its continuation into the colonial period is particularly notable at Malinalco. Located approximately 70 miles from modern day Mexico City (Fig. 2.45), the first settlements at Malinalco appeared in the early Post-Classic period, following the fall of Xochicalco and Cacaxtla, and it was continually occupied thereafter. This site is particularly important to this study because its structures were under construction through 1520, meaning that they were still being built when the Spanish invaded Mesoamerica. As such, the fortified temple at Malinalco serves as an important bridge between earlier pre-Hispanic sites and the colonial period, offering insight into the relationship between militarism and architecture in the years immediately preceding Spanish conquest and the extension of this relationship into the early colonial period as well.

The settlement complex at this site sits on partially manmade terraces, halfway up a granite mountain, approximately 330 feet above the valley floor (Fig. 2.46). During the Post-Classic period, Malinalco occupied a unique geographic position between competing regions. As such, it was vulnerable to various cultural and sociopolitical influences as well as to military incursions.<sup>254</sup> By the mid-fifteenth century, the Triple Alliance of Tenochtitlan, Texcoco,

<sup>&</sup>lt;sup>253</sup> Ibid., 35-36.

<sup>&</sup>lt;sup>254</sup> Peterson, *The Paradise Garden Murals*, 12.

and Tlacopan had executed an empire-building campaign wherein polities across the Valley of Mexico, including Malinalco, were conquered<sup>255</sup> and were subsequently required to pay tribute.

Shortly thereafter, construction of rock-carved temples dedicated to the jaguar and eagle warrior cults began at the behest of the Mexica ruler Ahuitzotl and construction continued into the early 1520s, when the invading Spanish arrived in Malinalco.<sup>256</sup> Malinalco's purpose as a military center was noted at the time of Spanish conquest in descriptions written by Hernán Cortés in 1521.<sup>257</sup> In his letters to Charles V, for example, Cortés speaks of the defenses of this site, noting the Spanish pursued the residents and warriors protecting Malinalco "right up to the walls," further noting that "[it was] perched on a very lofty peak too steep for the horses to climb."<sup>258</sup> Fernando de Alva Ixtlilxóchitl, in his sixteenth-century account, also describes Malinalco as a cliffside site ("high hill") and as a "place for war."<sup>259</sup> Taken together, these primary accounts indicate clearly that the site at Malinalco was a fortified center that was functional in warfare, in addition to being a ritual center featuring the Temple of the Eagle Warriors.

The archaeological zone at Malinalco consists of eight structures carved directly into the rock of the mountain. Of these, Structure I, also known as the Temple of the Eagle Warriors and the *Cuauhcalli*, is the largest and most impressive, consisting of a pyramidal platform with a

<sup>&</sup>lt;sup>255</sup> As previously noted, the *xochiyaoyotl*, or "flower wars," which were largely political in purpose, were an important aspect of Mexica imperialism. Malinalco was conquered by the Mexica in 1476. Brittenham, *The Murals of Cacaxtla*, 117. Also in Ross Hassig, *Aztec Warfare* (Norman: University of Oklahoma Press, 1988): 10, 119-121, 128-130, 254-256.

<sup>&</sup>lt;sup>256</sup> Kubler, The Art and Architecture of Ancient America, 95.

<sup>&</sup>lt;sup>257</sup> Peterson, *The Paradise Garden Murals*, 13.

<sup>&</sup>lt;sup>258</sup> Hernando Cortés, Five Letters, 1519-1526, trans. J.B. Morris (New York: W.W. Norton, 1962), 201.

<sup>&</sup>lt;sup>259</sup> Fernando de Alva Ixtlilxóchitl, *Obras Históricas*, ed. Edmundo O'Gorman (Mexico City: Universidad Nacional Autónoma de México, 1975), 474.

primary stairway facing the west (Fig. 2.47). Iconographic references to war and warriors that draw on precedents set at Teotihuacan and that were furthered at Xochicalco and Cacaxtla are prevalent in this structure, thus indicating an important continuity across the centuries leading to the Spanish invasion. For example, on either side of the stairs, there are two jaguar or ocelot statues in the round, identified by shape of their bodies, curling tails, and large claws (Fig. 2.48). These statues act as sentinels charged with protecting the access point to this ritual space.<sup>260</sup> Astride the center of the staircase that leads to the inner cella of the Temple of the Eagle Warriors sits a statue of a warrior, of which only the torso and legs remain (Fig. 2.49). At the top of the stairs, a rectangular sacrificial stone is evident as well (Fig. 2.50).

Upon ascending the central stairway at Malinalco, one encounters a large patio that is also adorned with two carved sculptures. To the east of the doorway on this patio is a sculpture of a serpent and what appear to be the legs of a human figure, likely a warrior (Fig. 2.51). To the west of the entrance doorway is a carved drum that also has the remains of what appear to be feet rested atop it (Fig. 2.52). The serpent that juts from the east side of the doorway has the bifurcated tongue similar to that previously discussed in the context of Teotihuacan and Xochicalco. Along its back, in lieu of feathers, are a series of arrow-like points (Fig. 2.53), which resemble the *atlatl* darts associated with butterfly imagery also found at Teotihuacan. The serpentine imagery of the temple at Malinalco continues around the entrance doorway, which is carved to resemble the gaping mouth of a serpent, with a bifurcated tongue jutting in low relief from the doorway to form the step into the inner space of the temple (Fig. 2.54).

The interior of Structure I is circular with a sculptural bench running along the perimeter. Directly across from the main entrance, a large jaguar head sits on the carved bench (Fig. 2.55).

<sup>&</sup>lt;sup>260</sup> From remaining material evidence, it is clear that these jaguar sculptures were at one point colorfully painted yellow with black spots, though the paint that remains on them today is minimal.

Two eagle heads are also carved on the bench, with a third, larger eagle sculpture emerging from the floor of this ritual space (Fig. 2.56). The eagles and jaguars on the bench are presented in a sculptural, yet almost flattened form, resembling a pelt. This presentation is intriguing for its continuity with the warrior garb evident at Cacaxtla, where warriors are frequently depicted wearing jaguar pelts and eagle headdresses. It also suggests, as noted by Peterson, that this ritualized militaristic space is associated with rulership because these pelts are better understood as sculptural thrones.<sup>261</sup> Peterson's interpretation aligns to that of Richard F. Townsend, who asserted that Structure I served an important practical and ritualistic purpose in the promotion of warriors as well as the ascension of rulers, similar to that of Yopico in Tenochtitlan.<sup>262</sup>

The connection between Malinalco and Tenochtitlan is important because the most robust written records that speak to the ongoing importance of ritualized militarism in the early sixteenth century are those written in by chroniclers like Sahagún and Durán. These Spanish writers took note of the ceremonies dedicated to warrior cults in Tenochtitlan's Eagle Warrior House (*Tlacochcalco Quauhquiauac*), which was located adjacent to the Templo Mayor, that included various rites related to warfare, including those specific to ritualized sacrifice.<sup>263</sup> Given that Malinalco was conquered by the Mexica, it is likely that a similar temple dedicated to

<sup>&</sup>lt;sup>261</sup> Peterson argues that the flattened sculptural forms inside the cella of Structure I at Malinalco are not merely pelts, but rather are thrones that give the site both cosmic and imperial meaning. Peterson, *The Paradise Garden Murals*, 13.

<sup>&</sup>lt;sup>262</sup> Townsend's interpretation of Structure I at Malinalco asserts the temple served an important practical and ritualistic purpose in the promotion of warriors and the ascension of rulers. For Townsend, Structure I is similar to chroniclers' descriptions of Yopico, a temple dedicated to warrior ceremonies and those related to rulership found in Tenochtitlan. This temple was the final place that rulers would have visited as part of a four-day ascension ceremony and was the location where the skins of enemy warriors were deposited after the *Tlacaxipehualiztli* or the 'Flaying of Men Ceremony.' Richard F. Townsend, "Malinalco and the Lords of Tenochtitlan," in *The Art and Iconography of Late Post-Classic Central Mexico*, ed. Elizabeth Hill Boone (Washington D.C.: Dumbarton Oaks, 1982), 111-140. Given the connection between Tenochtitlan and Malinalco as a result of the latter being conquered by the Triple Alliance, this parity could certainly have existed.

<sup>&</sup>lt;sup>263</sup> Hajovsky, On the Lips of Others, 29.

warriors, including those of the eagle and jaguar orders, would have been used for a comparable purpose in this location as well.<sup>264</sup> This interpretation is supported by the presence of the sacrificial stone at the top of the stairs and the circular hole to be used for depositing sacrifices behind the head of the eagle on the temple's main floor. This interpretation, too, makes clear that Structure I was a ritualized performative space directly associated with power.

Relatedly, Patrick Thomas Hajovsky builds a compelling argument for the use of Structure I at Malinalco as a place for the *Xipe Totec* (Our Lord, the Flayed One) ceremony, which is described in the colonial chronicles of both Sahagún and Durán as a festival where the highest-ranking enemy warriors were tethered to stones and given mock weapons that they used to defend themselves against attack by Mexica warriors armed with obsidian-edged clubs. As these captive warriors were "defeated" by the Mexica warriors in the ceremony, they were sacrificed, their skin was flayed and worn for twenty days by the victorious warrior or a priest, after which time it was placed in the ceremonial hole for such skins in the Yopico in Tenochtitlan.<sup>265</sup> The existence of a similar hole in the main floor of Structure I at Malinalco implies the possibility that it was used for similar ritualized militaristic rites.<sup>266</sup>

<sup>&</sup>lt;sup>264</sup> Ibid., 29. García Payón, in his study of the Malinalco complex, also argues that Structure I was used for rituals specific to the promotion and death of warriors, while Richard F. Townsend asserts that the space would have been used for conducting coronation rights. Townsend argues that Structure I at Malinalco served as a shrine and a councilroom where the auto-sacrificial rites of new rulers were performed. Cited in Peterson, *The Paradise Garden Murals*, 13.

<sup>&</sup>lt;sup>265</sup> Hajovsky, On the Lips of Others, 31.

<sup>&</sup>lt;sup>266</sup> There are other interpretations of the primary purpose of Structure I that are relevant. Hajovsky suggests that it may reference *Chicomoztoc*, or the Place of the Seven Caves, which is the place where the Aztecs and those peoples related to them originated. Malinalco's cave-like nature likens it to this mythical place. He further argues that the space of Structure I at Malinalco is suggestive of Coatepec, the primordial mountain where Coatlicue, the serpent-skirt wearing goddess of the Mexica, gave birth to Huitzilopochtli, the god of war. In connecting Malinalco to the cosmos, its connection to ritual as well as its importance becomes quite clear. Per Hajovsky, the ritualistic purpose of Structure I is directly connected to warrior rites of passage. He notes, also, that the curved bench of Malinalco's interior cella with its sculptures depicting two of the highest-ranking warrior orders - the jaguar and the eagle - can be respectively understood to be symbols of darkness or caves and the sun. Hajovsky further suggests that the arrangement of the jaguars and eagles on this bench represents the triad that comprised the military Triple Alliance of Tenochtitlan, Texcoco, and Tlacopan. Hajovsky, *On the Lips of Others*, 29-31.

The important connection between ritual and militarism at Malinalco is reinforced not just in the architecture of the site, but in material objects found there as well. For example, a huehuetl, or a wooden drum, which is part of a class of ritual objects used in warrior ceremonies, from Malinalco features several symbols of war including teoatl-tlachinolli or sacred water (blood), which is interlocked with symbols for fire (Fig. 2.57).<sup>267</sup> Additionally, the insignia of the Mexica war god Huitzilopochtli<sup>268</sup> and images of various weapons of war appear in the drum's registers. The lower register of this object includes renderings of two jaguars and an eagle, recalling the two highest ranking warrior cults to which Structure I is dedicated. The rounded beads that appear in the drum's central band recall carved beads also found at Tenochtitlan's Templo Mayor bearing the symbol of twisted grass, or *malinalli*, from which Malinalco gets its name, and which is also a reference to the path of the soul after death.<sup>269</sup> This twisted grass symbolism recalls the twisted rope that tethered captured warriors in the aforementioned festival in Tenochtitlan.<sup>270</sup> Twisted ropes are further iconographically similar to the twisted and knotted cords that visually symbolize sacrifice evident at Xochicalco and Cacaxtla, thus indicating a continuity in iconography associated with ritualized militarism.

Given the iconography of material objects like the *huehuetl* as well as the architecture and iconography of Structure I, it is clear that this space had a ceremonial and ritualistic purpose that was closely tied to the practice of war. Further, the conflation of militarism and ritual evident

<sup>268</sup> Ibid., 33.

<sup>269</sup> Ibid., 33.

<sup>270</sup> Ibid., 33.

<sup>&</sup>lt;sup>267</sup> Ibid., 33-34. In his analysis of the iconography of this object, Hajovsky notes that each of the warriors depicted speaks the *teoatl-tlachinolli* glyph, which evokes both a war cry related to blood (*teoatl*) and fields burned in conquest (*tlachinolli*). The implication is one of violent conflict resulting in physical destruction. And, the upper register of the *huehuetl* includes visual reference to flames, which are consuming a human figure dressed as an eagle warrior. Hajovsky suggests that this visual reference alludes to the practice of burning warriors in effigy at the Tlacochcalco, or military headquarters, of Tenochtitlan.

at Malinalco is closely linked to that which was in place in Tenochtitlan when the Spanish invaded in the sixteenth century. This link is important as we consider the intersection of Spanish and Indigenous approaches to ritualized militarism in defensive and militaristic architecture in the decades immediately following conquest.

### Tenochtitlan, Tlaxcala, and Tetenanco

As the Spanish invaded Central Mexico, they came into contact with a plethora of examples of pre-Hispanic defensive architecture. For example, in addition to the fortifications at Malinalco noted by Cortés in his letters to Charles V, he also encountered the fortified town of Ixtacamaxtitlan, near the eastern Tlaxcalan border, along the trek from Veracruz to Tenochtitlan (Fig. 2.58). This fortified site sat atop a high hill and was surrounded by a wall with barbican gates and moats. In close proximity to Ixtacamaxtitlan was also a frontier fortress built of stone walls that extended across hills and along the valley. These walls were approximately nine feet high and in some cases as much as eighteen feet thick, each surmounted by a parapet.<sup>271</sup> Similar features were also observed at the hilltop settlement of Tetenanco, located near Tlapa (Fig. 2.59). Tetenanco literally means "place of the stone-wall" and its toponym is clearly depicted in the colonial Codex Mendoza (folio 39r) as a wall with merlons over the glyphs for stones (Fig. 2.60).<sup>272</sup>

In many ways, these defensive structures were architecturally reminiscent of those with which Cortés and his European contingent would have been familiar. As discussed in chapter one of this study, thick sloping walls topped by parapets punctuated by barbican gates were common

<sup>&</sup>lt;sup>271</sup> Armillas, "Mesoamerican Fortifications," 80.

<sup>&</sup>lt;sup>272</sup> Ibid., 83.

architectural features of Early Modern European fortress architecture. Merlons, like the aforementioned defensive features of Ixtacamaxtitlan and Tetenanco, were also common in Early Modern European fortification. In general, many of the pre-Hispanic settlements that Europeans encountered on their trek from Veracruz or the Yucatán through Central Mexico, were protected by systems of walls, ramparts, parapets, and angle-bastioned structures, including temples, that were visually similar to those same European defensive architectural features.<sup>273</sup>

The familiarity of these forms would have extended to Tenochtitlan, the Mexica capital, as well, as it too was practically defended with various architectural features.<sup>274</sup> And, at Tenochtitlan, as in each of the other sites considered here, the practice of iconographically and architecturally conflating ritual and militarism was prominent. This conflation is particularly evident in the design and dedication of the Templo Mayor, the main temple in Tenochtitlan. The Templo Mayor itself marks not just the urban center of Mexica power, but it can also be understood as the conceptualization of the Flower World,<sup>275</sup> a place of self-sacrifice and

<sup>&</sup>lt;sup>273</sup> Ibid., 80.

<sup>&</sup>lt;sup>274</sup> Barbara Mundy's *The Death of Aztec Tenochtitlan, The Life of Mexico City* (2015, 30-39) explores the founding of Tenochtitlan in the center of Lake Texcoco in detail. Her work offers considerable insight into the relationship between the pre-Hispanic city and the founding of Mexico City post-conquest. Additionally, it is notable that the hill of Chapultepec, near the capital at Tenochtitlan, was protected by successive lines of concentric stone walls as a practical defensive feature.

<sup>&</sup>lt;sup>275</sup> There are multiple relevant understandings of the Flower World in Mesoamerica. These include those noted by Jane H. Hill in "The Flower World of Old Uto-Aztecan," *Journal of Anthropological Research* 48 (1992) 117-144, where she characterizes the Flower World as a place wherein spiritual aspects of living things can be found (127-128). In the specific context of Aztec tradition, Hill asserts that flowers are associated with several paradises, including that of the Sun's heaven, where men who die in battle and women who die in childbirth accompany the path of the sun alongside birds and butterflies. She also notes that warriors who fall in battle can be understood as flowers and that flowers can represent bellicose bloodshed (130). Flowers are also associated with human hearts, blood, and organs of perception as well as fire and aspects of gender identity (122). Kelley Hays-Gilpin and Jane H. Hill in "The Flower World in Material Culture: An Iconographic Complex in the Southwest and Mesoamerica," *Journal of Anthropological Research*, 55, no. 1 (Spring 1999) 1-37, argue that Flower World ideology has ancient roots among Uto-Aztecan peoples and that the flower as symbolic of female progenitive power was co-opted into male ritualistic practice in Mesoamerica (2). These understandings add further complexity to recognition of the Templo Mayor as connected to ritualized warfare and the Flower World.

apotheosis as well as home to a solar war cult at the center of the Mexica universe.<sup>276</sup> Recognizing the Templo Mayor as the architectural embodiment of ritualistic warfare expands on the identification of the edifice as Coatepec, or Serpent Mountain, which was considered the dwelling place of ancestors as well as a cosmological home to deceased warriors.<sup>277</sup>

There are a number of additional features of the Templo Mayor and archaeological remains associated with it that lend themselves to this interpretation. These include several ritual deposits found along all four sides of the temple. Sacrificed human remains as well as auto-sacrificial tools made of jaguar and eagle bones appear to be presided over by images of Tlaloc, who as has been previously discussed in this chapter is associated with the practice of warfare, in these caches. This arrangement also speaks to a narrative about the origin of the present age, called the Fifth Sun, which was used as a justification for war and human sacrifice by the Mexica.<sup>278</sup>

<sup>&</sup>lt;sup>276</sup> Ángel González López and Lorena Vázquez Vallín, "The Flower World in Tenochtitlan: Sacrifice, War, and Imperialistic Agendas," in *Flower Worlds: Religion, Aesthetics, and Ideology in Mesoamerica and the Mesoamerican Southwest*, eds. Michael D. Mathiowetz and Andrew D. Turner (Tucson: University of Arizona Press, 2021), 244.

<sup>&</sup>lt;sup>277</sup> Eduardo Matos Moctezuma discusses the symbolism of the Aztec Templo Mayor in his essay "Symbolism of the Templo Mayor," included in *The Aztec Templo Mayor: A Symposium at Dumbarton Oaks, 8th and 9th October 1983,* ed. Elizabeth Hill Boone (Washington DC: Dumbarton Oaks Research Library and Collection, 1983): 185-201.

<sup>&</sup>lt;sup>278</sup> López and Vallín, "The Flower World in Tenochtitlan: Sacrifice, War, and Imperialistic Agendas," 246-247, To build the argument for understanding the Templo Mayor as a representation of the Flower World and its associated importance in the context of ritualized militarism, López and Vallín point to the arrangement of the objects found in the Offering Contreras-Angulo, located at the southwest corner of the site. In this cache, severed human heads were placed alongside "skull masks," also made of human heads. Some of the human heads found in this offering wear earspools decorated with a solar disk, thus referencing the solar deity, Tonatiuh, or potentially the turquoise enclosure associated with Teotihuacan, as identified by Taube (Karl Taube, "The Turquoise Hearth," 309-316), that served as the dwelling of the fire patron Huehueteotl-Xiuhtecuhtli. Also found in this cache is a flint knife adorned with the insignia of Ehecatl, or the wind deity and an *atlatl*, which is a weapon of war. According to a sixteenth-century account by Sahagún, the wind god was responsible for sacrificing the rest of the deities (Fray Bernardino de Sahagún, Historia general de las cosas de Nueva España, 3 vols (Mexico City: Consejo Nacional para la Cultura y las Artes, 2000), 693-698). As such, the human sacrifices in this offering could represent deceased warriors as well as deities who also died in a ritualistic act that fed the sun as a means of maintaining universal order. In understanding the sun as needing constant feeding via human sacrifice, we can see a clear avenue by which the Mexica would have justified the need to continually engage in warfare as a means of sourcing captives for such ritualized sacrifice. This interpretation is further supported by Maffie's research. He notes that for the Mexica, there existed a metaphysical link between the act of sacrifice or autosacrifice, the resulting blood, and war - a cycle that

In addition to caches like that described above, the iconography of the interior rooms found on the platform of the Templo Mayor speak to the importance of ritualized warfare quite explicitly and further suggest that this edifice could indeed be a conceptualization of the Flower World. These images include thirty-nine reliefs of chanting Mexica warriors, wearing the guise of Toltec warriors. Some are holding weapons and the warriors in this procession are surrounded by feathered serpents, which connects this iconography to that of feathered serpents discussed in the context of earlier sites. Ángel González López and Lorena Vázquez Vallín suggest that this procession could depict ancestors who died in battle and who now march alongside the Mexica army as it conquers Mesoamerica.<sup>279</sup> In associating the Mexica army with the power of idolized, and in some aspects mythologized, Toltec warriors as well as with the cosmologically powerful Flower World, the iconography of this mural, which is located on the god of war Huitzilopotchli's side of the platform of the Templo Mayor, clearly reinforces the link between the practice of warfare and its ritual implications. In so doing, it also serves to legitimize the Mexica's continual investment in warfare and their subsequent right to rule those whom they conquered and subsequently sacrificed in this effort.

The plaza at the foot of the Templo Mayor also features images of the Flower World, suggesting that this architectural space can be understood as both a garden and a battlefield. The floor of the plaza is adorned with seventy-eight carved stone plaques, which bear images of Tlaloc, eagles and jaguars engaged in dance or in battle as well as reliefs of butterflies, smoking darts, flowers, and shooting stars.<sup>280</sup> The prevalence of eagles, jaguars, and stars recalls similar

provided nourishment, rebirth as well as renewal per James Maffie in *Aztec Philosophy: Understanding a World in Motion* (Boulder: University Press of Colorado, 2014), 253, 312.

<sup>&</sup>lt;sup>279</sup> Ibid., 253.

<sup>&</sup>lt;sup>280</sup> Ibid., 256-258.

symbols of ritualized militarism evident in the Battle Mural at Cacaxtla. The interaction between eagles and jaguars also recalls the abundance of comparable sculptural adornments in Structure I at Malinalco, which were created by the Mexica. And, the references to butterflies<sup>281</sup> and to Tlaloc are similar to those frequently found at Teotihuacan, Xochicalco,<sup>282</sup> and Cacaxtla as well. What we, therefore, see in the iconography of the main plaza at Tenochtitlan is a compendium of references to sacred, and importantly, state-sponsored ritualized warfare that are continuations of those previously established at earlier sites discussed in this study.

In understanding the Templo Mayor as a physical manifestation of Coatepec and the Flower World, it is clear that architecture plays a critical role in making visible the conflation of ritual and warfare in Mesoamerica from the rise of Teotihuacan through the Spanish invasion. As this study continues, recognizing the centrality of this conflation and its impact on architectural design and associated iconography creates opportunity for understanding colonial militaristic architecture, much of which was built by Indigenous creators, differently. In lieu of interpreting colonial architecture like the fortress of San Juan de Ulúa or the fortress monasteries of San

<sup>&</sup>lt;sup>281</sup> Maffie, *Aztec Philosophy*, 232. As Maffie notes, butterflies in the Mexica context functioned as ideograms for *olin* and the concept of the Fifth Sun. Consequently, butterfly ideograms appeared on the attire as well as the housing quarters of warrior cults, including those of the eagle and jaguar Warriors.

<sup>&</sup>lt;sup>282</sup> Xochicalco's Temple of the Feathered Serpent has also been interpreted as a physical manifestation of the Flower World by Andrew D. Turner. To substantiate this interpretation, Turner suggests that the warriors of Xochicalco's façade might be deceased warrior ancestors seated among feathered serpents Turner's interpretation draws on similar iconography found in Maya renderings of lords and is bolstered by his interpretation of the speech scrolls associated with these figures as featuring trilobed wings, an allusion to the warrior-associated butterflies of the Flower World. Butterfly iconography can be found on the Animal Ramp, located on the eastern edge of the Xochicalco acropolis, near the ballcourt as well. This ramp consists of 286 stones and includes forty references to butterflies, with curling snouts and crenelated wings. The ramp also includes images of birds and feathered serpents, which like butterflies, are associated with the Flower World. Turner further notes that the Animal Ramp's east-west orientation may indicate the path of the sun. Taking all of these aspects together, Turner suggests that we might best understand the entire acropolis at Xochicalco to be a recreation of this cosmologically important Flower World. Andrew D. Turner, "Beauty in Troubled Times: The Flower World in Epiclassic Central Mexico, A.D. 600-900" in Flower Worlds: Religion, Aesthetics, and Ideology in Mesoamerica and the Mesoamerican Southwest, eds. Michael D. Mathiowetz and Andrew D. Turner (Tucson: University of Arizona Press, 2021), 165-167. Observing this continuity from Xochicalco to Tenochtitlan is important because it speaks to the ongoing importance of ritualized militarism across centuries through the point of the Spanish invasion.

Miguel el arcángel in Huejotzingo and San Salvador in Malinalco as architectural reflections of European hegemony alone, we have the opportunity to see these colonial structures as multivalent and hybrid edifices because their architecture and iconography speak to a continued interest in ritualized militarism and its association with power that would have likely been quite familiar to the various audiences who built and experienced them.

## **CHAPTER THREE**

## COLONIAL INNOVATION AND HYBRIDITY IN DEFENSIVE ARCHITECTURE

The robust tradition in defensive and ritualized militaristic architecture that developed in Mesoamerica over the course of centuries was thriving when the Spanish invaded Veracruz in 1519. In Malinalco, in particular, the Mexica fortified ritual site that sits just one mile above the population center where the fortress monastery would later be built, was still in production in the first decades of the sixteenth century. This chronology is important because it demonstrates that there is a throughline, centered around the importance of ritualized militarism, its relationship to issues of power, and its manifestation in defensive and militaristic architecture and its iconography. This throughline connects sixteenth-century Malinalco, Huejotzingo, and Tenochtitlan as the Spanish encountered them with the pre-Hispanic past and sites like Cacaxtla, Xochicalco, the early period of settlement at Malinalco, and Teotihuacan. Acknowledging and understanding this connection is essential to creating opportunities for decolonial readings of the defensive and militaristic colonial constructions of the sixteenth century. We can then engage with upstreaming as a methodological tool to inform these readings.

In this chapter, I analyze the earliest Spanish defensive architecture, and specifically fortifications, built in colonial Mexico.<sup>283</sup> In examining the architecture of these structures and its connection to issues of power, I compare them to the European theoretical and practical precedents in fortification design that were intended to inform their construction. I use the phrase "intended to inform" intentionally here because the fortresses that were actually built in colonial

<sup>&</sup>lt;sup>283</sup> As noted in the introduction of this study, "colonial Mexico" is used synonymously with "New Spain." New Spain, officially titled the Viceroyalty of New Spain or the Kingdom of New Spain, was the territory occupied by the Spanish in the Americas that includes what is today Mexico, the southwestern United States, California, Florida, Louisiana, Central America and the Caribbean.

Mexico differ in notable ways from their European antecedents and from the architectural standardization that the Spanish Crown attempted to implement in the Americas. To make clear the extent of this deviation, I analyze the first Spanish-commissioned fortress built in colonial Mexico, San Juan de Ulúa in Veracruz, comparing it to the Spanish fortification of San Diego de Acapulco and select examples from elsewhere in the Spanish Americas.

Using San Juan de Ulúa as a case study, I argue that this fortress and others like it in the Americas must be interpreted as more than merely copies of European models. They are instead distinctly American hybrid cultural artifacts that speak to the colonial condition in which they were created. This is particularly true given the extensive tradition of defensive and militaristic architecture in pre-Hispanic Mesoamerica and the fact that these edifices were primarily built by Indigenous creators, using Indigenous building techniques and materials. Thus, to assert that Spanish colonial fortresses are reflective solely of European architectural traditions, power structures, hegemony, and perspectives alone would be to tell only one side of the story. These structures are far more complex, hybrid, and multivalent edifices wherein power dynamics between the Spanish and Indigenous populations of sixteenth-century Mexico were actively negotiated.

As such, our interpretation of them must be complicated to elevate the varying different perspectives, belief systems, and power structures that likely were associated with their construction and reception. To develop this point, I compare the Spanish colonial fortifications at Veracruz and Acapulco to the pre-Hispanic fortification at Cacaxtla and to the ritualized militaristic sites of Teotihuacan, Malinalco, and Xochicalco. In this chapter, I also draw on the postcolonial scholarship of Leibmann, Jeb J. Card, Chakrabarthy, and Bhabha as well as on the decolonial thinking of Mignolo, Walsh, Dean, Webster, and Leibsohn to offer a new

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interpretation of Spanish defensive architecture in colonial Mexico that acknowledges its more expansive cultural relevance. In doing so, I argue that this style of architecture can be understood as far more than "utilitarian" and far more than just "Spanish," and as such, it subsequently warrants deeper consideration within the discipline of art and architectural history.

# Early Sixteenth-Century Fortified Structures

There were few standalone fortifications built in colonial Mexico in the century following the Spanish invasion in 1519. Those of greatest importance protected Spanish trade interests by guarding the ports at Veracruz and Acapulco (Fig. 3.1). In some ways, this limited investment in defensive architecture is understandable given that the Spanish were primarily seeking to protect their commercial interests, not necessarily to engage in land-based warfare conducted by standing armies beyond the duration of initial conquest. Yet, the choice to fortify port cities and little else is also intriguing given the Spanish imperial emphasis on the use of city planning and architecture as a symbolic and practical mechanism and strategy for demonstrating hegemony and control.<sup>284</sup> Additionally, fortresses were commonly constructed in Early Modern Europe as a means of demonstrating power and control over territories too.<sup>285</sup> Therefore, we might expect

<sup>&</sup>lt;sup>284</sup> The Spanish reliance on city planning and buildings as mechanisms of control is clear in the writings of Cobo who stated that towns and their buildings were intentionally constructed in European styles in the Americas so as to deliberately entrench Spanish culture and architecture in the colonies to the point that "it would become impossible to eradicate. Cited in Fraser, *The Architecture of Conquest*, 21. Translated from the Spanish in Cobo's *Historia del Nuevo Mundo 2: 52: "tantos pueblos edificados a nuestra traza,…tantos edificios suntuosos de cal y canto,…muchas piedras labradas con el primor y arte que se labran en Europa en forma de columnas, basas y todo género de labores y molduras*. Along similar lines, in response to a 1537 letter from the Bishop Juan de Zumárraga, King Charles V authorized the destruction of Indigenous temples and the reuse of their materials to build Spanish-style churches and monasteries within newly-established colonial cities and towns. Zumárraga's letter dated November 1537 received response from Charles V in 1538. This response gave the bishops the authority to destroy temples and to "save and use again the conveniently cut stones for building churches and monasteries," as noted by McAndrew in *The Open Air Churches of Sixteenth-Century Mexico*, 181. Alfonso Ortiz Crespo's research on the Spanish use of architecture as a mechanism of control and demonstration of power also speaks to the use of uniform, and at least from the Spanish point of view, "European" city plans and architecture in Crespo, "The Spanish American Colonial City: Its Origins, Development, and Functions," 25.

<sup>&</sup>lt;sup>285</sup> Pepper and Adams (1986) as well as Duffy (1996) frequently attest to the importance of fortresses as physical mechanisms for indicating power and control in Early Modern Europe. In his article, "The Utility of Fortifications in Early Modern Europe: Italian Princes and Their Citadels, 1540-1640" in *War in History* 7, no. 2 (April 2000):

that the Spanish would have made more substantive investments in constructing more than a few standalone fortresses in their port cities primarily, particularly early in the colonial period.

The choice not to establish a more robust fortified presence is particularly perplexing when we also consider the strategic and political importance of the colonial capital of Mexico City to the Spanish. Like Veracruz and Acapulco, Mexico City was a significant population center and a nexus of Spanish power in their newly-formed colony. Yet, there was no permanent standalone Spanish-commissioned fortress built in the city in the sixteenth century. One possible practical explanation for this lack of a permanent fortress may be that Mexico City was afforded natural protection by Lake Texcoco, which surrounded it on all sides prior to being drained by the Spanish during the colonial period. Like the Mexica capital of Tenochtitlan that preceded it,<sup>286</sup> colonial Mexico City was ostensibly offered some protection from potential bellicose threats by nature of its location in the center of what effectively was a very large natural moat.

However, despite the natural protection afforded the city by Lake Texcoco, primary source materials from the sixteenth century indicate that several calls for and orders to build fortifications in colonial Mexico City and across Central Mexico were issued by colonizing Europeans. Interestingly, though some construction on what could have become permanent standalone fortifications began in the early 1520s, these defensive structures appear never to have been completed or they were quickly repurposed for non-military use. For example, in the 1520s, Cortés began overseeing construction of a pair of structures on the causeway from Ixtapalapa to Mexico City (Fig. 3.2) that are referred to in archival materials as "fortifications."

<sup>127-153,</sup> David Parrott also discusses the use and purpose of fortresses as architectural and practical mechanisms for demonstrating control. His primary argument centers on examples from Italy, but also discusses similar strategic use of fortresses in France and Spain in the Early Modern period.

<sup>&</sup>lt;sup>286</sup> Tenochtitlan was the capital of the Mexica (Aztec) Empire. The Spanish first arrived in Tenochtitlan in 1519. However, Mexica forces did not surrender to the Spanish until 1521.

Despite the archival references to these structures as "fortresses,"<sup>287</sup> their actual use as defensive edifices is questionable. And, since construction was never completed on either edifice, it is difficult to imagine that they were ever actually used for any sort of literal or substantive defensive purpose. In keeping with this assumption, records indicate that each of these structures was rather quickly adapted to serve other purposes, including use as slaughterhouses and centers for commerce, among other non-defensive functions. Although specific rationale for the modification of the use-purpose of these buildings is not recorded, presumably, the decision to repurpose them for non-military use may have been made because their practical defensive function may not have been necessary.<sup>288</sup>

Early sixteenth-century archival records indicate that just one standalone fortified structure may have been designed and built initially for purposes related to defense in Mexico City: the *atarazanas*. Constructed at the direction of Cortés between 1521 and 1524, this defensive structure functioned as a combined barracks, arsenal, and naval base. In a 1524 letter to the Emperor Charles V, Cortés described the *atarazanas* as a safe lodging in which he kept his quarters and that of his entire company.<sup>289</sup> Given its use, this building could be understood to have been a kind of fortress. However, in as little as four years - by 1525 - the *atarazanas* was quickly converted to a jail and was no longer used for any sort of military-specific purpose.<sup>290</sup> Thus, it can better be characterized as a militaristic edifice, more so than a truly defensive one.

<sup>&</sup>lt;sup>287</sup> McAndrew cites reference to these fortifications in the *Colección de documentos inéditos relativos al* descubrimiento, conquista y organización de las antiguas posesiones españolas de América y Oceanía, sacados de los archivos del reino, y muy especialmente de las Indias known as the *Colección de documentos inéditos de Indias*, Real Academia de Historia, Madrid, 1864-1884, 42 volumes. McAndrew, *The Open-Air Churches of* Sixteenth-Century Mexico, 273.

<sup>&</sup>lt;sup>288</sup> Ibid., 273.

<sup>&</sup>lt;sup>289</sup> Hernán Cortés, *Letters of Cortés (1519-26) (The Five Letters of Relation from Fernando Cortés to the Emperor Charles V)*, trans. and ed. Francis Augustus MacNutt (New York: Putnam: 1908) Volume II, 202.

<sup>&</sup>lt;sup>290</sup> McAndrew, The Open-Air Churches of Sixteenth-Century Mexico, 274.

Though its military purpose was limited, the *atarazanas* does boast some defensive architectural features of note. One of the earliest visual renderings of the structure as it existed in the sixteenth century is included in the *Mapa de Santa Cruz*, or the Uppsala Map, created between 1537 and 1555. In the center lower register of the cityscape of Mexico City featured in this map, we see two large-scale white buildings with arcades that open directly onto the water of Lake Texcoco (Fig. 3.3). Although the rendering in the *Mapa de Santa Cruz* is not highly detailed, a close examination of the depiction of the *atarazanas* suggests the possibility of a merloned roofline positioned on the second story above the arcade. This architectural feature gives the structure a militaristic character. However, the lack of other substantive defensive architectural features in the *atarazanas* suggests that it was not truly built to support long-term or even short-term functional defense. Thus, its architectural militarism was much more symbolic or performative than it was practical.

Beyond the *atarazanas*, the earliest renderings of Tenochtitlan and Mexico City created for European audiences suggest that there were some towers and walls that had a defensive architectural character in the central plaza of the city and surrounding it. However, the extent to which these towers and walls can be understood to be truly defensive in purpose is questionable. These are evident, for example, in the *Nuremberg Map*, produced in 1524 by an unknown creator to accompany Cortés's second letter to Charles V.<sup>291</sup> The map features one cylindrical standalone tower and two rectangular towers (Fig. 3.4, Fig. 3.5, Fig. 3.6) around the outskirts of the city and

<sup>&</sup>lt;sup>291</sup> Both Barbara Mundy and Elizabeth Boone discuss the *Nuremberg Map* in their research. Elizabeth Hill Boone does so in "This New World Now Revealed: Hernán Cortés and the Presentation of Mexico to Europe," *Word & Image*, 27 no. 1 (January-March 2011) 31-46. Mundy explores the *Nuremberg Map* in Barbara Mundy, "Mapping the Aztec Capital: The 1524 Nuremberg Map of Tenochtitlan, Its Sources and Meanings." *Imago Mundi* 50, 1 (1998): 11-33. In each case, the authors analyze the map and its depiction of pre-Hispanic Tenochtitlan as it was transformed into Mexico City in the colonial period. A theme explored by these authors is the extent to which the city depicted is a rendering of pre-Hispanic Tenochtitlan, the newly-conquered city, or some blend of both. This ambiguity adds complexity to interpretations of the structures of the map, which cannot with certainty be attributed to pre-Hispanic nor post-conquest origins.

two cylindrical towers clearly depicted in the central precinct (Fig. 3.7). The central precinct of Mexico City-Tenochtitlan also appears to be surrounded by walls, which connect to the four primary causeways that link the city to the land on the opposite sides of Lake Texcoco. From archaeological evidence, the depiction of the towers of the central precinct does not reflect the exact architectural form of pre-Hispanic structures that were built in Tenochtitlan as the Spanish would have encountered it. Instead, the two towers depicted in the *Nuremberg Map* bear greater architectural resemblance to the style of rounded defensive towers that were frequently incorporated into Italian Renaissance and even Medieval European fortifications. It is certainly possible that the towers shown here are symbolic and are intended to infer a sort of defensive character in the architecture of the central precinct more so than to depict structures with accuracy. And, it is also possible that they could be visual references to the aforementioned fortified towers that Cortés began constructing in the 1520s but never completed.

Although few truly defensive structures seem to have been built in sixteenth-century colonial Mexico City, calls for and orders for their construction continued to be issued frequently in the first century after Spanish invasion. For example, in 1537, Viceroy Antonio de Mendoza received instructions from the Spanish Crown to build a citadel in Mexico City. Mendoza, however, never constructed such a fortress.<sup>292</sup> There were also repeated requests from colonists and orders from the Crown to build a new fortress on the Tacuba causeway, including the King's 1550 order to begin construction.<sup>293</sup> However, though the calls for a standalone fortification in this location in Mexico City in the sixteenth century are somewhat numerous in the archival record, such a stronghold was also never built. Instead, in a 1567 letter, King Philip II was told

<sup>&</sup>lt;sup>292</sup> McAndrew, The Open-Air Churches of Sixteenth-Century Mexico, 273.

<sup>&</sup>lt;sup>293</sup> Ibid., 273.

that there was no need for such a fortress, and indeed no need to use the militaristic *atarazanas* as any sort of defensive edifice either. Instead, it was suggested in this letter that the King's vassals served as a more effective "fortification" than a building could anyway.<sup>294</sup>

However, many colonists continued making calls for the construction of standalone fortresses throughout the sixteenth century. For example, Spanish colonists and missionaries requested permanent fortresses in Oaxaca in 1531 and again in 1544, and in Puebla in 1555, but colonial administrators in Mexico City declined them. In Oaxaca in particular, Viceroy Mendoza determined that the residents of the city had no need for a fortification despite their expressed concern for the danger posed by local Indigenous peoples.<sup>295</sup> Similarly, in 1555, Father Toribio Benavente Motolinía suggested that a fortress was needed in Puebla to protect against potential uprisings of Indigenous or African peoples.<sup>296</sup> Again, administrators denied their request and a permanent standalone fortification was never built, ostensibly because the perceived threat was not sufficient to warrant one. Thus, it would appear that though colonists may have felt standalone defensive architecture was a must, the colonial administration had other approaches in mind for the protection of Spanish territory in colonial Mexico.

## San Juan de Ulúa and Deviation from European Architectural Precedents

Although the Spanish did not construct permanent fortifications in Mexico City and its surrounding environs in the sixteenth century, they built permanent fortresses in major port cities on Mexico's eastern and western coasts. The first to be built was San Juan de Ulúa in Veracruz.

<sup>&</sup>lt;sup>294</sup> *Epistolario de Nueva España 1505-118*, ed. Francisco del Paso y Troncoso (México: Robredo, 1939-1942), Volume X, 192.

<sup>&</sup>lt;sup>295</sup> McAndrew, The Open-Air Churches of Sixteenth-Century Mexico, 273.

<sup>&</sup>lt;sup>296</sup> Toribio Motolinía, *Carta al Emperador (1555), refutación a Las Casas sobre la colonización española,* introduction and notes by José Bravo Ugarte (México: Jus, 1949), 76-77.

The initial period of construction began in 1519, immediately following the Spanish invasion. The fortress was renovated several times, with construction on the permanent edifice beginning in 1535.<sup>297</sup> This was followed by the construction of the fortress of San Diego in Acapulco in 1615, which was erected to protect the arriving ships of the Manila Galleon on the western coast of colonial Mexico. And, finally, in the eighteenth century, the fortress of San Felipe de Bacalar was built in Quintana Roo. Each of these fortifications as they currently stand, are products of multiple renovations, some spurred by defensive needs largely in response to European piracy and others by natural disasters, including earthquakes and hurricanes. For the purpose of this study, San Juan de Ulúa, in its sixteenth-century form, is a primary focus because of its direct link to the initial colonization effort undertaken by the Spanish.

In 1519, as Cortés arrived in what would become New Spain, he established a camp at Villa Rica de Veracruz (Fig. 3.8).<sup>298</sup> According to the description provided in the sixteenth century by Bernal Díaz del Castillo, a member of Cortés's contingent, this camp was protected by a rough fortification, made of mud walls, with some barbicans.<sup>299</sup> Although this structure undoubtedly served a defensive purpose, it was far from a permanent edifice and it would have provided little practical protection to the critically important port of Veracruz, particularly in the event of attack by sea. Given the importance of the port to Spanish commercial interests in colonial Mexico, it is unsurprising that investment was quickly made in improving the functional defensibility of the fortification.

<sup>&</sup>lt;sup>297</sup> Construction on a form of fortification in Veracruz began in 1519. Construction on San Juan de Ulúa as a more permanent structure began in 1535. The fortress would be repeatedly renovated throughout the colonial period into the eighteenth century.

<sup>&</sup>lt;sup>298</sup> Ramón Gutiérrez, *Fortificaciones en Iberoamérica* (Madrid: Fundación Iberdrola, 2005), 79.

<sup>&</sup>lt;sup>299</sup> Ibid., 79.

This initial improvement effort, which was completed in 1552 by the *alcalde mayor de Veracruz* (regional magistrate of Veracruz), García Escalante de Alvarado, and Diego Gomedel,<sup>300</sup> included the addition of a single tower and ringed curtain walls. Despite its intention, this architectural improvement did little to prevent the successful attack of the English pirate John Hawkins on the port of Veracruz in 1568. In the aftermath, it appears as though the Spanish identified a need for yet more substantial defensive architecture in this location. To this end, in 1570, the fortification at San Juan de Ulúa was renovated under the leadership of Cristóbal de Eraso, whose renovation included adding more substantial walls and bastions as well as a second tower to the layout of the fortress.<sup>301</sup>

These architectural improvements contributed to the creation of a more permanent structure. However, it was not until architect-engineer Battista Antonelli<sup>302</sup> arrived in Veracruz in 1590 that the fortification at San Juan de Ulúa became a structure truly central to and architecturally capable of defending the Spanish port and, by extension, the Crown's territorial and economic interests in the region. In 1588, the Spanish King commanded Battista Antonelli and Juan de Tejeda to travel to the Americas with the express purpose of constructing defenses for Cuba, Veracruz, Cartagena de Indias, Panamá, and Puerto Rico. The Real Cédula (royal proclamation) specifically stated that they were "to study the American coasts and develop the plans of fortifications they deemed opportune."<sup>303</sup> The expedition left Spain on February 18,

<sup>&</sup>lt;sup>300</sup> Ibid., 79.

<sup>&</sup>lt;sup>301</sup> Ibid., 79.

<sup>&</sup>lt;sup>302</sup> For clarity, in chapter one of this study, Giovanni Battista Antonelli is discussed at length and is referred to in my text as "Antonelli." Battista Antonelli, referenced here, is Giovanni Battista Antonelli's younger brother. He is referred to in my study as "Battista Antonelli."

<sup>&</sup>lt;sup>303</sup> Real Cédula, Madrid, 23 November 1588; instruction to Juan de Tejeda, Madrid, 23 November 1588. In Spanish: "para estudiar las costas americanas y trazar las plantas de las fortalezas que ellas consideran oportunos."

1589 on course for Puerto Rico. Working first in Puerto Rico, then Santo Domingo, Battista Antonelli updated the defensive architecture of fortifications across the Spanish Caribbean, many of which were at best semi-permanent constructions prior to his arrival. From Santo Domingo, he traveled to Cuba, and from Cuba to Veracruz, where he arrived on January 19, 1590.<sup>304</sup>

In Veracruz, he found the fortified structure, which had been built in 1570 by his predecessor Cristóbal de Eraso, to be architecturally inadequate from a defensive perspective. At the time of his arrival in 1590, the fortress of San Juan de Ulúa consisted of two towers connected by a stone wall, extending approximately 450 feet, which served primarily as a mooring point for ships in port,<sup>305</sup> not as a true defensive barrier of any form. A 1590 image of the fortification, created by Battista Antonelli and currently housed in the Archivo General de Indias in Sevilla, Spain, includes a rendering of the two towers of the fortress that were in place at this time. One is depicted atop an irregular polygon protruding into the bay and the second takes more of a quadrilateral shape, both are connected by a long low wall at which ships are depicted moored (Fig. 3.9).

To improve the structure's defensive capabilities, Battista Antonelli immediately recommended the addition of two new towers and the enclosing of the fortress wall. The renovations proposed by Battista Antonelli are evident in another drawing produced around 1590, also housed in the Archivo General de Indias, where the red lines indicate new additions to this defensive structure (Fig. 3.10). Upon his arrival in 1590, the new Viceroy, Luis de Velasco, openly criticized Battista Antonelli's proposed renovations, calling them both time-consuming and costly. Further, in his letter to King Philip II, written on June 5, 1590, Velasco asserted that

<sup>&</sup>lt;sup>304</sup> Ray F. Broussard, "Bautista Antonelli: Architect of Caribbean Defense," *The Historian* 50, no. 4 (August 1988):
514.

<sup>&</sup>lt;sup>305</sup> Ibid., 514.

Battista Antonelli's plans would leave the important port city open to attack during the reconstruction period.<sup>306</sup> That the Viceroy would share such a perspective with the King of Spain is notable in that Battista Antonelli was specifically commanded by the King to complete these renovations. It is also notable given that Velasco denied several other requests and orders to build permanent fortifications in Mexico City during the sixteenth century as well.

Despite the criticisms of the Viceroy, the renovations proceeded and were completed by 1592. The outcome is evident in a 1592 rendering of the fortress produced by Vellerino de Villalobos, currently housed in the Biblioteca de la Universidad de Salamanca in Spain (Fig. 3.11). Although less to-scale and less realistic than Battista Antonelli's own 1590 renderings, it appears to indicate that the towers on either end of the mooring wall were made more rectangular and the one closest to the port itself was topped with a more substantial structure that was also rectangular in shape, somewhat resembling a squared tower. As we examine these records of the design of the fortress, it is notable that neither the 1590 plans drawn by Battista Antonelli nor the 1592 renovation of the fortress at San Juan de Ulúa conform to the fortification standards established by the Italian School or by Giovanni Battista Antonelli and Cristóbal de Rojas in Europe. They do not reflect the "universal model," nor do they substantively align to the style of architecture common to European fortresses built in Italy and Iberia during this period, such as the Fort of Bernia or the Castillo at Santa Catalina as discussed in chapter one.

This deviation from European architectural standards is notable for several reasons. First, Battista Antonelli was well-versed in Italian Renaissance and Early Modern defensive architectural standards. Second, he was specifically ordered to build European-style fortresses in

<sup>&</sup>lt;sup>306</sup> Luis de Velasco, writing to the King of Spain from Mexico 5 June 1590 in Francisco del Paso y Troncoso, *Epistolario de Nueva España, 1505-1818,* 16 vols (Mexico City, 1940), 12: 173-86. Iinstrucción de Bautista Antonelli sobre San Juan de Ulúa, Mexico, 15 March 1590 in *Colección de Documentos Inéditos, relativos al descubrimiento...de las antiguas posesiones de España en América y Oceánia,* 42 vols. (Madrid 1870), 13: 549-53.

keeping with the Spanish imperial interest in standardization and the use of architecture as a tool for demonstrating power in the colonization process. And finally, Battista Antonelli brought with him several European craftsmen as well as tools and building materials, all of which he appears not to have used extensively in his efforts to fortify the Spanish Americas. Significantly, architectural variation from standards set in Europe evident at San Juan de Ulúa can also be found in Battista Antonelli's fortresses in Cuba, thus making the design at San Juan de Ulúa not a singular aberration.

Regarding Battista Antonelli's familiarity with European architectural standards, which ostensibly would have informed his designs for fortresses in the Americas, we know that the Antonelli family of architect-engineers occupied a central role in the fortification of Spain. Giovanni Battista Antonelli, who was responsible for designing and building the Spanish Fort of Bernia in Alicante in the "universal model," was Battista Antonelli's older brother. Giovanni Battista Antonelli's treatise on military architecture, as previously noted, was informed by the writings of various Italian Renaissance architect-engineers including those explored in chapter one. It was also informed by Francesco de Marchi's *Della architettura militare,* which was known to have been sent to the Spanish King Philip II as well.<sup>307</sup> Given the familial relationship between Giovanni Battista Antonelli and Battista Antonelli, it is certainly plausible that the latter had some familiarity with his brother's architectural treatise and subsequently would have been aware of the "universal model." Battista Antonelli was also independently well-versed in Italian School fortification principles having been a part of the architectural schools of Giuliano and Antonio da Sangallo and Michele Sanmicheli. In addition, he served as an architect for the

<sup>&</sup>lt;sup>307</sup> Gutiérrez, Fortificaciones en Iberoamérica, 12-13, 18.

prominent Italian Colonna family,<sup>308</sup> for whom he designed several buildings including fortifications, prior to taking his commission with the King of Spain.

Given this grounding in Italian Renaissance and Early Modern Spanish architectural theory and practice, the intensive Spanish interest in architectural standardization as a colonizing tool, and the specific charge issued by King Philip II, who was also thought to be familiar with defensive architectural theory,<sup>309</sup> one might naturally assume that Battista Antonelli would have opted to construct fortifications in the Americas that aligned to European architectural precedents. However, Battista Antonelli consistently deviated from these principles in the design and construction of his fortresses. This deviation is evident, for example, in the 1590 and 1592 renderings of San Juan de Ulúa. In both instances, the fortress does not in any way resemble the polygonal ground plans, and specifically the quadrangular or five-pointed star floor plans recommended by European theoretical treatises, including the "universal model." Nor does the ground plan of San Juan de Ulúa in the late sixteenth century appear to conform to the specific geometries articulated in these treatises either.

Evidence of the irregularity in the ground plan is even more clear in Battista Antonelli's 1608 design for the renovation of San Juan de Ulúa (Fig. 3.12). As was the case in his 1590 plan for the fortress, in the 1608 redesign, the fortress features large squared towers on either end of a long, low mooring wall. The smaller of the two towers sits atop a bastion in an irregular polygon shape that juts directly into the sea. In the 1608 rendering, Battista Antonelli added another long wall extending beyond the irregular polygonal bastion, which does not appear to be intended for use in mooring ships. He also added a square tower that sits atop angle bastions. Given these

<sup>&</sup>lt;sup>308</sup> Olimpia Niglio, "Geometry and Genius Loci: Battista Antonelli's Fortifications in Havana," *Nexus Network Journal* 16, no.3 (2014): 727.

<sup>&</sup>lt;sup>309</sup> Gutiérrez, *Fortificaciones en Iberoamérica*, 18-28.

features, on visual inspection, this 1608 ground plan for the fortress departs significantly from the fortification standards of the Italian Renaissance as well as the "universal model" developed in Early Modern Spain. Instead of aligning to these European precedents, Battista Antonelli's renovation of San Juan de Ulúa is a design that appears to have been intentionally and specifically adapted to the unique geography of Veracruz harbor.<sup>310</sup>

To make even more clear the extent to which the architecture of this fortress deviates from European standards and even from other examples of Spanish-commissioned fortifications built in colonial Mexico, it is useful to compare its late sixteenth-century design to that of early seventeenth-century San Diego de Acapulco. San Diego de Acapulco (Fig. 3.13), originally constructed between 1615 and 1617 on the Western coast, was built to meet the specifications of Dutch military engineer Adrian Boot. Like Battista Antonelli, Boot was commanded to travel to the Americas via a Real Cédula, which was issued on June 1, 1613, for the specific purpose of building fortifications and to address drainage challenges encountered in urban developments of the Spanish American colonies.<sup>311</sup>

Of particular interest when considering Boot's design for the fortress at Acapulco and his other engineering efforts in colonial Mexico is his reliance on plans for a fortification and other structures that he produced in Paris as early as 1612.<sup>312</sup> The plans themselves, perhaps unsurprisingly, conform to European architectural precedents and they make clear that some European architect-builders working in the Americas were dependent on European theoretical

<sup>&</sup>lt;sup>310</sup> Broussard, "Bautista Antonelli: Architect of Caribbean Defense," 515. Broussard argues that the fortress is specifically designed to suit the environmental complexities of the Veracruz harbor.

<sup>&</sup>lt;sup>311</sup> José Antonio Calderón Quijano, "Ingenieros militares en Nueva España," *Anuario de Estudios Americanos* (January 1, 1949) 4.

<sup>&</sup>lt;sup>312</sup> Adrian Boot's "Diseño de la Ciudad de México y Virreinato de Nueva España desde el Mar del Norte al del Sur para instrucción del Desagüe de la Laguna de México" was produced in Paris in 1612 and sent to Don Iñigo de Cárdenas in a letter on July 29, 1612. Found in Pedro Torres Lanzas, *Relación descriptiva de los mapas, planos & de México y Floridas existentes en el Archivo General de Indias, Sevilla 1900, número 55.* 

models as the basis for their work. Reliance on Italian School fortification principles aligns with the Spanish emphasis on architectural standardization and contrasts with Battista Antonelli's treatment of San Juan de Ulúa, which resulted in a largely non-conforming structure.

The differences between San Juan de Ulúa and San Diego de Acapulco range from the placement of the fortresses in relation to the native landscape, the materials used to build them, and their architectural form and features. Both are coastal fortresses; however, San Juan de Ulúa sits in the harbor at Veracruz, and San Diego sits entirely on the Acapulco shore without direct access to the water. In this way, San Diego is similar to the design of European coastal fortifications, including Cristóbal de Rojas's Santa Catalina, which also sits on-shore in accordance with the recommendations of his treatise on defensive architecture. San Diego features a combination of acute and oblique-angled bastions. Its five-pointed star shape aligns with the standard proportions and geometries of fortresses prescribed by Italian Renaissance and Early Modern treatises on fortress design and evident in actual European fortresses. These standards, as has been noted elsewhere in this study, generally called for the use of regular polygons and for the linking of coastal fortresses directly to the mainland. Thus, in its basic form, San Diego de Acapulco is arguably much more "European-looking" than is the unique design of Battista Antonelli's San Juan de Ulúa in its sixteenth-century form.

Unlike San Juan de Ulúa, where Battista Antonelli prioritized environmental integration, Boot opted not to work within or design to the confines of the geography of the Acapulco port. His fortress does not integrate into the landscape of the port in any way that could be defined as seamless or intentionally harmonious. This is evident when we examine his own painted depiction of the port (Fig. 3.14). Given the landscape that Boot himself depicts in this painting, it is clear that either the landscape needed to be modified to accommodate the fortress or the design

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of a standard five-pointed European polygonal fortress layout needed to be altered to allow for the construction of this edifice at the port of Acapulco. Instead of making changes to his architectural design, Boot opted to modify the landscape of the port to accommodate the construction of his fortress with its European standard proportions and geometries.<sup>313</sup> Thus, unlike San Juan de Ulúa, where the design of the fortress was intentionally integrated into the environs of the harbor, San Diego looks as though it has been placed atop the landscape on the edge of the bay.

In this way, the design of San Diego de Acapulco is notably reminiscent of Giovanni Battista Antonelli's theory and application of the "universal model" of fortification design. This "universal model," as has been noted, was closely aligned to Italian School fortification principles and, in his architectural treatise, Giovanni Battista Antonelli stipulated that such a model could be installed in any location without accounting for or being modified to accommodate for the landscape or surroundings. In a similar vein, Boot designed the fortress at Acapulco while still in Paris and seems to have dropped that design on to the landscape in colonial Mexico in a way that is much more in keeping with European architectural practice than is the integrative design of Battista Antonelli's fortress at Veracruz.

Although Boot's San Diego de Acapulco conforms to European fortification standards in its polygonal shape and use of regular angles that align to the geometries and proportions recommended by Giovanni Battista Antonelli, Cristóbal de Rojas, and the architect-authors of the Italian School, the structure is not without deviation from European architectural norms for defensive structures entirely. According to José Antonio Calderón Quijano, Boot chose to use lightly colored stone on the upper portions of the fortification's bastioned walls. From a defensive perspective, this color choice serves no strategic purpose and in fact is perhaps a

<sup>&</sup>lt;sup>313</sup> Gutiérrez, Fortificaciones en Iberoamérica, 97.

tactical disadvantage in that it makes the fortress more visible from the bay. Nonetheless, it appears as though Boot may have opted to include this lighter stone as a means of creating a color contrast with the dark water and the mountains that surround it.<sup>314</sup> If this was indeed an artistic decision, it adds visual interest to the architecture of the fortification, which differentiates it, to some extent, from the European models that informed its structural design.

San Diego de Acapulco is the only fortress that Boot designed and built in Spanish America. Battista Antonelli, by contrast, built several other fortifications in the region in the late sixteenth and early seventeenth centuries and as such, his innovative approach to fortification design can be understood as much more characteristic of colonial fortification in the region than Boot's more "Europeanate" approach. Other fortresses built by Battista Antonelli in the Americas include El Morro (1589-1630) and La Punta (1590-1630) in Cuba. Each of these fortresses, like San Juan de Ulúa, are demonstrative of what I would argue is a new and distinctly colonial style of defensive architecture that is specific to the Spanish Americas.

Unlike the geometric regularity of Italian School and Early Modern Spanish fortresses in Europe, many of the Spanish fortresses in the Americas feature irregular polygonal ground plans and non-standard geometries in their layouts. They are often, with the exception of Boot's fortress at Acapulco, more seamlessly integrated into the landscape of the ports they protect. El Morro, La Punta, and San Juan de Ulúa in its sixteenth-century form, all deviate from European theoretical and practical defensive design standards in their highly irregular polygonal ground plans. Fortifications in irregular polygonal shapes can be found only sparingly among Italian School architectural designs and constructions in Europe. For example, irregular polygons are the basis of the fortifications built by Antonio da Sangallo in Pisa,<sup>315</sup> yet few other examples

<sup>&</sup>lt;sup>314</sup> Calderón Quijano, "Ingenieros militares en Nueva España," 8.

<sup>&</sup>lt;sup>315</sup> Niglio, "Geometry and Genius Loci: Battista Antonelli's Fortifications in Havana," 728.

exist. As such, they are testaments to the development of a new style of fortification in the Americas.

Battista Antonelli's use of irregular ground plans in Cuba and Veracruz also speaks to a pattern of architectural integration into the landscape that is evident in Spanish American fortresses built during the colonial period, but largely absent from Italian Renaissance and Early Modern European defenses. For example, the unusually-shaped bastions at El Morro allow the fortress to fit neatly into and harmonize with the rocky surfaces of the harbor on which it was built (Fig. 3.15).<sup>316</sup> In this way, the accommodating design of El Morro is similar to the geographic accommodation evident in Battista Antonelli's 1590 design of San Juan de Ulúa, which is also intentionally constructed to integrate into the unique features of Veracruz Harbor in which it sits. By contrast, Giovanni Battista Antonelli's Early Modern European "universal model" intentionally disregards considerations of landscape given the architect-author's assertion that this fortress design could be built anywhere without modification.

Olympia Niglio's close study of the geometries of El Morro also confirms that the angles and proportions of its walls and bastions do not conform to the extensive geometric specifications proposed by Italian Renaissance treatises on fortification architecture<sup>317</sup> nor do they conform to the Early Modern Spanish standards articulated by Giovanni Battista Antonelli or Cristóbal de Rojas. The irregular shapes and non-standard geometries of El Morro are innovative and demonstrate Battista Antonelli's cognizance of the site on which the fortification was built. Additionally, El Morro deviates from the standards of European defensive architecture

<sup>&</sup>lt;sup>316</sup> Ibid., 728.

<sup>&</sup>lt;sup>317</sup> Ibid., 730.

as well as the Spanish regulations of these structures, of which Battista Antonelli was undoubtedly aware.

Similar deviations are also evident in the non-standard geometries of La Punta (Fig. 3.16), which sits across the harbor from El Morro.<sup>318</sup> La Punta was also built in an irregular polygonal ground plan that integrates the surrounding local environment into the fortress's design even more extensively than El Morro. Its moat, for example, was carved to channel directly from the rock on which it is built. Here again, Battista Antonelli's ingenuity as an architect is on full display, as is his willingness to deviate from European standards, which do not account for such integrative design. His Spanish American defensive structures are best understood as products of a unique colonial style of defensive design that developed during the sixteenth century.

It might be tempting to suggest that the innovative designs of San Juan de Ulúa, El Morro, and La Punta are the result solely of Battista Antonelli's own personal ingenuity. However, evidence of innovation in defensive architectural design, characterized by deviation from theoretical and practical standards defined in Europe, can also be found elsewhere across the Spanish Empire in the Americas. Examples include the circular Spanish fortress of Real Felipe de Callao (Fig. 3.17), built between 1747 and 1774 in Peru under the direction of the architect Louis Godin. <sup>319</sup> Another unique ground plan is evident in the quadrangular Presidio in San Francisco, California, built in 1776<sup>320</sup> (Fig. 3.18). Thus, to suggest that Battista Antonelli's fortifications are the only ones that broke from the European mold would be too limiting.

<sup>&</sup>lt;sup>318</sup> Ibid., 731.

<sup>&</sup>lt;sup>319</sup> Peter T. Bradley, Spain and the Defence of Peru, 1579-1700. (Lulu, 2009).

<sup>&</sup>lt;sup>320</sup> Barbara L. Voss, "The Archaeology of Indigenous Heritage at Spanish-Colonial Military Settlements," in *Enduring Conquests: Rethinking the Archaeology of Resistance to Spanish Colonialism in the Americas*, eds. Matthew Liebmann and Melissa S. Murphy (Santa Fe: School for Advanced Research Press, 2010): 243-265.

Instead, what we see in colonial Spanish America is a pattern of architectural innovation that largely disregarded the theoretical and practical foundations of defensive design established in Europe to incorporate a cognizance of the unique geographies of the Americas through the use of unusual or non-standard ground plans and structural geometries. As such, this style of defensive architecture is better understood as a unique manifestation of the colonial context in which it was created than as a copy of European models.

#### Hybridizing Interpretations of San Juan de Ulúa

The design and construction of San Juan de Ulúa speak to the Spanish desire or need to create visual manifestations of power and presence in a new territory, indicating Spanish conquest and hegemony. However, the Spanish reliance on Indigenous creators and the use of local materials and Indigenous building techniques in the construction of San Juan de Ulúa suggests a more complex picture. Said simply, this fortress is more than merely "European." Its complexities and their implications for our interpretations of it become even more evident when we concurrently acknowledge not just the extent to which San Juan de Ulúa deviates from European architectural standards, but also the important and extensive parallels to be found between this edifice and examples of pre-Hispanic defensive architecture.

From a structural standpoint, if we interpret San Juan de Ulúa, in both its 1590 form and its later iterations, from the perspective of Spaniards who were familiar with European architecture and who espoused the belief that architecture could be used as a mechanism for demonstrating European power and control,<sup>321</sup> we might take its several angle-bastioned walls as

<sup>&</sup>lt;sup>321</sup> Crespo, "The Spanish American Colonial City," 24-25. Crespo speaks to the intentional use of city planning, including the construction of permanent edifices as a mechanism of establishing control and imposing European power. He articulates that cities were classified by the Spanish as either fortified or non-fortified and that this classification indicated not just the presence of fortresses, but also the intentionality with which the Spanish constructed these buildings as a mechanism of asserting control ("The Spanish American Colonial City," 27). Additionally, the primary source account written by Bernabé Cobo, and cited in Fraser, *The Architecture of* 

visual evidence of the building's inherent "Europeanness." This view would reinforce the notion that the fortress is an unmistakable manifestation of Spanish power, conveying dominance through its form.<sup>322</sup> However, the shape of the angle bastions at San Juan de Ulúa, and other related Spanish-American fortresses, are visually and structurally reminiscent of the aggressively angled walls of pre-Hispanic *talud-tablero* buildings. It is not a stretch to find architectural similarities between the structural defensive features found at San Juan de Ulúa and those of the Temple of the Feathered Serpent at Teotihuacan or Xochicalco, Structure I at Malinalco, the fortress at Cacaxtla, or the Templo Mayor at Tenochtitlan.

Teotihuacan's Ciudadela, which surrounds the Temple of the Feathered Serpent, for example, is home to several *talud-tablero* pyramids. Each one features significantly sloped walls that meet the ground at triangular points in forms that are remarkably similar, visually and structurally, to the form often called the "Italian angle bastion" by scholarship. Similarly, Xochicalco is laid out in a series of elevated quadrangular patterns and the primary ritualized militaristic structures found at this site are built in Xochicalco's variant of *talud-tablero*. Again, the angular walls here are structurally similar to the angle bastions evident at San Juan de Ulúa. Despite the tendency to see such forms as indicators of the stylistic and structural "Europeanness" of this and other Spanish-commissioned fortresses in the Americas, it is clear that the angle bastion has multiple points of origin.

In the same manner, the various styles of parapets and merlons used in the roof lines of colonial Spanish American fortifications are strikingly similar to those found in pre-Hispanic defensive structures. Such merlons are depicted, for example, in the *Codex Mendoza* rendering of

*Conquest*, 21, indicates an intentional use of construction in European style as a means of demonstrating the permanence of European power and control.

<sup>&</sup>lt;sup>322</sup> Such a perspective is reinforced in Kubler's interpretation of colonial construction wherein the imposition of European approaches to building and representation preclude continuation of Indigenous traditions in art and architecture. From Kubler's "On the Colonial Extinction of the Motifs of Precolumbian Art," 66.

Tetenanco in folio 39r.<sup>323</sup> Similarly, the practice of fortifying locations with moats, concentric walls, and ramparts of various elevations is not solely a European import. They are also prevalent at the fortified sites of Xochicalco, Cacaxtla, and Malinalco. At Xochicalco, for instance, we find various moats, stone ramparts, and walls that encircle the entire hilltop on which the primary complex is built and all of these features are structurally similar to those which we find in Europe. Similarly, at Cacaxtla, which functioned primarily as a fortress, we also find several levels of walls, ramparts, and moats that would have offered structural protection to this site. And, the fortress itself consists of numerous angular and sharply-sloped walls that are visually and structurally reminiscent of forms that are often deemed to be "European" in origin when considered in the context of colonial structures.

My point in highlighting these structural similarities is to make clear that defensive architectural elements scholarship has often identified as European cannot solely be understood as such. Moats, ramparts, defensive walls, and even the form often referred to as the angle bastion are common in pre-Hispanic defensive architecture too. And thus, when we consider colonial Mexican defensive structures built by Indigenous creators at the behest of the Spanish, we must acknowledge the possibility that they carried multivalent meanings depending on who was viewing and interacting with them. As such, they ought not be interpreted solely through a lens that reiterates a Spanish perspective linking architecture, power, and primacy in colonial contexts. Instead, they are better understood as multivalent hybrid edifices, with several points of origin, that spoke to Indigenous audiences about issues of power and agency simultaneously as well.

Studies in architectural and visual hybridity must recognize the politics, issues of power, and violences of colonialism. The cultural hybridization of colonial Mexico, evidence of which

<sup>&</sup>lt;sup>323</sup> Armillas, "Mesoamerican Fortifications," 83.

we see in colonial architecture, was far from a peaceful intersection nor was it the result of a "happy, consensual mix of diverse cultures," to quote Bhabha.<sup>324</sup> Instead, hybridity in this context is best understood as the result of strategic intersections through which power and authority<sup>325</sup> between Spanish and Indigenous populations were actively negotiated.

The relationship of hybridity to power is particularly important when interpreting defensive structures like colonial fortresses because they are, by their nature and purpose, inherently linked to such issues. Kubler treated hybridity as a result of an imbalance of power in colonial contexts wherein European forms were imposed almost unilaterally and some Indigenous forms persisted more by happenstance than intentionality.<sup>326</sup> In contrast, Leibmann asserts hybridity is a form of power through which the agency of subalterns is elevated.<sup>327</sup> Along these lines, Jeb J. Card sees it as a tool that undermines categories of race and culture based specifically on Eurocentric concepts of power.<sup>328</sup> Steven Wernke states,"the semiotics of buildings occupy a middle ground between structure and agent" and they can become new kinds of "third spaces" where dispute, opposition, and ambiguity are embodied by built forms."<sup>329</sup> By combining these latter definitions of hybridity and applying them specifically to architecture, we

<sup>327</sup> Ibid., 31-42.

<sup>&</sup>lt;sup>324</sup> Matthew Liebmann, "Parsing Hybridity: Archaeologies of Amalgamation in Seventeenth-Century New Mexico" in *The Archaeology of Hybrid Material Culture*, ed. Jeb J. Card (Carbondale, Illinois: Board of Trustees, Southern Illinois University, 2013), 27-30.

<sup>&</sup>lt;sup>325</sup> Leibmann and Bhabha assert hybridity is strategic and is fundamentally about the transference of power and authority as well as cultural hegemony. Ibid., 30-31.

<sup>&</sup>lt;sup>326</sup> Such a perspective aligns to Kubler's assertions about the "extinction" of Indigenous motifs as a result of the imposition of European forms in the Americas. Kubler, "On the Colonial Extinction," 66-67.

<sup>&</sup>lt;sup>328</sup> Jeb J. Card, "Introduction," in *The Archaeology of Hybrid Material Culture*, ed. Jeb J. Card (Carbondale, Illinois: Board of Trustees, Southern Illinois University, 2013), 2.

<sup>&</sup>lt;sup>329</sup> Haagen D. Klaus, "Hybrid Cultures...and Hybrid Peoples: Bioarchaeology of Genetic Change, Religious Architecture, and Burial Ritual in the Colonial Andes," in *The Archaeology of Hybrid Material Culture*, ed.Jeb J. Card (Carbondale, Illinois: Board of Trustees, Southern Illinois University, 2013), 219. Wernke is cited by Klaus.

can better understand hybridity as a tool to be leveraged to elevate the power of subaltern populations in colonial contexts. Adopting this understanding of hybridity and subsequently recognizing it in the architectural forms of colonial fortresses like San Juan de Ulúa allows us to recognize not just the multivalency of these buildings but the fact that their Indigenous creators exercised agency in building them.

Indigenous agency in the construction of colonial fortresses can further be elevated by recognizing these structures as examples of camouflaged metonymy.<sup>330</sup> Indigenous architect-builders working at the behest of European invaders were, in some cases, conscripted, coerced, and even enslaved to build edifices that were by and large designed by Europeans.<sup>331</sup> However, I argue that colonial Mexican defensive structures can be understood as metonyms given their cross-cultural architectural elements, the importance of the process of construction, and their relationship to pre-Hispanic ritualized militaristic complexes.<sup>332</sup> In this light, they had the ability to disrupt and "deauthorize" the power structure that the Spanish intended them to physically and symbolically reinforce. <sup>333</sup> If we acknowledge that fortresses like this one are, in part, rearticulations of Indigenous tradition, their assigned value as edifices that literally and

<sup>&</sup>lt;sup>330</sup> Bhabha, *The Location of Culture*, 128. Bhabha argues that mimicry can function as a representation of identity and meaning that is rearticulated along what he calls the "axis of metonymy." In defining mimicry, Bhabha reminds us of Lacan and his characterization of mimicry as "camouflage, not a harmonization or repression of difference, but a form of resemblance, that differs from or defends presence by displaying it in part, metonymically.

<sup>&</sup>lt;sup>331</sup> Kelly and Palerm note the implementation of *repartimiento* and *encomienda*, or forced labor, among the Totonacs and Mexica in the region shortly after the Spanish conquest of Totonacapan in the early sixteenth century. Forced construction of buildings, among other tasks, including construction of mines and roads, is noted as among the projects on which forced Indigenous labor was used in the sixteenth century (1952, 33-36).

<sup>&</sup>lt;sup>332</sup> A metonym is the relation between an object replaced with another one closely related or suggested by a more original form. Bhabha, *The Location of Culture*, 128-130.

<sup>&</sup>lt;sup>333</sup> Bhabha, *The Location of Culture*, 130. Bhabha goes on to articulate that colonial culture is "potentially and strategically an insurgent counter-appeal…under cover of camouflage, mimicry, like the fetish, is a part-object that radically revalues the normative knowledges of the priority of race, writing, and history. For the fetish mimes the forms of authority at the point at which it deauthorizes them. Similarly, mimicry rearticulates presence in terms of its 'otherness', that which it disavows.

symbolically crush Indigenous social and political systems under the auspices and physical manifestation of Spanish imperial authority becomes diminished.

Like many colonial edifices of sixteenth-century Mexico,<sup>334</sup> Indigenous craftsmen primarily constructed San Juan de Ulúa.<sup>335</sup> It was also built with locally-sourced construction materials using some Indigenous construction techniques. Recognizing the use of Indigenous materials and techniques is important because Spanish archival records indicate that Battista Antonelli and Tejeda arrived in the Americas with European stonecutters and artisans in tow. These craftsmen would have been familiar with European defensive architecture and accustomed to using construction materials available in Europe.<sup>336</sup> Yet, they appear not to have been the primary workforce used in its construction. Instead, the primary workforce responsible for San Juan de Ulúa, and other structures like it, would have been Indigenous creators and laborers.<sup>337</sup>

Webster's analysis of the architecture of colonial Quito offers a valuable model for acknowledging the agency of Indigenous creators at San Juan de Ulúa, and subsequently their power in its construction. She asserts that for the Inka, the process of building was directly

<sup>337</sup> Ibid., 513.

<sup>&</sup>lt;sup>334</sup> Scholarship on construction in colonial Mexico by Peterson in *The Paradise Garden Murals of Malinalco*, 19-21 and McAndrew in *The Open-Air Churches of Sixteenth-Century Mexico*, 190-195, notes the prominent role of Indigenous labor in the creation of colonial edifices in the sixteenth century. Specific to the region of Veracruz, Kelly and Palerm note the use of substantive forced labor in the construction of buildings in their *The Tajin Totonac*. Isabel Kelly and Angel Palerm. *The Tajin Totonac* (Washington DC: United States Interdepartmental Committee on Scientific and Cultural Cooperation) 1952, 33-36.

<sup>&</sup>lt;sup>335</sup> José Gorbea Trueba, *La arquitectura militar en la Nueva España* (Mexico City: Universidad Nacional Autónoma de México, 1968), 11. Trueba speaks generally to the use of Indigenous labor and also specifically references Bernal Díaz del Castillo's description of the construction of the first fortress in Veracruz on page 151 of the first volume of the 1942 edition of *Historia verdadera de la conquista de la Nueva España*. The chronicler discusses the foundation of Veracruz, including the building of the fort and the alliance made between the Spanish and the "Cempoalans" or Totonacs as the Spanish established their settlement in this location. This description includes mention of the role of Spaniards in the construction of the fortress. It notes "Cortes himself was the first to start carrying earth and stones and to dig the foundations; and all of us, captains and soldiers alike, followed his example" and specifically states that the "Indians helped us." Found in the 1963 translated edition of Bernal Díaz del Castillo's *The Conquest of New Spain*, (London: Penguin Classics, 1963), 114.

<sup>&</sup>lt;sup>336</sup> Broussard, "Bautista Antonelli: Architect of Caribbean Defense," 513.

associated with social and political power and the process of architectural creation was, by extension, associated with the same.<sup>338</sup> Thus, the outward appearance of European-style buildings in colonial Quito did not diminish the Indigenous agency involved in their creation. Parallels to this connection between the process of construction and Indigenous power can be found in pre-Hispanic Mexico as well. For example, Wake notes the important link between construction processes and ritual in the pre-Hispanic period and its continuation into the sixteenth century and Ryan Crewe finds implications for Indigenous agency and political power in the process of construction as led by Indigenous authorities in colonial Mexico too.<sup>339</sup> The same argument can be made about San Juan de Ulúa, where Indigenous agency is evident not just in the labor force that was used to build it, but is also visible in the use of Indigenous construction techniques, specifically the use of *piedras de coral* (coraline blocks or blocks of stone made of petrified coral).

Not only did Battista Antonelli and Tejeda arrive in Veracruz with European craftsmen, but they also brought specific building materials and tools from Europe to be used in their constructions.<sup>340</sup> Included among these materials were red brick *ladrillos* (Fig. 3.19) as well as stone and various specific construction implements.<sup>341</sup> The decision to traverse the Atlantic Ocean with European construction materials aboard is notable given that Battista Antonelli and

<sup>&</sup>lt;sup>338</sup> Susan Verdi Webster, "Vantage Points: Andeans and Europeans in the Construction of *Colonial Quito*," *Colonial Latin American Review*, 20, 3 (December 2011): 303-330.

<sup>&</sup>lt;sup>339</sup> Eleanor Wake, *Framing the Sacred: The Indian Churches of Early Colonial Mexico* (Norman, Oklahoma: University of Oklahoma Press, 2016) 92. See also Ryan Crewe, "Building in the Shadow of Death: Monastery Construction and the Politics of Community Reconstitution in Sixteenth-Century Mexico" in *The Americas* 75, no. 3 (July 2018): 514. The relationship between power, construction, and ritualized structures is discussed in more depth in chapter four as it relates to the fortress monasteries.

<sup>&</sup>lt;sup>340</sup> Ibid., 513. Broussard references a letter from Tejeda to the King of Spain, written in Havana on June 4, 1589, in which bringing materials as well as craftsmen is discussed. This letter is also cited by Irene Wright in *Historia documentada de San Cristóbal de la Habana en el siglo XVI*, 2 volumes (Havana, 1927), 129.

<sup>&</sup>lt;sup>341</sup> Ibid., 513.

Tejeda had knowledge of the construction materials available to them in the Americas.<sup>342</sup> As such, they could, ostensibly, have planned to use those locally-sourced materials from the outset in lieu of transporting building materials across an ocean. Although there is arguably a practical need to include some sort of ballast in ships traversing the Atlantic and brick as well as stone can to some extent accomplish this function, bringing such specific European building materials in addition to tools and craftsmen from Spain is intriguing.

Despite the availability of bricks in Veracruz, their actual use in San Juan de Ulúa appears to have been minimal. An examination of portions of the fortress constructed in 1590, only a handful of the walls include any of the original Spanish brick that traversed the ocean with the architect and his crew (Fig. 3.20). Instead, the vast majority of the fortress, from its earliest iterations to the seventeenth-century renovation, was built using *piedras de coral*, a locally-sourced stone made of petrified coral (Fig. 3.21 and 3.22).<sup>343</sup> It is difficult to imagine that the choice of materials used in a structure so important to the protection of Spanish interests in the Americas was haphazard. Battista Antonelli must have chosen to use local construction materials and techniques despite having European materials and craftsmen at his disposal. The use of *piedras de coral* on such a large scale and with such precision in San Juan de Ulúa indicates the Indigenous creators' familiarity with this material and knowledge of the techniques, which are discussed below, for building with it.

<sup>&</sup>lt;sup>342</sup> Various officials across the Americas sent reports to Spain articulating details relevant to the construction of fortification. Broussard highlights a report prepared by the governor of Puerto Rico, which not only articulated the extant fortification on the island, including specifics of its material construction, but made suggestions regarding potential modification thereto. This report was provided to Antonelli prior to his 1598 journey to the Americas. Broussard, "Bautista Antonelli: Architect of Caribbean Defense," 513.

<sup>&</sup>lt;sup>343</sup> Dolores Pineda Campos, "Materiales pétreos en fortificaciones de México y España: Caracterización comparada por técnicas analíticas," in *Impactos de las Tecnologías en las Ciencias Sociales Aplicadas*, ed. Jadilson Marinho da Silva (Atena Editora, 2022), 76.

The use of coral as a building material, along the Mesoamerican Gulf Coast significantly pre-dates the Spanish invasion. The earliest evidence of coraline construction has been noted by archaeologists in the Indigenous Olmec settlements of this region (1200-400 BCE). Specifically, crushed coral was used as an additive to raw bitumen, which is a material collected from the surface of water (e.g. oceans and rivers), beaches, seeps, and potentially also from wells.<sup>344</sup> The combination of bitumen with coral and other minerals results in a binding agent that is similar to cement and can be used like mortar to construct stone edifices. This binding agent has been identified by archaeologists at Olmec sites including La Venta and San Lorenzo, where it was used to bind together stone in basalt aqueduct troughs, for example.<sup>345</sup> Bitumen combined with coral was also used at later Huastec sites in the same region, appearing as a sealant on floors and as a covering and binding agent on the exterior of stone mounds as well as in the outer surfaces of buildings as a form of mortar used to hold together stone blocks.<sup>346</sup>

A similar technique and material was used to construct many of the buildings of the fortified Totonac capital of Cempoala, which was still occupied at the point of Spanish invasion.<sup>347</sup> The pre-Hispanic structures at Cempoala, located just a few miles from what would become the Spanish port at Veracruz (Fig. 3.23), were primarily built from locally-sourced river rock and various other types of stone bound together with a shell and coral-based mortar.<sup>348</sup> The use of bitumen as building material by the Mexica is also noted in Book X of the *Florentine* 

<sup>&</sup>lt;sup>344</sup> Carl Wendt and Ann Cyphers, "How the Olmec Used Bitumen in Ancient Mesoamerica," *Journal of Anthropological Archaeology*, 27 (June 2008): 179.

<sup>&</sup>lt;sup>345</sup> Ibid., 179-180.

<sup>&</sup>lt;sup>346</sup> Ibid., 180.

<sup>&</sup>lt;sup>347</sup> Díaz del Castillo, The Conquest of New Spain, 107.

<sup>&</sup>lt;sup>348</sup> Félix Báez-Jorge and Sergio R. Vásquez Zárate, Alicia Hernández Chávez, and Eduardo Matos Moctezuma. *Cempoala* (Mexico City: Fondo de Cultura Económica), 2016. <u>https://www-digitaliapublishing-com.colorado.idm.oclc.org/a/64108</u>.

*Codex,* where Sahagún indicates that it "comes from the ocean, from the sea….they pick it up from the sand,"<sup>349</sup> a description that implies the technique and material was still in use after the Spanish invasion. It should be noted that in 1519 and for approximately three hundred years prior, the Totonac region surrounding what would become the port of Veracruz was controlled by the Mexica.<sup>350</sup> As such, it is reasonable that construction techniques used by the Totonacs in this Gulf Coast region would have been relayed, in some form, to the Mexica capital at Tenochtitlan and thus could have been familiar to Sahagún's Indigenous sources.

Coraline construction is further evident in the Totonac city of Huitzilapan, which was renamed La Antigua during the colonial period. There the "Casa de Cortés" was built from a combination of *piedras de coral*, brick, and river rock (Fig. 3.24).<sup>351</sup> Thus, the use of coraline blocks at San Juan de Ulúa represents a continuation of this building tradition. And, the use of coral as the primary construction material for this fortress indicates the outsized role of local Indigenous creators and building techniques in the production of this important colonial edifice. It also adds a new layer of depth to a reinterpretation of San Juan de Ulúa.<sup>352</sup>

Understanding San Juan de Ulúa to be a local construction is also important when considering issues of power and agency in the colonial context. According to Mignolo and Walsh, who are drawing on the concept of decoloniality introduced by Aníbal Quijano in 1990, pluriversal decoloniality challenges the outcomes of colonial imposition by connecting "local

<sup>&</sup>lt;sup>349</sup> Sahagún, Florentine Codex: Book 10, 89-90.

<sup>&</sup>lt;sup>350</sup> Isabel Kelly and Angel Palerm. *The Tajin Totonac* (Washington DC: United States Interdepartmental Committee on Scientific and Cultural Cooperation) 1952, 6.

<sup>&</sup>lt;sup>351</sup> BBC News, "En fotos: La casa de Hernán Cortés en México," (December 20, 2010) <u>https://www.bbc.com/mundo/noticias/2010/12/101220 galeria casa cortes</u>.

<sup>&</sup>lt;sup>352</sup> There is opportunity for further consideration of the materiality and presence of some stone to the Indigenous creators of this fortress that could potentially add further depth to reinterpretations of this edifice. See the conclusion of this study for notes on possible directions for further study.

histories, subjectivities, knowledges, narratives, and struggles against the modern/colonial order and for an otherwise.<sup>353</sup> Acknowledging these local histories and perspectives creates space for multiple concurrent realities and consequently multiple concurrent interpretations of the artifacts and histories that exist in those realities. In this vein, to Spaniards, San Juan de Ulúa would have been a symbol of European power and their claim to the land on which it sits. Simultaneously, to its creators, it would have stood as a local testament to Indigenous agency and building knowledge. Recognizing this complexity transcends the Eurocentrism that has typically guided the interpretation of many colonial edifices, including fortifications.<sup>354</sup> It is only through this transcendent effort that the colonial matrix of power can truly be disrupted.

Acknowledging the pluriversal realities of hybrid fortifications in colonial Mexico also allows us to challenge the universality of European ideals and ways of knowing. To this end, Chakrabarty argues that Europe should be "provincialized" because European ideas do not necessarily have universal validity.<sup>355</sup> Since the tradition of defensive architecture in pre-Hispanic Mesoamerica was strong and many of the same architectural features are evident in colonial fortifications, to assume the universality of European perspectives on these fortifications is too one-dimensional. Thus, to "provincialize Europe" in this context is to recognize that the unilateral application of the label "Italian Renaissance" or "Italian School" to the architecture of fortresses in colonial Mexico fails to acknowledge that this characterization is not universally

<sup>&</sup>lt;sup>353</sup> Mignolo and Walsh, On Decoloniality, 3.

<sup>&</sup>lt;sup>354</sup> Ibid., 3-17. Mignolo and Walsh assert that the possibility of a different world is only achievable when the ideas of the Western canon, including those of the Renaissance and Enlightenment, are transcended. They emphasize the importance of "re-existence" in addition to resistance as a means of redefining the conditions created by colonialism. Decoloniality, therefore, specifically "seeks to make visible, open up, and advance radically distinct perspectives and positionalities that displace Western rationality as the only framework and possibility of existence, analysis, and thought" (17).

<sup>&</sup>lt;sup>355</sup> Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference*, xiii. Although Chakrabarty is primarily interested in the application of this idea in southeast Asia, the notion of challenging the universality of European ideas has validity in the colonial Mexican context as well.

true. Instead, it behooves scholars to recognize both the architectural influence of the Italian School and other European architectural precedents on these constructions from the European perspective, alongside the parallels to similarly robust pre-Hispanic architectural traditions as they informed the interpretations of the Indigenous viewers of these structures too.<sup>356</sup> In so doing, it is possible to de-center Europe, allowing decolonial possibilities to become realities.

<sup>&</sup>lt;sup>356</sup> On the note of tradition, it is important to acknowledge its link to issues of power in the space of cultural convergence. Bhabha asserts that tradition can be reinscribed while continuing to be linked to identity in the restaging of the past. Bhabha writes: "The 'right' to signify from the periphery of authorized power and privilege does not depend on the persistence of tradition; it is resourced by the power of tradition to be reinscribed through the conditions of contingency and contradictoriness that attend upon the lives of those who are 'in the minority.' The recognition that tradition bestows is a partial form of identification. In restaging the past it introduces other, incommensurable cultural temporalities into the invention of tradition." Homi K. Bhabha, *The Location of Culture* (New York and London: Routledge, 1994), 3. Given this assertion, arguably, the use of defensive features common to the architectural traditions of both Europe and pre-Hispanic Mesoamerica in colonial fortification can, to some extent, be understood as reinscribed traditions.

## **CHAPTER FOUR**

# CROSS-CULTURAL CONTRIBUTIONS TO MILITARISTIC STRUCTURES IN EARLY COLONIAL MEXICO

Scholarship has established colonial Mexico's fortresses and other militaristic structures as Europeanate constructions and demonstrations of Spanish hegemony in American colonial territories. There is clearly an argument to be made for regarding a fortress like San Juan de Ulúa as a physical manifestation of conquest, a Spanish building set atop colonial shores as a symbol of European ownership and power. Similarly, an argument can be made for regarding colonial Mexico's fortress monasteries as comparable physical and symbolic manifestations of Spanish Christian power in the Americas. This interpretation is not wholly incorrect. It is, however, incomplete.

In this chapter, I analyze European and Indigenous contributions to the militaristic architecture of early colonial Mexico, focusing on building techniques and materials, labor systems, and painted and sculptural imagery. I argue that our understanding of these structures expands when we consider their hybridity, subsequent polysemy, and cross-cultural relevance. This approach reframes how we interpret the power structures traditionally attributed to defensive and militaristic buildings as well. It complicates our understanding of them and challenges the colonial matrix of power, offering us new insights into how architecture is a manifestation of the complexities of its period.

Since hundreds of fortress-style monasteries and civic structures were built in the sixteenth century, for the purposes of this study, primary consideration is given to a select few. These include the Palace of Cortés in Cuernavaca, the fortified domestic structures of

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sixteenth-century Mexico City, and the fortress monasteries in Huejotzingo and Malinalco. San Miguel el Arcángel in Huejotzingo and San Salvador in Malinalco have been specifically selected because of their close proximity to the pre-Hispanic sites of Cacaxtla and Structure I, or the Temple of the Eagle Warriors, in Malinalco. The battle mural inside the fortress monastery of Ixmiquilpan is also briefly analyzed in this chapter, as is the visual prominence of fortress monasteries in the sixteenth-century *Relaciones geográficas*. In drawing on these select examples in this chapter, I present a decolonial argument that links pluriversal interpretations with ritualized militaristic architecture.

## Militaristic Domestic Structures and the Palace of Cortés

Houses and colonial administration buildings comprise the two primary types of militaristic domestic and civic structures in early colonial Mexico. After the fall of Tenochtitlan, the Spanish built houses that could also presumably function as strongholds or fortresses. For example, in 1554, Francisco Cervantes de Salazar noted that the defense of Mexico City was evident in the architecture of its houses where "each [was] so well constructed that one would call it a fortress, not a house."<sup>357</sup> The *Mapa de Santa Cruz* depicts these dwellings, with their crenelated or merloned rooflines (Fig. 4.1). However, their defensibility appears to have been largely performative as we lack records of their use as even temporary defenses.

The need for such defensive capacity is also questionable in this period. Cervantes de Salazar suggests that the fortification of domestic structures was the Spanish architectural response to the existence of a "large hostile population" and these defensive structures were

<sup>&</sup>lt;sup>357</sup> Francisco Cervantes de Salazar, *Life in the Imperial and Loyal City of Mexico in New Spain and the Royal and Pontifical University of Mexico, as described in the Dialogues for the Study of the Latin Language (1554);* facsimile of the 1554 edition, trans. Minnie Lee Barrett Shepard; introduction and endnotes .Carlos Eduardo Catañeda (Austin: 1953), 39.

needed because "it was impossible to surround the city with walls and defend it with towers."<sup>358</sup> Yet, the lack of significant numbers of towers or other forms of standalone fortification appears to have been a conscious choice on the part of the colonial administration. Cortés and the Viceroys Mendoza and Velasco repeatedly declined calls for fortress construction issued by colonists and even the King in the decades following conquest.<sup>359</sup> Thus, as we consider Cervantes de Salazar's commentary coupled with what appears to have been minimal need for truly defensible architecture in the early conquest period, it would follow that those domestic structures built in a militaristic style were more performative or symbolic than they were practical.

The purpose of this performativity in colonial domestic architecture, from the Spanish perspective, is two-fold. First, European nobility often inhabited homes with the architectural features of strongholds.<sup>360</sup> Given that many of the Spanish colonists in the Americas were not members of the European nobility, their use of militaristic architecture can be understood as an effort to performatively connect themselves to notions of European aristocratic grandeur and subsequently to elevate their own social or political importance. Second, the militarism of these domestic structures is evidence of the Spanish interest in using urban planning and its embedded architecture to demonstrate a sort of visually-attested control over the spaces they occupied in the Americas. As has been noted previously in this study, the Spanish harbored a particular interest in uniformity and frequently relied on the rule of law or ordinance to drive the standardization of everything from style to construction materials in the space of architecture. Thus, it is

<sup>&</sup>lt;sup>358</sup> Ibid., 39. Scholarship on this period, including that of McAndrew, Edgerton, and others suggests that there was little if any Indigenous threat that needed to be mitigated through the construction of permanent fortifications.

<sup>&</sup>lt;sup>359</sup> These varied calls for investment in fortification are outlined in chapter three of this study.

<sup>&</sup>lt;sup>360</sup> McAndrew, The Open-Air Churches of Sixteenth-Century Mexico, 274.

unsurprising that in 1573, Spanish royal ordinances continued to require such uniformity in construction, stipulating that "all town houses are to be planned so that they can serve as a defense or fortress,"<sup>361</sup> although the practical need for this sort of protective stance was certainly questionable more than fifty years after invasion. In taking these many possibilities together, from a European perspective, it is reasonable to believe that the implied defensive nature of domestic structures served a particular purpose in projecting the notion of Spanish power and capability to defend newly-conquered territory.

A notable example of militaristic construction as a testament to Spanish power is the Palace of Cortés. Commissioned by Hernán Cortés and constructed between 1526 and 1529 in Cuernavaca, this stone edifice was primarily designed as a residence for the Spaniard and his family. It, like the fortress-style homes of sixteenth-century Mexico City, boasts numerous architectural features of militaristic bearing. For example, the walls of the palace are topped with pointed merlons (Fig. 4.2), which could have, in theory, been used to shield defenders firing artillery or other weapons from the building's rooftop. However, from a practical standpoint, these merlons would have afforded little to no protection to armed defenders standing atop the walls because they are too narrow and too widely set to be functional as defensive mechanisms. Thus, they are more performatively defensible than practically so. Further, the walls of the building are notably thick, as if designed to withstand artillery-based attack. Given that the threat of such an attack was minimal,<sup>362</sup> the choice to rely so heavily on substantial stone masonry

<sup>&</sup>lt;sup>361</sup> Zelia Nuttall, "Royal Ordinances concerning the Laying out of New Towns in HAHR, IV (1921) and V (1922), cited in McAndrew, *The Open-Air Churches of Sixteenth-Century Mexico*, 274.

<sup>&</sup>lt;sup>362</sup> The Spanish introduced artillery-based warfare to Mexico in the 1520s. At this time, Indigenous populations would have had little access to it, thus making the probability of an artillery-based attack in Central Mexico low. Further, as previously mentioned, pre-Hispanic warfare in Mesoamerica took place primarily in the field, not within population centers. Or, it was conducted for the purpose of acquiring captives for ritual sacrifice as in the case of "Flowery Wars." Ross Hassig's work (1995) discusses the "Flower Wars" or "Flowery Wars" at length. It is also cited and discussed in chapter two of this study. Given these conditions and the fact that Indigenous use of artillery

construction, which would have been cost and labor-intensive in such a large edifice, is best understood as a symbolic gesture intended to imply or perform Spanish power and make clear the permanence of Spanish presence in Cuernavaca.<sup>363</sup>

The implications for Spanish power at this site, from the European perspective, are further reinforced by its intentional construction atop a *tlatlocayacalli*,<sup>364</sup> or a place where tribute was paid and collected by the local Indigenous population prior to the Spanish invasion. As was common practice in Spanish colonial construction, such sites were often intentionally used as the foundations for European-commissioned edifices. This practice derived from the idea that building atop these sacred and powerful places would tangibly demonstrate Spanish hegemony, supremacy, and reinforce the completeness of the conquest. The Eurocentrism of this perspective has also been echoed in scholarship on colonial architecture, which has suggested that superimposing Christian churches and other colonial edifices, like the Palace of Cortés, on sites of pre-Hispanic spiritual importance was a tangible demonstration of the conquest of pagan religion and of Christian European triumph as well.<sup>365</sup>

was not so expansive by the mid-1520s as to warrant a need for practical defensive structures, its militaristic nature and architectural features are best understood as performative.

<sup>&</sup>lt;sup>363</sup> The idea that the architecture and defensive bearing of structures like the Palace of Cortés was purposefully symbolic or performative more so than it was practical is further supported by the fact that more than one such militaristic edifice built in a very similar style was constructed in the Spanish Americas. Much like the Palace of Cortés, the Alcázar de Colón in Santo Domingo was built of local-sourced coraline blocks between 1510 and 1514 to serve as a residence for Cristóbal Colón (Claire Cardinal-Pett, *A History of Architecture and Urbanism in the Americas* (New York: Routledge, 2015), 139). Like the Palace of Cortés, it too features planar, thick walls with narrow pointed merlons dotting the roofline, thus implying the need for defensibility, but it is not practically defensible. From the Spanish perspective, the fortress-like architecture of the Alcázar de Colón, like that of the Palace of Cortés, likely was intended to be a visual testament to notions of dominance, hegemony, and European power, much in the same way that architecturally similar structures functioned in Europe.

<sup>&</sup>lt;sup>364</sup> In the settlement that would become colonial Cuernavaca, the practice of paying tribute at the site on which the palace is built began with the Tiahuica rulers and continued amongst the local Indigenous population through to the arrival of the Spanish in the sixteenth century. Instituto Nacional de Arqueología e Historia (INAH), "Palacio de Cortés." <u>http://www.cnmh.inah.gob.mx/400143.html</u>. Accessed January 7, 2023. Information on the Palace of Cortés also gathered from a visit to the Museo Cuauhnahuac, housed at the palace in Cuernavaca.

<sup>&</sup>lt;sup>365</sup> Kubler, "One the Colonial Extinction," 66-67. A quintessential example of this Eurocentrism in scholarship is Kubler's assertion that the imposition of European conventions of representation and building "precluded any real

Although the Palace of Cortés would have had this symbolic resonance for Spaniards, it is limiting to assume that this perspective was shared by the local Indigenous people who built and experienced it. This is particularly the case when we recognize that numerous pre-Hispanic militaristic sites, including nearby Xochicalco, featured residential palaces with comparable militaristic architectural features. Furthermore, as Dean and Leibsohn note,<sup>366</sup> merely building atop a *tlatlocayacalli* would not have destroyed the ritualized power that Indigenous peoples attributed it. Instead, it would have "lived on" in the stone that was used to construct Cortés's palace. Therefore, the superimposition of The Palace of Cortés on this Indigenous sacred site cannot be seen merely as a show of Spanish power and superiority, especially when accounting for Indigenous perspectives.<sup>367</sup>

Accounting for labor also adds to our understanding of a structure's cultural multivalence and its relationship to colonial power dynamics. According to Jéronimo Valderrama, Indigenous labor was central to the Spanish building campaign in colonial Mexico. In his 1564 letter to King

continuation of native traditions in art and architecture." He argues that "enemy' works of art are destroyed during cultural conflicts" and "the triumph of one culture over another is usually marked by the virtual cessation of the art of the vanquished and its replacement by the art of the conqueror." This perspective on the artistic and architectural result of the intersection of cultures that occurred in the wake of Spain's sixteenth-century invasion of Mexico mirrors that of the conquering Spaniards.

<sup>&</sup>lt;sup>366</sup> Carolyn Dean and Dana Leibsohn, "Scorned Subjects in Colonial Objects" in *The Journal of Objects, Art and Belief,* 13, no. 4 (2017): 423.

<sup>&</sup>lt;sup>367</sup> Ibid., 424-425. As another example of this concept in practice, Dean and Leibsohn offer the imposition of Christian crosses into monuments like a sculpture from Coyoacán that depicts the venerated Quetzalcoatl and the earth deity Tlatecuhtli. Despite the square hole drilled through the center of this carving to make room for the Christian cross, it cannot be assumed that this modification destroyed its enlivened essence for those Indigenous viewers thereof. Instead, when viewed through the Mexica's lens, we can understand this act of destruction as one in which the persistent earth goddess triumphs and perhaps is even propagated through the creation of fragments, ashes, and even dust that continued to carry the *teteo*, or vital essence of this supernatural figure. In adopting this lens, we allow for a more complicated reading of this subject-object that makes space both for the European perspective as well as Indigenous ones, and further allows for them to exist on equal footing. Through this respect of the subjecthood of Indigenous cultural artifacts, Dean and Leibsohn further suggest that the combination of sacred materials from Indigenous and European sources could actually strengthen the power manifested in objects as well as specific places, as opposed to diminishing it. It is this critical lens that is particularly relevant in the consideration of ritualized militaristic architecture in colonial Mexico.

Philip II, he wrote "I can swear to you, as a Christian that there is not one stone [in these walls] that did not require a thousand Indians pulling it to get it here."<sup>368</sup> The provision of Indigenous labor, like that described by Valderrama, was undertaken via a variety of means during the colonial period, including most prominently through the *encomienda*. The *encomienda*, as established by Cortés in the 1520s, effectively provided the Spanish with access to a compulsory labor force to be used at the *encomendero's* discretion, including for the construction of colonial edifices.<sup>369</sup>

The *encomienda* was of Spanish origin and provided *encomenderos* with substantive power over Indigenous labor forces; however, the direct management of Indigenous laborers was primarily the responsibility of local Indigenous leaders.<sup>370</sup> These leaders, many of whom were among the elite or were rulers of local polities, relied on an ancient, but parallel system known as the *coatequitl* to draft tribute labor for a variety of tasks, including building projects, during the colonial period.<sup>371</sup> Prior to the invasion of the Spanish, draft labor systems mobilized the

<sup>&</sup>lt;sup>368</sup> Jerónimo Valderrama to Philip II, 1564, in *Cartas del licenciado Jerónimo Valderrama y otros documentos sobre su visita al gobierno de Nueva España, 1563–1565*, eds. France V. Scholes and Eleanor B. Adams (Mexico City: Porrúa, 1961), 58. Also cited in Ryan Crewe, "Building in the Shadow of Death: Monastery Construction and the Politics of Community Reconstruction in Sixteenth-Century Mexico," *The Americas* 75, no. 3 (July 2018): 513.

<sup>&</sup>lt;sup>369</sup> In the years immediately following the establishment of New Spain, via a 1526 ordinance, Cortés created an *encomienda* system. This system was predicated on Indigenous populations providing food, services, and labor to the Spanish in exchange for religious instruction. Kubler, *Arquitectura*, 187. Also cited in Lesley Byrd Simpson, *The Encomienda in New Spain: The Beginning of Spanish Mexico* (Berkeley: University of California Press, 2008), 67. https://hdl-handle-net.colorado.idm.oclc.org/2027/heb92789.0001.001. EPUB. The *encomienda* would be replaced by other approaches to labor management later in the sixteenth century, beginning with the Spanish Crown's passage of the *Nuevas Leyes* (New Laws) in 1542. The *encomienda* system was largely abused. Mendicant friars were frequent critics of the abuses of this system. One of the most vocal critics among them was Bartolomé de las Casas. In response to critiques like those of las Casas, the Spanish Crown issued the "New Laws" or *Leyes y ordenanzas nuevamente hechas por su Majestad para la gobernación de las Indias y buen tratamiento y conservación de los Indios* in 1542. The New Laws were intended to protect Indigenous peoples against forced labor. Simpson, *The Encomienda*, 37. Also cited in Kubler, *Arquitectura*, 187.

<sup>&</sup>lt;sup>370</sup> Ryan Crewe, "Building in the Shadow of Death: Monastery Construction and the Politics of Community Reconstruction in Sixteenth-Century Mexico," in *The Americas* 75, no. 3 (July 2018): 513.

necessary manpower to build public works projects, ritual sites like temples, and other structures erected for the benefit of local rulers or for imperial authorities, including the Mexica ruler Ahuitzotl.<sup>372</sup>

Archival records indicate that the *coatequitl* was used to build various structures in Cuernavaca.<sup>373</sup> For example, *Los títulos primordiales* note a reliance on Indigenous-led tribute labor forces and Quaxomulco's (a subunit of Cuernavaca's) contribution of construction materials and carpenters.<sup>374</sup> Though there are few archival records that clearly articulate the specific roles of Indigenous creators in the construction of the Palace of Cortés, we can reasonably surmise that the process of building this structure was one in which there was substantial Indigenous leadership and involvement.

Although its primary purpose was as a practical system for managing labor, Wake argues that the colonial formation of *coatequitls* was the result of an ongoing "compulsion for ritualized labor" derived from Mesoamerican tradition.<sup>375</sup> This association is central to complicating our interpretation of the Palace of Cortés because it allows us to regard this European-looking edifice as much more than solely as a symbol of Spanish power. It is concurrently a testament to the power and agency of its Indigenous creators as well. As such, it is best understood as a multivalent structure.

<sup>&</sup>lt;sup>372</sup> Ibid., 514.

<sup>&</sup>lt;sup>373</sup> Ibid., 514-515. Crewe cites the use of the *coatequitl* to build structures at Tula, Nexapa, and Tlatelolco in addition to Cuernavaca.

<sup>&</sup>lt;sup>374</sup> Los títulos primordiales del centro de México, ed. Paula López Caballero (Mexico City: Conaculta, 2003), 168. This is also cited by Robert Haskett, *Visions of Paradise: Primordial Titles and Mesoamerican History in Cuernavaca* (Norman: University of Oklahoma Press, 2005), 257; and Crewe, 514. Los títulos primordiales were written later in the colonial period by Indigenous authors seeking to promote and protect their interests. They frequently discuss occurrences in the early sixteenth century. As reflections on the past, it is certainly possible to question the accuracy and their potential bias. However, they nonetheless point to the important role of Indigenous creators in the construction process of the early colonial period.

<sup>&</sup>lt;sup>375</sup> Wake, *Framing the Sacred*, 92 and Crewe, "Building in the Shadow of Death," 516.

In this vein, Webster's examination of the colonial architecture of Quito again informs this study's emphasis on the cross-cultural multivalence of the Palace of Cortés and its associated power dynamics.<sup>376</sup> Webster notes that although many scholars from Kubler to Crespo interpret Quito's colonial architecture as decidedly European in its style, this interpretation fails to acknowledge the importance of the process of construction to Indigenous creators. The "reliance on visibility" has created an image of colonial Andean buildings as an architecture of conquest in which mere glimmers of Andean presence may be seen, but which ultimately is symbolic of the dominant Spanish imperial project...[however], the reliance on the visible product...often overlooks the relatively invisible and potentially significant people and processes involved in architectural production."<sup>377</sup> Much in the same way that Inka master builders were responsible for and had agency in the creation of the "European-looking" edifices of colonial Quito, I argue that the Indigenous leaders of and laborers in the *coatequitl* in Cuernavaca and across early colonial Mexico also had agency in the creation of similarly "Europeanate" buildings, like the Palace of Cortés.

Acknowledging this agency is also important when considering the extent to which construction campaigns were "inextricable from native rulers' efforts to reconstitute their polities," in the context of the newly-established colonial power dynamics of the sixteenth century.<sup>378</sup> The political reward for successful management of the *coatequitl* substantively proved the viability of local states and local leaders.<sup>379</sup> And, it was also directly associated with rights to

<sup>&</sup>lt;sup>376</sup> Webster, "Vantage Points," 303-330.

<sup>&</sup>lt;sup>377</sup> Ibid., 303-307. Webster acknowledges the relevance of Italian architectural treatises in Quiteñan architecture as indicative of the role of European architectural influence in their design. However, she also highlights the importance of Andean, and particularly Inka, master builders in the construction of colonial Quito.

<sup>&</sup>lt;sup>378</sup> Crewe, "Building in the Shadow of Death," 495.

<sup>&</sup>lt;sup>379</sup> Ibid., 513.

land, and consequently power, for these Indigenous leaders. For example, in the specific context of Cuernavaca, one of the *Títulos primordiales* states, "because we helped make the [cabecera] church of Cuernavaca, we received our land grant...and our boundaries were measured."<sup>380</sup> This comment clearly establishes a connection between the construction process and the acquisition of and subsequent control over land in colonial Mexico. Although this example is specific to the construction of the fortress monastery in Cuernavaca, in principle, the testament to power associated with the construction process and resultant acquisition of territory is concurrently applicable to interpreting the Palace of Cortés as a multivalent and culturally relevant structure indicative of the navigation of new and complex power dynamics in sixteenth-century Mexico.

## Fortified Religious Structures

Issues of power and agency, as they manifest in colonial militaristic domestic construction, are perhaps even more prevalent in the fortress-style religious edifices that populate much of Mexico. They combine religious purpose with militaristic architectural style that, like its domestic and civic counterparts, was more performative than defensively functional. Like other militaristic structures built in the sixteenth century, the architecture and iconography of the fortress monasteries is multivalent and these structures are best understood as hybrid and culturally relevant artifacts with the potential to be interpreted in ways that challenge the colonial matrix of power.

Although I limit my case studies to specific examples, there are many common architectural features in almost all sixteenth-century Mexican fortress monasteries. These religious complexes typically consist of large walled courtyards, or *atrios*, that served as outdoor

<sup>&</sup>lt;sup>380</sup> Haskett, *Visions of Paradise*, 208-210, 264-265. Also cited in *Los titulos*, ed. López Caballero, 144-145 and Crewe, "Building in the Shadow of Death," 517-518.

spaces for worship. Square oratories, referred to as *posas*, are positioned at the four corners of the *atrio*. A vaulted chapel, which housed the Sacrament, typically faces the open courtyard, where congregations would gather for services.<sup>381</sup> Additionally, as a fundamental stylistic characteristic, the monasteries that were built by the Franciscan, Dominican, and Augustianian orders are all primarily fortified in appearance, not in function. As has been noted in the limited scholarship that exists on these edifices,<sup>382</sup> none of the colonial Mexican fortress monasteries appear to have actually been built for use in any sort of practical defensive capacity.<sup>383</sup>

Perhaps the only exception to this characterization was the *ad hoc* defensive function of the fortress monasteries constructed to the northwest of Mexico City, including Ixmiquilpan which is discussed in this chapter. In this region, active conflict with the Indigenous Chichimecas continued across several decades following the Spanish invasion. In these instances, given ongoing bellicose conflict in the region, it is possible that the monastic buildings built in this area may have served temporarily as actual fortresses, though there is limited evidence to attest to this possibility.<sup>384</sup> Further, there is no archival evidence to suggest that their defensive design was originally implemented with the intention of being protectively functional.<sup>385</sup> Thus, the fortress monasteries of colonial Mexico are best understood not as true fortresses at all, but rather as

<sup>385</sup> Ibid., 262.

<sup>&</sup>lt;sup>381</sup> Kubler and Soria, Art and Architecture in Spain and Portugal, 70.

<sup>&</sup>lt;sup>382</sup> McAndrew, The Open-Air Churches of Sixteenth-Century Mexico, 258.

<sup>&</sup>lt;sup>383</sup> This non-functional militaristic style is noted by Kubler and Soria, who observed the bare surfaces of the monastery walls and the use of "*porte-a-faux*" buttresses, noting in particular that the buttresses were not structurally useful from a defensive standpoint. Kubler and Soria, *Art and Architecture in Spain and Portugal*, 71. Kubler and Soria suggest that the bareness of the walls in fortress monasteries is the result of a lack of skill on the part of the Indigenous laborers who were charged with building them. I disagree with this assessment particularly given the architectural complexities of adjacent pre-Hispanic structures. This statement on the part of the authors reveals a Eurocentric perspective consistent with Kubler's commentary on the "extinction" of Indigenous motifs as discussed in the introduction of this study.

<sup>&</sup>lt;sup>384</sup> McAndrew, The Open-Air Churches of Sixteenth-Century Mexico, 265.

performatively militaristic edifices. Though they lack true defensive purpose, the fortress monasteries are nonetheless architectural testaments to issues of power.

The architecture of the fortress monasteries was also informed by various *ordenanzas* that conveyed the Crown's expectations for architectural standardization, which was intended to express Spanish control and power. These orders were substantively informed by Renaissance and Early Modern architectural principles as articulated in European treatises, some of which were also available in colonial Mexican libraries.<sup>386</sup> As previously noted, these architectural treatises were fundamental to the development of the theories of military architecture in Renaissance Italy, Early Modern Spain, and, to some extent, colonial Mexico. The friars' engagement with these architectural treatises, for example, ostensibly informed their design and interpretation of the fortress monasteries. This is all the more likely given that these friars, by and large, did not have any formal training in building construction.<sup>387</sup> Thus, to execute on the construction of a vast program of militaristic religious edifices in Mexico, it is reasonable to believe that these friars would have defaulted to referencing architectural designs found in treatises brought from Europe to Mexico in lieu of attempting to create their own entirely new architectural models.

As a result, much of the architecture of the fortress monasteries can indeed be said to "look European" or to reference the European architectural treatises that informed their design. For example, Italian Renaissance architectural forms, such as those found in the designs in Serlio's treatise on military architecture, likely influenced the architecture of the façades of the

<sup>&</sup>lt;sup>386</sup> Edgerton, *Theaters of Conversion*, 39, 114. The library in the colonial Colegio de Santa Cruz housed print editions of Vitruvius's *Ten Books on Architecture*, the treatises on military architecture written by Sebastiano Serlio and Albrecht Dürer. The 1550 Cosimo Bartoli edition of Leon Battista Alberti's *De re aedificatoria* was also available in this library. And, a 1512 edition of Alberti's treatise was brought to Mexico by the first Spanish Viceroy Antonio de Mendoza, a cofounder of the library in the Colegio de Santa Cruz as well.

<sup>&</sup>lt;sup>387</sup> Ibid., 39.

Franciscan monasteries of Huejotzingo, the Augustinian monastery at Malinalco, and the Dominican monasteries in Coixtlahuaca, Oaxaca, and Cuilapan,<sup>388</sup> among many others. Yet, while Italian Renaissance architectural models likely influenced the militaristic architectural features and overall designs of Mexico's sixteenth-century monasteries, no evidence suggests that entire building plans were imported directly from Europe.<sup>389</sup> Unlike the design plans for some colonial fortifications, like Adrian Boot's San Diego de Acapulco which was drawn in Paris in 1612 for example, the fortress monasteries appear to have been largely designed locally. Thus, they were not built as mere copies of European precedents nor drawn to the specifications of exacting designs generated in Europe. Instead, they are best understood as reflections of the colonial context in which they were created and subsequently as cross-culturally multivalent spaces wherein the power between colonizers and the colonized was actively negotiated during the first century of the colonial period.

#### San Miguel el Arcángel in Huejotzingo

San Miguel el Arcángel in Huejotzingo is among the earliest of the fortress monasteries to be built in colonial Mexico. Initial construction began in 1529 and the creation of a grander monastery on the same site, termed the "Queen of the Missions" began under the direction of the Franciscan mendicant Juan de Alameda in 1540. Construction was completed in 1570. The

<sup>&</sup>lt;sup>388</sup> Ibid., 40. Santo Domingo in Oaxaca is one such example, the façade of this monastery is framed by two squared towers, topped with decorative arcades and domes. Pointed merlons sit atop each of the four corners of the towers beneath these prominent domes, creating a military bearing in a manner reminiscent of that recommended by Serlio. Similar squared features are evident in the façade of Huejotzingo. Serlio's treatise, like those of many of his Italian Renaissance contemporaries, also recommends the use of merlons, among other defensive features, in the design of standalone fortifications. And, we see merlons used extensively along the *atrio* walls and on the façades of many of the fortress monasteries. Perry's *Mexico's Fortress Monasteries* also discusses approximately 70 fortress-style monasteries, the majority of which include merlons in their design.

<sup>&</sup>lt;sup>389</sup> Edgerton, *Theaters of Conversion*, 41.

settlement of Huejotzingo, in what is now the state of Puebla, was a strategically-placed town positioned as a waypoint in the high passes between the Puebla Valley and the pre-Hispanic imperial capital of Tenochtitlan (Fig. 4.3).<sup>390</sup> It was a settlement site for pre-Hispanic populations and is located in close proximity to the fortified ritual site of Cacaxtla.

The Franciscans intentionally selected this location for the fortress monastery because of its proximity to important Indigenous population centers, placing it atop a site of ritual significance to the local Indigenous population,<sup>391</sup> much in the same way that the Palace of Cortés is placed atop a similar ritual site. This attitude of conquest through the physical suppression of Indigenous sacred spaces directly speaks to the Church's militant interest in furthering a Christianity that literally and figuratively stomped out all those enemies it encountered.<sup>392</sup> In line with this attitude, Spanish Viceroy Mendoza provided specific instruction regarding the reuse of Indigenous materials in the construction of the monasteries. More

<sup>&</sup>lt;sup>390</sup> Perry, Mexico's Fortress Monasteries, 95.

<sup>&</sup>lt;sup>391</sup> Robert Ricard, *The Spiritual Conquest of Mexico: An Essay on the Apostolate and the Evangelizing Methods of the Mendicant Orders in New Spain, 1523-1572,* trans. Lesley Byrd Simpson (Oakland, California: University of California Press, 1966), 163. As Robert Ricard notes in his study of the spiritual conquest of Mexico, the mendicant orders intentionally installed their *conventos* in areas that were already political and religious centers for Indigenous populations. These religious centers, similar to the previously discussed Palace of Cortés in Cuernavaca, often included one or more *teocalli*, or sanctuaries and sites of spiritual importance to Indigenous populations, which were found frequently within temples and pyramids. Therefore, as a strategy of conversion, *conventos* were commonly built on top of or very near these sites of spiritual importance, as was the case at Tlaxcala, Huejotzingo, Huexotla and other locations across Central Mexico.

<sup>&</sup>lt;sup>392</sup> Generally speaking, the "Church Militant" refers to the Catholic Church's promotion of the idea that Christians were obligated, as soldiers of Christ, to fight against evil and those deemed the enemies of the "True Religion." As C.R. Boxer notes, Spanish missionaries, across the vast geographic expanse of the Spanish Empire, were aware of their role as the "vanguard of the Church Militant," effectively serving as spiritual pioneers or soldiers who played a vital role in the overseas expansion of Spain and by association, of Catholicism. C.R. Boxer, *The Church Militant and Iberian Expansion, 1440-1770* (Baltimore: The Johns Hopkins University Press, 1978), x. As the Spanish Crown sought to grow its commercial and political interests outside of Europe, the Catholic Church effectively authorized the expansion of Christianity and the resultant evangelization associated therewith, through the issuance of several papal bulls in support of Spanish imperialistic aims. Gabriel Márquez Ramírez, "Los franciscanos y la evangelización de la Nueva España en el siglo XVI: Las contribuciones franciscanas a dominación socio-religiosa," in *Evangelization and Cultural Conflict in Colonial Mexico*, eds. Robert H. Jackson (Newcastle Upon Tyne, England: Cambridge Scholars Publishing, 2014), 97.

specifically, in 1538, in a letter to Bishop Zumárraga, Mendoza ordered the use of the stone gathered from demolished pre-Hispanic temples in the construction of colonial churches.<sup>393</sup>

Like many of the sixteenth-century monasteries constructed across Mexico, San Miguel is massive in scale, with severe stone walls that are buttressed and adorned with various architectural features found in European and Mesoamerican fortifications. Spanish chronicler Matías de Escobar noted that the use of merlons in the architecture of monasteries was designed to give "authority to the immense and massive building."<sup>394</sup> Similarly, the Viceroy Antonio de Mendoza (1495-1552) noted that "the monasteries with friars were walls and castles with which the whole land was defended, because with their example and their sacred sermons and admonitions, they conquered the spirit of the Indians…and monasteries…were more valuable than fortresses with soldiers in towns."<sup>395</sup> Each of these descriptions point to the use of monumental militaristic architecture to convey a symbolic message of power and conquest, that

<sup>&</sup>lt;sup>393</sup> Kubler, *Arquitectura*, 216. Colonial Spanish chronicler Juan de Grijalva includes a passage in his history of the Augustinian order in Mexico that pits Christianity and its associated forces of light against the darkness of paganism in a confrontation defined as the "spiritual conquest" of the New World. Juan de Grijalva, *Crónica de la Orden de N.P.S. Agustín en las provincias de la Nueva España, 1533-1592,* 2nd ed. (Mexico City: Imprenta Victoria, 1624). The militant language used to describe the Augustinian mission, as well as those missions of other mendicant orders evangelizing in Mexico in the century after conquest, indicates clearly that the friars perceived themselves to be actively engaged in a battle. As such, the choice to build militaristic edifices, like the fortress monasteries, and particularly to build such structures in close proximity to or on top of ritual sites important to those "enemies" the missionaries sought to conquer and convert, substantiates a reading of them as emblems of Spanish and Christian conquering power. This interpretation is further supported by consideration of the gusto with which the mendicant orders pursued the spiritual conquest of Mexico and their likening of themselves to soldiers of Christ. Peterson, *The Paradise Garden Murals*, 17.

<sup>&</sup>lt;sup>394</sup> Matías de Escobar, Americana Tebaida, 2nd ed. Morelia: Balsad Ed., 1970.

<sup>&</sup>lt;sup>395</sup> José Antonio Maravall, "La Utopía político-religiosa de los Franciscanos en Nueva España," *Estudios Americanos*, 1 no. 2 (1949): 199-227. Torquemada's comments to Viceroy Mendoza allude to the possible millenarian associations with the fortified nature of the *conventos*. As noted by Miguel Angel Fernández in *La Jerusalén Indiana: Los conventos-fortaleza mexicanos del siglo XVI* (México: Smurfit Cartón y Papel de Mexico, SA de CV, 1992), 1-22, the Spanish associated the Americas with the idea of the "New Jerusalem" where utopias could be built and protected by the walls of fortified monasteries. Thus, the investment in large-scale *conventos* with implied defensive characteristics may be interpreted as a visual manifestation of the beliefs associated with millennialism and its relationship to the spiritual conquest of the Americas undertaken by the Spanish.

from the Spanish perspective, appears to have been intended to inspire awe or perhaps even fear among those Indigenous peoples to be converted under the auspices of Christian militaristic zeal.

Defensive architectural features, like the merlons referenced by Escobar and that were common in Italian Renaissance and Early Modern fortresses, are prominently featured in the design of San Miguel in Huejotzingo. For example, San Miguel's large outdoor *atrio*, which was used primarily for open-air masses, features them (Fig. 4.4). If the purpose of this space was truly defensive, these architectural features would have shielded defenders positioned inside the *atrio* walls from attack and they would also have prevented any would-be attackers from easily cresting the walls of the courtyard. However, at Huejotzingo, as at the Palace of Cortés, the merlons are placed so far apart that they would not have had any practical defensive use in the event of an attack. They could be easily scaled and would have offered little protection from any sort of weaponry. Thus, though these architectural features suggest the space is intentionally enclosed and guarded, they are far more performative than they are practical from a defensive standpoint.

Additional militaristic architectural features at Huejotzingo include the topping of the sheer external walls of the church with parapets of pierced merlons (Fig. 4.5). In Italian Renaissance and Early Modern Spanish fortification designs, pierced merlons were used to support long-guns. Swallow-tail battlements crown each of the square buttresses of San Miguel in Huejotzingo and rectangular buttresses frame the ashlar façade as well (Fig. 4.6). These, and many other architectural features can also be directly connected to European architectural precedents in fortification design.<sup>396</sup> But, as has been discussed previously in this study, features

<sup>&</sup>lt;sup>396</sup> Kubler's analysis of the *atrios* offers a related Eurocentric perspective, in which he points to the integration of *atrios* into the design plans of sixteenth century monasteries as examples of convergence, which is the notion that unconnected cultural traditions can result in similar behavior patterns and in this case architecture. Open-air worship was common in pre-Hispanic Mexico, though Kubler also asserts that open-air chapels were features of many Early Christian churches in a statement that almost seems to undermine the importance of pre-Hispanic tradition. Nonetheless, for Kubler, the integration of open-air spaces for worship into colonial monasteries reflects a

like expansive enclosed *atrios*, significant systems of defensive walls, bastions, and merlons are found at numerous pre-Hispanic fortified sites as well, including nearby Cacaxtla.<sup>397</sup> Thus, when taken together, all of these architectural elements lend the structure of San Miguel in Huejotzingo an undoubtedly militaristic character in both Mesoamerican and European terms.

Significantly, San Miguel was built primarily by Indigenous creators who had agency in the construction process. Additionally, like the other colonial Mexican fortress monasteries, it was also constructed with local materials and using some Indigenous building techniques. As noted, the Spanish Crown charged friars in Mexico with erecting monasteries using European architectural treatises as guides or points of reference. However, the friars generally lacked the architectural skill necessary to implement the construction of such edifices. And, in the sixteenth century, especially prior to 1550, there were few European architect-builders who would have traveled to Mexico to build colonial fortress monasteries.<sup>398</sup> Instead, in most cases, European friars likely acted as foremen while more experienced Indigenous and *mestizo* creators as well as master masons and common laborers were primarily responsible for construction.

Although it is certain that Indigenous creators were essential to the construction of the fortress monasteries, archival records and early colonial chroniclers, including the friars themselves, are vague about the exact role of Indigenous and *mestizo* craftsmen in the design process. Instead, sixteenth-century chroniclers largely attribute the design of these structures to

convergence between a European antecedent and a similar practice that developed independently in pre-Hispanic Mexico. Although the concept of convergence recognizes that pre-Hispanic tradition is of some importance, Kubler's contemplation of this concept suggests the European antecedent is more important and perhaps also predates the architectural traditions of Mexico, though little evidence is provided to support this assertion. Kubler, "On the Colonial Extinction," 68-69.

<sup>&</sup>lt;sup>397</sup> The fortress at Cacaxtla was buried in the early sixteenth century and therefore would not have been readily visible to colonial viewers. However, given the prevalence of pre-Hispanic fortified sites across this region and the extensive tradition of ritualized militarism that was associated with them, it is reasonable to assume that Indigenous peoples would have had exposure to the defensive architectural features named here in their pre-Hispanic contexts. Thus, that Cacaxtla was buried in the early sixteenth century does not preclude its relevance.

<sup>&</sup>lt;sup>398</sup> Peterson, The Paradise Garden Murals, 21.

the mendicant orders more generally and only occasionally recognize the "lay architects," as a collective group for their generalized involvement in the design and construction process.<sup>399</sup> Despite the implication of these archival records, the prevalence of Indigenous construction techniques as well as records of extensive use of Indigenous labor make clear that Indigenous creators were deeply involved in the execution of the Spanish building program in colonial Mexico. And, in some cases, Indigenous creators did record their participation and leadership in the building of colonial edifices like the fortress monasteries. For example, at the fortress monastery in Cuitzeo, Michoacán, Francisco Metl, an Indigenous creator, carved the inscription *Fr lo Metl me Fecit* into the cloister portal,<sup>400</sup> recording that he was responsible for "making" the structure. Although such records and literal attributions to Indigenous creators are rare, this group's active participation in construction should not be overlooked or undervalued.

At San Miguel Huejotzingo, archival records speak, at a high level, to the role of Indigenous creators in the construction process. For example, tribute rolls associated with the Indigenous-led *coatequitl* indicate the number of stonecutters, masons, lumberjacks, carpenters, and painters who were responsible for its construction.<sup>401</sup> And, the coordination of draft laborers as well as skilled artisans by local Indigenous leaders, or *mandones*, was essential to the process of construction at this fortress monastery too.<sup>402</sup> Given this important role, arguably, the Indigenous leaders of the construction process, in particular, had notable agency in the structural execution and the overall building program.

<sup>400</sup> Ibid., 21.

<sup>&</sup>lt;sup>399</sup> Peterson, *The Paradise Garden Murals*, 21.

<sup>&</sup>lt;sup>401</sup> Crewe, "Building in the Shadow of Death," 514. Crewe is specifically citing Ursula Dyckerhoff and Hanns J. Prem's discussion of the *coatequitl* at Huejotzingo in, "La estratificación social en Huexotzinco," in *Estratificación social en la Mesoamérica prehispánica*, eds. Pedro Carrasco and Johanna Broda (Mexico City: INAH, 1976), 165.

<sup>&</sup>lt;sup>402</sup> Crewe, "Building in the Shadow of Death," 512.

The participation in and leadership of the construction of sites of ritual importance resonated with Indigenous building practices prior to and following the Spanish invasion. Evidence of this sentiment can be found in the comments of Indigenous witness Luís Ouiab, recorded in 1550, in which he noted the comparable significance of building a *teocalli* either for Ahuitzotl, the Mexica ruler, or for the colonial town in which he resided.<sup>403</sup> On a broader scale, the process of creating a *teocalli*, whether it be in the form of a pre-Hispanic temple or a colonial fortress monastery, according to Crewe was a "grand act of world-making" that, specifically in colonial Mexico, "at once it established a new spiritual home, and it reconstituted and empowered the political and economic networks that were connected to it. It materialized the sacred and sacralized worldly power, and in so doing it asserted the endurance of the community."404 Further, the construction of these monasteries in partnership with mendicants often led to recognition from the Spanish colonial administration, which translated to greater autonomy for local Indigenous leaders.<sup>405</sup> Thus, the Indigenous investment in and leadership of the construction of ritualized spaces like the fortress monasteries was a mechanism for negotiating political power within the confines of the sociopolitical hierarchy established by the Spanish as well.

<sup>&</sup>lt;sup>403</sup> Quiab's comments come from testimony submitted in 1550 in *Temascalapa v. Tepechpan*. These comments are cited by Crewe, "Building in the Shadow of Death," 513. Although Tepechpan is its own polity, the church there was, according to Quiab's testimony similarly built on a *teocalli* and thus was also a site of pre-Hispanic ritual significance. Luís Quiab, "Testimony, 1550" in *Temascalapa vs. Tepechpan, 1550-1564,* Archivo General de Indias Justicia, leg. 164, no. 2, fol. 261r.

<sup>&</sup>lt;sup>404</sup> Crewe, "Building in the Shadow of Death," 501.

<sup>&</sup>lt;sup>405</sup> Ibid., 508. The author notes that Indigenous communities and Indigenous leaders in particular were aware that the construction of monastery complexes in partnership with mendicant friars had an impact on colonial officials' perceptions of their jurisdictions. The monasteries became proof of political and economic viability for the communities in which they were built and as such could result in the designation of *cabecera*, which was the highest status that an Indigenous polity could receive. This status translated to autonomy for local leaders.

Although some scholars, including Kubler, for example, characterize Indigenous participation in the construction of these edifices as a response to the powerful "apostolic fervor" generated by the mendicant friars,<sup>406</sup> the large-scale execution of building programs in colonial Mexico was not merely a response to Christian evangelism. Nor was it merely a rote or "spontaneous" continuation of pre-Hispanic construction practices as argued by Christian Duverger.<sup>407</sup> Instead, Indigenous engagement in the monastery construction process was driven by a conflation of a sense of local pride tied to the *altepetl* (local, ethnically-based political entities or polities) wherein the monasteries were being built, as argued by James Lockhart,<sup>408</sup> and the continuation of ritualized labor practices established during the pre-Hispanic period, which were directly tied to issues of power, as argued by Wake<sup>409</sup> and Crewe, respectively.<sup>410</sup>

The ritual implications of the construction process become more clear when recalling that

the fortress monastery at Huejotzingo is built atop a teocalli or a site of Indigenous spiritual

significance.<sup>411</sup> As noted previously, the structural superimposition of a Christian church on a site

<sup>409</sup> Wake, *Framing the Sacred*, 92. See also Crewe, "Building in the Shadow of Death," 514. Wake argues that Indigenous participation in monastery building programs represents a continuation of ritualized labor practices established during the pre-Hispanic period via the colonial *coatequitl*.

<sup>410</sup> Crewe, "Building in the Shadow of Death," 514. Crewe argues that Indigenous participation in the *coatequitl* was politically motivated and as such was rooted in both tradition and ritual.

<sup>411</sup> Ricard, *The Spiritual Conquest of Mexico*, 36.

<sup>&</sup>lt;sup>406</sup> George Kubler, *Arquitectura mexicana del siglo XVI*, second edition, translated by Roberto de la Torre, Graciela de Garay y Miguel Ángel de Quevedo (Mexico City: Fondo de Cultura Económica: 2012), 188-190. Kubler asserts that the power of this "apostolic fervor" motivated participation in the construction of the fortress monasteries, but that this power diminished over time.

<sup>&</sup>lt;sup>407</sup> Christian Duverger, *Agua y fuego: arte sacro indígena de México en el siglo XVI* (Mexico City: Océano, 2003), 80–81. Christian Duverger suggests that Indigenous populations "spontaneously" participated in collective efforts to build the fortress monasteries as "laid out in their ancient laws." See also Roberto Meli, *Los conventos mexicanos del siglo XVI: construcción, ingeniería structural y conservación* (Mexico City: Porrúa, 2001), 58; Carlos Chanfón Olmos, *Historia de la arquitectura y el urbanismo mexicanos,* vol. 1, (Mexico City: Fondo de Cultura Económica, 1997), 139; Kubler, Vol. 1, *Mexican Architecture*, 136–139; and Crewe, "Building in the Shadow of Death," 514.

<sup>&</sup>lt;sup>408</sup> James Lockhart, *The Nahuas after the Conquest: A Social and Cultural History of the Indians of Central Mexico, Sixteenth through Eighteenth Centuries,* 1st ed. (Stanford, California: Stanford University Press, 1992), 55. See also Crewe, "Building in the Shadow of Death," 514.

like this, for the Spanish, was demonstrative of the completeness of Christian spiritual conquest, which was a primary aim of Spanish imperialism.<sup>412</sup> However, merely constructing such an edifice atop a *teocalli* would not have diminished its resonance or importance from the perspective of its Indigenous creators. Rather, it would have connected this new colonial structure directly with Indigenous ritual practices<sup>413</sup> and their associations with power, sacredness, and identity.<sup>414</sup>

The techniques used to build the fortress monasteries point to a heavy reliance on the labor and skill of Indigenous craftsmen as well. Although some colonial chroniclers, like Motolinía who referred to Indigenous craftsmen as "like monkeys,"<sup>415</sup> imply that Indigenous

<sup>413</sup> Wake, *Framing the Sacred*, 86-89. Wake argues that Indigenous participation in the construction process of structures like these was motivated by "ritual and image" as the basis of religious expression wherein church building and the persistence of Indigenous religious practices were linked.

<sup>414</sup> Crewe, "Building in the Shadow of Death," 504.

<sup>&</sup>lt;sup>412</sup> Spiritual conquest and the notion that it was the duty of Christian emperors to uphold and protect Christendom by creating congregations of the faithful were referenced as a justification for Spanish territorial acquisitions across the world. Anthony Pagden, *Lords of All the World: Ideologies of Empire in Spain, Britain and France c. 1500-1800* (New Haven and London: Yale University Press, 1995), 30-31. The link between Spanish imperialism and the expansion of Christendom is evident in numerous primary source communications from the colonial period, including the instructions given by Diego Velázquez, the governor of Cuba, to Cortés as he embarked for Mexico in the early sixteenth century. Velázquez writes: "Bear in mind from the beginning that the first aim of your expedition is to serve God and spread the Christian Faith. You must not, therefore, permit any blasphemy or lewdness of any kind, and all who violate this injunction should be publicly admonished and punished. It has been said that crosses have been found in that country. Their significance must be ascertained. The religion of the natives, if they have one, must again be studied and a detailed account of it made. Finally, you must neglect no opportunity to spread the knowledge of the True Faith and the Church of God among those people who dwell in darkness." Robert Ricard, *The Spiritual Conquest of Mexico*, 1966), 16. As Velázquez makes clear, at least in the written record, the primary purpose of Spanish expansion into Mexico was the promulgation of Catholicism, through a militant Christianity that sought to imbue the "True Faith" into those populations who had not yet become enlightened.

<sup>&</sup>lt;sup>415</sup> Toribio Motolinía, *Memoriales e historia de los indios de la Nueva España* (Madrid: Ediciones Atlas, 1970), 104. Some modern scholarship also refers to Indigenous creators as copyists more so that creators. Kubler takes the notion of Indigenous creators as copyists in a strongly Eurocentric direction in referring to a presumed lack of skill among Indigenous artisans resulting in the creation of "folk art" in "On the Colonial Extinction," 68. Kubler is not alone in this characterization. Martin Soria, a frequent collaborator with Kubler, also furthers the notion that the art and architecture of Spain and Portugal was superior to the "folk art" created in the American colonies, that he characterizes as "far below the best European standards in George Kubler and Martin Soria, *Art and Architecture in Spain and Portugal and their American Dominions: 1500-1800* (Baltimore, Maryland: Penguin Books Ltd., 1969), 5. Similarly, Diego Angulo Iñíguez, writing in the mid-twentieth century, like Kubler and Soria, focused on the influence of European prints on the painting produced in colonial Mexico, articulating the considerable impact that these imported works had on art produced in New Spain in a way that implies their superiority to what were

artists and craftsmen merely copied the European architectural models and building techniques provided to them, it is incumbent upon modern scholarship, particularly when adopting a decolonial view, to acknowledge the importance of Indigenous artistic and structural contributions to these works as far more than mere copies, particularly in instances where Indigenous construction techniques are readily apparent. This is all the more the case given that few written sources from the sixteenth century exist that speak specifically to the exact roles of Indigenous creators in the construction process.

Indigenous techniques evident in the construction of San Miguel in Huejotzingo include the integration of chinked mortar and rubble-fill, which is visible in a partially dissected wall in the living quarters of the friars<sup>416</sup> (Fig. 4.7). As Reyes-Valerio has noted, it is also certain that the quarrying of the requisite stone used to execute construction techniques like that used at Huejotzingo was also the responsibility of Indigenous laborers.<sup>417</sup> This masonry technique and the use of locally-sourced stone, importantly, are the same kinds of materials and building techniques that were used in the construction of pre-Hispanic temples and other defensive structures,<sup>418</sup> many of which were located in very close proximity to the colonial fortress monasteries, including this one.<sup>419</sup>

characterized as poorer copies produced in the Americas. Cited in Peterson, *The Paradise Garden Murals*, 5. Peterson offers her own perspective on the success of artistic programs in colonial Mexico in noting that it "rested on the extraordinary ability of the native population as technicians and copyists," *The Paradise Garden Murals*, 21.

<sup>&</sup>lt;sup>416</sup> McAndrew, The Open-Air Churches of Sixteenth-Century Mexico, 191.

<sup>&</sup>lt;sup>417</sup> Constantino Reyes-Valerio, *El pintor de conventos: Los murales del siglo XVI en Nueva España* (Mexico City: Instituto Nacional de Antropología e Historia, 1989), 15-22.

<sup>&</sup>lt;sup>418</sup> McAndrew, *The Open-Air Churches of Sixteenth-Century Mexico*, 190-195. In this section, McAndrew discusses the survival of Indigenous building techniques following Spanish conquest.

<sup>&</sup>lt;sup>419</sup> The pre-Hispanic fortress of Cacaxtla is located less than ten miles from the population center at Huejotzingo where San Miguel is located.

Another Indigenous building technique involves the use of measuring ropes, which determined the proportion of ground plans, as depicted in an illustration from the pre-Hispanic *Codex Vindobonensis* (Fig. 4.8). Here, two Indigenous figures designated as "architects" are shown measuring with such a rope.<sup>420</sup> Colonial chroniclers also record the use of this Indigenous measuring technique by Motolinía in the construction of the *convento* in Puebla.<sup>421</sup> These colonial references to historical Indigenous building practices and techniques indicate not only the important role of Indigenous creators and knowledge in the construction of these colonial structures, but also the agency and potential sense of ownership that these creators had.

The adornment of the fortress monasteries, like San Miguel in Huejotzingo speak to Indigenous agency and negotiation of power as well. Their adornment was made possible through heavy reliance on Indigenous creators, who moved from site to site as needed, carving and painting the vast majority of these buildings.<sup>422</sup> Although some colonial chroniclers were reluctant to highlight the prominent role of Indigenous artisans, others, including the Franciscan friar Gerónimo de Mendieta, credit their work, emphasizing their role not just in construction but in the ornament, painting, and sculptural decoration of these edifices.<sup>423</sup> At Huejotzingo, certain

<sup>&</sup>lt;sup>420</sup> Edgerton, *Theaters of Conversion*, 49. Note that the symbol for "architects" designates this characterization in the codex. However, the term "architect" was not used in the same fashion in this period and context as it is in modern conventions. It represented more of a designer/builder or general contractor than an "architect" in the contemporary sense.

<sup>&</sup>lt;sup>421</sup> Agustín de Vetancurt, *Teatro mexicano, descripción breve de los sucesos ejemplares, históricos y religiosos del Nuevo Mundo de las Indias: Crónica de la Provincia del Santo Evangelico de México* (Mexico City: Editorial Porrúa, 1982), 48.

<sup>&</sup>lt;sup>422</sup> Edgerton, *Theaters of Conversion*, 50. Constantino Reyes-Valerio in *Arte Indocristiano* (1978) also discusses the important role of Indigenous creators in producing painting and sculpture that adorts these buildings. In his study, Reyes-Valerio coined the term *indocristiano* to describe the synthesis of Indigenous and European forms that derived from the colonial intersection.

<sup>&</sup>lt;sup>423</sup> Gerónimo de Mendieta, *Historia eclesiástica indiana*, vol. 3 (Mexico City: Ed: Hayhoe, 1945), 75. Mendieta asks "Who built the many churches and monasteries...if not the Indians with their own hands and sweat? And who provided the churches with ornaments...and everything else they have as equipment and decoration, if not these same Indians?"

paintings, carvings, and sculpture reveal the work of Indigenous creators. They speak to the ritualized militaristic nature of the site and are integral to my characterization of it as a hybrid space of negotiated power.

The Fransciscans dedicated the church at Huejotzingo to San Miguel, who traditionally served as the messenger of Christ to far-flung pagan lands.<sup>424</sup> His selection as patron saint indicates the shared importance of ritualized or sacred ritualized militarism for Europeans and Indigenous people. Saint Michael the archangel is frequently pictured as a soldier in service of the true religion, or Catholicism.<sup>425</sup> Thus, he represents a Euro-Christian conflation of religion and aspects of militarism. And, images of San Miguel as a warrior appear frequently in the interior murals at Huejotzingo, where he is most often depicted as a warrior of the Church, bearing a sword and framed by his large wings (Fig. 4.9).

As a winged warrior, San Miguel calls to mind the similarly feathered warriors of the pre-Hispanic tradition who are also directly associated with ritualized militarism. For example, bird warriors are prominently featured in pre-Hispanic militaristic iconography, including in the

<sup>&</sup>lt;sup>424</sup> Ibid., 95.

<sup>&</sup>lt;sup>425</sup> Spanish Golden Age poet Hernando de Acuña conveys the connection between Christianity and militarism in one of his most well-known sonnets. He states that the Spanish sought "one flock, one shepherd upon earth...one monarch, one empire, and one sword." It is clear in this and other descriptions from the same period that the expansion of Christianity and, in tandem, the expansion of the Spanish empire was an effort undertaken by an army or soldiers of Christ. This visual testament to militant Christianity and its potential resonance with Spanish colonial audiences is further reinforced by the characterization of missionaries as in service, akin to military service, of both Crown and Church. Further, missionaries in the Spanish Americas were often initially accompanied to their various outposts by small military escorts or garrisons. In pairing missionaries with soldiers, the Spanish conflated their purpose, further reinforcing the notion that religion and its associated rituals and militarism were intrinsically linked. Though the mendicant friars of each of the orders were primarily responsible for furthering the evangelizing mission of the Spanish Crown, the presence of soldiers alongside these missionaries could have been intended to convey a sort of threat of actual military action as a means of garnering Indigenous compliance in conversion and conquest. Fray Antonio Margil de Jesus, a Franciscan missionary in New Spain, speaks to this connection in his commentary, noting that "in no single kingdom, province or district of this vast American continent have the Indians been successfully reduced, without the gospel preaching and the blandishments of the missionaries being reinforced by the fear and the respect which the Indians have for the Spaniards." Boxer, The Church Militant and Iberian *Expansion*, 72-77. The implication here is that the Spanish soldiers who were not missionaries created a sense of fear that would have motivated Indigenous compliance with the evangelizing mission of the Franciscans.

murals of Cacaxtla, which is located just ten miles from the fortress monastery at Huejotzingo. There, in a mural at the north end of the acropolis (Fig. 4.10), a warrior with enlarged wings who is a weapon is depicted in a similar manner to the images of San Miguel at Huejotzingo. Just as San Miguel participated in battles on behalf of the Church, similarly the bird warrior at Cacaxtla participated in ritualized warfare on behalf of the pre-Hispanic state that governed this site and region. Thus, in the image of the winged warrior at Huejotzingo, we see overlapping notions of sacred warfare in Indigenous and Euro-Christian traditions. This meaningful correspondence speaks to the power of images to accommodate multiple readings and interpretations, which subsequently are the foundations for the cross-cultural hybridity evident not just in the architecture but also in the iconography of this monastery.

Other militaristic iconography at Huejotzingo would have resonated with European and Indigenous audiences too. Carved symbols of the Franciscan order, for example, including the Franciscan knotted cord (Fig. 4.11) and the crest of the Franciscans in the Americas (Fig. 4.12), appear on the four *posa* chapels. Despite their Christian subject matter, they resonate with Indigenous images linked to ritualistic militarism. The Franciscan knotted cord, for example, recalls the knotted cord imagery associated with ritualized sacrifice, particularly that enacted by warriors, observed in the murals Cacaxtla (Fig. 4.13). Similarly, the freestanding sculpture of the dismembered torso at Xochicalco bears a knotted cord across its shoulder (Fig. 4.14). Meanwhile, the Franciscan crest with the five stigmata visually resembles the sacrificial heart glyph in Cacaxtla's Battle Mural (Fig. 4.15 and 4.16) and its symbolic associations are notably similar to that of the pre-Hispanic sacrificial heart as well. The stigmata symbolizes the bodily wounds of the crucified Christ, the image *par excellence* of Christian sacrifice. In the context of

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pre-Hispanic Cacaxtla, and at other pre-Hispanic sites throughout Mesoamerica, the heart glyph signifies the ritual sacrifice of captives.

Additionally, the sculptural figures that appear on the corners on the roofs of Huejotzingo's *posa* chapels feature circular forms (Fig. 4.17) that I interpret to be visually reminiscent of the goggled eyewear sometimes pictured on warriors in pre-Hispanic imagery. Goggled eyewear has been identified at Teotihuacan and elsewhere in pre-Hispanic Mesoamerica and was frequently associated with warriors and the storm god, Tlaloc.<sup>426</sup> Drawing on this possible visual association, I argue that the appearance of these forms in the *posa* chapels at Huejotzingo could further establish a link between pre-Hispanic ritualized militarism and this ritualized militaristic colonial space. Visual references to similar circular forms are further evident in the sculptural adornments of the interior walls of the *atrio* (Fig. 4.18). And similar rounded shapes are found in stones that were used to build the interior of the *convento* (Fig. 4.19), which appear to have either been repurposed from the nearby pre-Hispanic sacred site or carved intentionally for inclusion in this colonial one.

If stone from a nearby pre-Hispanic site was reused in the construction of Huejotzingo, it would arguably speak to the agency of Indigenous creators who would have likely been responsible for including this particular motif. Additionally it would speak to the continued importance of material choices in both construction and artistic adornment. As noted previously, Indigenous understandings of the materiality of stone were largely misunderstood by Spanish, who mistakenly believed that the superimposition of Christian structures and forms would diminish or extinguish the power of Indigenous icons, imagery, and materials from the

<sup>&</sup>lt;sup>426</sup> The goggled eyewear of warriors and its associations, as identified by Taube in "The Turquoise Hearth: Fire, Self Sacrifice, and the Central Mexican Cult of War," 271, is discussed in more detail in chapter two of this study.

perspective of Indigenous viewers and creators.<sup>427</sup> Instead, the intentionality with which materials were reused and specific iconography was included in the ritual spaces built by Indigenous creators during the colonial period is a testament to their agency and subsequently their power in shaping these new colonial spaces and their associated meanings.

Although I interpret the rounded shapes found on the *posa* chapel roofs and along the *atrio* walls at Huejotzingo to be visual references to warriors, and subsequently to Tlaloc, thus establishing a connection between pre-Hispanic ritualized militarism and the ritual spaces of the fortress monasteries, there are concurrent relevant interpretations that should be noted here. For example, small circular blue-green stones known as *chalchihuitl* have a similar shape to the circular forms found at Huejotzingo and these stones appear frequently in ritual spaces in Mesoamerica.<sup>428</sup> Additionally, during the late fifteenth and early sixteenth centuries, *chalchihuitl* were among the most common forms of tribute paid to the Mexica rulers in Tenochtitlan, including Ahuitzotl and Moctezuma. The value of these stones is noted by colonial chroniclers, including Sahagún, who emphasizes their preciousness and their use in the attire of noblemen in Book XI of the *Florentine Codex*.<sup>429</sup> They are also noted by Juan de Villagutierre Sotomayor, who observes the presence of these precious stones inside of temples.<sup>430</sup>

*Chalchihuitl* motifs were frequently embedded in the exterior walls of pre-Hispanic palaces, including for example the *tecpan* (royal palace) at Tlayacapan in Morelos and in the rear

<sup>&</sup>lt;sup>427</sup> Dean and Leibsohn, "Scorned Subjects in Colonial Objects," 424-425. As noted above, Dean and Leibsohn articulate the importance of acknowledging the presence associated with materials like stone in Mesoamerica and the extension thereof into the colonial period.

<sup>&</sup>lt;sup>428</sup> Zelia Nuttall, "Chalchihuitl in Ancient Mexico," in American Anthropologist, 3 no. 2 (April 1901), 227.

<sup>&</sup>lt;sup>429</sup> Ibid., 228-229.

<sup>&</sup>lt;sup>430</sup> E.G. Squier, *Observations on the Chalchihuitl of Mexico and Central America* (New York: Annals of the Lyceum of Natural History of New York, 1896) 7.

wall of the Templo Mayor at Tlatelolco, for example.<sup>431</sup> Renderings of *chalchihuitl* are also evident in the depiction of the palace of Moctezuma included in the *Codex Mendoza* (Fig. 4.20).<sup>432</sup> The practice of embedding these precious stones in the façades of important edifices continued into the colonial period, with *chalchihuitl* appearing in and on the walls of the sacred spaces that took the place of pre-Hispanic temples too.<sup>433</sup> Given this practice, it is possible that the circular imagery found on the *posa* chapels at Huejotzingo is a visual reference to these sacred stones, which like the interpretation thereof as the goggled eyewear of warriors, points to important iconographic continuity between the pre-Hispanic period and the colonial period specific to notions of "preciousness" within sacred spaces.

Interpreting the circular forms found on the rooflines and walls at Huejotzingo as *chalchihuitl* does not preclude their association with ritualized warfare in Mesoamerica and the continuation of its importance in the colonial context particularly as it relates to the sacred spaces of the fortress monasteries. The association of "preciousness" with literal and symbolic warfare is referenced, for example in the frieze at Xochicalco where the precious *kan* is connected to a visual narrative of warfare, conquest, and tribute as paid by various conquered polities. The *chalchihuitl* were also precious and were among the most highly-prized forms of tribute paid to the Mexica emperors from across the empire they established and maintained through the practice of literal and symbolic warfare.<sup>434</sup> Thus, whether we interpret the rounded sculptural forms found at Huejotzingo to be references to pre-Hispanic warriors or to *chalchihuitl*, there

<sup>&</sup>lt;sup>431</sup> Robert H. Jackson, "Introduction," *Evangelization and Cultural Conflict in Colonial Mexico*, ed. Robert H. Jackson (New Castle, United Kingdom: Cambridge Scholars Publishing, 2014) xxii.

<sup>&</sup>lt;sup>432</sup> *Codex Mendoza,* the Mexican Manuscript Known as the Collection of Mendoza and preserved in the Bodleian Library (Oxford: Waterlow & Sons, Limited, 1938) folio 69r.

<sup>&</sup>lt;sup>433</sup> Ibid., xxiii.

<sup>&</sup>lt;sup>434</sup> Nuttall, 228-229.

exists a connection to the ritualized practice of warfare and its association with sacred spaces that importantly continues into the colonial period.

Other evidence of the association between the ritualized space of the fortress monasteries and pre-Hispanic temples can be found in the shape of the pierced merlons that adorn the roofline of the basilica at Huejotzingo. These forms are strikingly similar to that of pre-Hispanic ritual pyramids found in abundance across this part of Central Mexico (Fig. 4.21). Thus, again, in the architectural and iconographic adornment of Huejotzingo, we find testaments to the hybridity of this space wherein Euro-Christian forms and iconography were actively combined with those that would have been familiar to Indigenous creators and viewers.<sup>435</sup>

Beyond simply acknowledging the hybridity of these motifs, it is imperative that we consider the extent to which this hybridity speaks to decolonial possibilities wherein the assumed power structures negotiated between the European mendicants who commissioned this fortress monastery and the Indigenous creators who built it are challenged. If we adopt a Eurocentric perspective, like that furthered by Kubler, Soria, and others,<sup>436</sup> we could interpret the visual similarities between the pre-Hispanic glyph of a sacrificial heart and the stigmata included in the Franciscan crest as a mere coincidence. If we interpret this hybridity through Edgerton's notion of "expedient selection,"<sup>437</sup> the similarities between renderings of San Miguel and the bird warriors of Cacaxtla and elsewhere across Mesoamerica are best understood as useful visual and

<sup>&</sup>lt;sup>435</sup> Additional iconography of interest that warrants further study can be found along the interior *atrio* walls at Huejotzingo. Here, several visages of what were likely understood in the Christian context to be angels emerge from the wall encircled by rings of what appear to be feathers. These sculptural renderings strikingly recall pre-Hispanic images of Quetzalcoatl, the feathered serpent who is also directly associated with ritualized warfare, like the sculptural renderings that emerge from Teotihuacan's Temple of the Feathered Serpent. Thus, it is possible that this sculptural adornment at Huejotzingo is another conflation of iconography associated with ritual and militarism. As such, it too is best understood as an example of colonial hybridity and subsequently as particularly relevant to understanding the colonial condition in which it was created.

<sup>&</sup>lt;sup>436</sup> See discussion of Kubler, Soria, and others in this chapter as well as the introductory chapter of this study.

<sup>&</sup>lt;sup>437</sup> Edgerton, *Theaters of Conversion*, 2.

symbolic similarities that benefited the mendicant evangelical mission in a power structure that favors European dominance. Both of these approaches center Europe and suggest that Indigenous creation in this context is devoid of any sort of notable creative agency.

However, in applying a decolonial lens, I offer a new interpretation of this iconography. Instead of seeing visual and symbolic similarities as incidental, I argue that through these complex hybrid forms, Indigenous creators disrupted Eurocentric power structures that are often singularly assigned to works of art and architecture created in colonial contexts. If we acknowledge that the iconographic choices of Indigenous creators were intentional at Huejotzingo, and they specifically included forms and materials that would have resonated with Indigenous audiences for their visual and symbolic similarities to those associated with ritualized militarism in the pre-Hispanic past, we can interpret this hybridity as strategic. This interpretation is in keeping with the understanding of hybridity articulated by Liebmann and Bhabha.<sup>438</sup> Adopting this interpretation also allows us to view the architecture and iconography at Huejotzingo as a testament to Indigenous agency and power.

#### San Salvador, Malinalco

Similar interpretive possibilities apply to the architecture and iconography of the Augustinian convent of San Salvador in Malinalco. Like Huejotzingo, it serves as a geographic and temporal bridge between the pre-Hispanic and colonial periods. Structure I or the Temple of the Eagle Warriors was still under construction and in use when the Spanish invaded and this edifice is located just one mile from the site where San Salvador would later be built. Therefore, it is plausible to assume that some of the Indigenous creators charged with constructing the

<sup>&</sup>lt;sup>438</sup> Liebmann, 30-31.

pre-Hispanic fortified temple and the defensive zone at Malinalco or their descendents may also have been conscripted into the construction of the fortress monastery.<sup>439</sup> It is also reasonable to suggest that the visual elements that allude to ritualized militarism at San Salvador likely would have been conceptually familiar to a local Indigenous population that for centuries elevated and venerated the link between militarism and ritual.

Construction of San Salvador began in 1540 with the building of an impermanent open chapel made of rough masonry on the site. The more permanent Augustinian *convento* that still stands today was completed in the 1570s.<sup>440</sup> Across its thirty year construction period, several militaristic architectural features, similar to those found at Huejotzingo, were integrated into its design. For example, the exterior façade of the church is characterized by a severe planarity and the entry is framed by a rectangular tower and an aggressively angled adjacent wall that lend the building a stark and uninviting appearance, much like that of a standalone fortification (Fig. 4.22). Additionally, San Salvador is located in close proximity to the ritualized militaristic Indigenous Temple of the Eagle Warriors or Structure I. In choosing this site, the Augustinians presumably intended to send a message about the power of Spanish Christianity and its dominance over Indigenous belief systems.

Examples of colonial hybridity are evident on both the exterior and interior of San Salvador. For example, the exterior arcade of the monastery is adorned, on the side that faces the *atrio*, with a series of twenty four sculptural medallions in high relief (Fig. 4.23). These medallions feature Christian insignia and notably also the pre-Hispanic glyph of bound grass or

<sup>&</sup>lt;sup>439</sup> Peterson, *The Paradise Garden Murals*, 19. Peterson notes that Indigenous labor was responsible for the building and maintenance of Spanish monasteries both in the form of voluntary labor as well as via forced labor drafts.

<sup>&</sup>lt;sup>440</sup> Ibid., 22-23. A towered façade was added to the monastery and the original open chapel was enclosed during the 1570s renovation. A *portería* accessible from the outside of the monastery through a seven-arched arcade was added at this time as well.

*malinalli*, representing the pre-Hispanic place name for Malinalco<sup>441</sup> (Fig. 4.24). *Malinalli* was also symbolically and practically linked to the twisted rope associated with captives acquired through ritualized warfare in the pre-Hispanic context.<sup>442</sup> Other examples of iconographic hybridity can be found in the atrial cross once located on the patio at Malinalco, which was carved to include inlaid obsidian in the form of a flower with a crucifix at its heart from which a stream of blood drips.<sup>443</sup> For Spanish Christian viewers, this imagery references the blood and sacrifice of Christ, but for Indigenous viewers, imagery of blood is iconographically linked to pre-Hispanic renderings of sacrificial hearts and the human sacrifice that was directly associated with ritualized militarism across Mesoamerica, including in Malinalco.<sup>444</sup>

The multivalence of San Salvador's adornment and its consequent association with issues of agency and power is particularly notable in the interior cloister murals where, as explored in depth by Peterson, a profusion of images of native plants, birds, and insects offer visual testaments to the intersection of Christian symbolism and pre-Hispanic iconography.<sup>445</sup> Building on Peterson's interpretation, I argue that many of the images of native flora and fauna found in these stucco murals, which were produced between the early 1560s and 1580s by Indigenous

<sup>&</sup>lt;sup>441</sup> Ibid., 95-96.

<sup>&</sup>lt;sup>442</sup> Hajovsky, On the Lips of Others, 33.

<sup>&</sup>lt;sup>443</sup> Edgerton, *Theaters of Conversion*, 213.

<sup>&</sup>lt;sup>444</sup> Kubler would disagree with the characterization of the iconography of Malinalco's atrial cross as "hybrid." Instead, he would identify it as a "transplant" or an isolated, but important, aspect of Indigenous tradition that was adopted into colonial behavior patterns without significant modification or development. As an example of a "transplant," Kubler highlights the inclusion of pre-Hispanic symbols in colonial art, pointing specifically to the use of obsidian in colonial sculpture. He notes that the stone atrial crosses found in Michoacán and Tepeapulco bear inserts of obsidian symbolic of the heart at the intersection of the arms of the cross. Specifically, he holds that these crosses reinforce only Christian meanings associated with the crucifixion of Christ. Kubler, "On the Colonial Extinction," 68-71. If we apply Kubler's approach in interpreting the monastery and murals at San Salvador, any connection or resemblance to Indigenous motifs would be deemed absent of any significant meaning. Peterson, by contrast, puts forth a strong argument for recognizing Indigenous creative agency as well as the multivalency of the garden murals. My work draws on this foundation.

<sup>&</sup>lt;sup>445</sup> Peterson, *The Paradise Garden Murals*, 83-123.

artists,<sup>446</sup> are important visual indicators of the ongoing importance of ritualized militarism, the continuity of the iconographic tradition associated therewith, and its implications for the ongoing negotiation of power taking place in the early colonial period as well.

Among the more prominent, polysemic images found inside San Salvador are large circular medallions that feature the IHS symbol for Jesus Savior of Humankind (Fig. 4.25) and which concurrently resemble the shape of Indigenous warrior shields.<sup>447</sup> Not only do these medallions resemble elements of the costume of pre-Hispanic warriors, but they also feature the image of the order of St. Augustine, which consists of a heart pierced by three darts (Fig. 4.26). This heart and its connection to weapons of war specifically recalls the iconography of sacrificial hearts evident at Huejotzingo as well as in structures and murals created across pre-Hispanic Mesoamerica.

The connection of sacrificial hearts to blood and subsequently ritualized militarism is reiterated in the duality of meaning associated with the grapevines that are also prominently featured in the murals of San Salvador (Fig. 4.27). For the Indigenous populations of Malinalco in the sixteenth century, the grape plant was valued for its medicinal properties and was associated with various ritual practices.<sup>448</sup> From a Euro-Christian perspective, grapes are associated with wine, which is used as a metaphor for the blood of Christ via its role in the Eucharist. The blood of Christ, as alluded to in the murals at San Salvador, is further symbolic of self-sacrifice and specifically that of Christ as the savior of Christian peoples. This meaning was likely conveyed to the Indigenous viewers who were converting to Christianity. It is also likely that references to blood and its association with self-sacrifice here recalled for these viewers the

<sup>&</sup>lt;sup>446</sup> Edgerton, *Theaters of Conversion*, 213.

<sup>&</sup>lt;sup>447</sup> Ibid., 217.

<sup>&</sup>lt;sup>448</sup> Peterson, *The Paradise Garden Murals.*, 96.

ritual self-sacrificial practice associated with militarism that was still occurring in the early sixteenth century at Structure I. There, holes atop the temple stairs to the temple and in the cella were used specifically to capture warriors' blood in self-sacrifice.

Additionally, the murals in vaults at San Salvador include references to plants and animals that were also associated with pre-Hispanic warfare and ritual. For example, the inclusion of renderings of the red and yellow spotted flower called *oceloxochitl*, also known as the "flower of the ocelot or jaguar," is important here because of the jaguar's association with high status and military prowess not just in nearby Structure I, but also across Mesoamerica (Fig. 4.28).<sup>449</sup> Similarly, the inclusion of renderings of butterflies in these murals speaks to the continuity of this iconography and its symbolic association with the souls of warriors from Teotihuacan to Xochicalco and Tenochtitlan.<sup>450</sup> In the Christian context, the butterfly is also associated with the souls of the dead and is connected to the idea of resurrection through physical transformation.<sup>451</sup> Given the similarities between this Christian reading and pre-Hispanic understandings of butterfly iconography as associated with ritualized militarism, the renderings of this creature inside San Salvador are best understood as testaments to the hybridity of this space.

The multiplicity of interpretive possibilities at San Salvador extend to the renderings of several hummingbirds in the murals (Fig. 4.29). In pre-Hispanic Mexica mythology, hummingbirds were associated with hibernation as well as resurrection or rejuvenation linked to

<sup>&</sup>lt;sup>449</sup> Ibid., 101.

<sup>&</sup>lt;sup>450</sup> As discussed in chapter two, butterflies are included in the murals of Teotihuacan where they represent the souls of warriors in a rendering of a garden-like paradise. Butterflies are also featured in sculptural elements in fortified Xochicalco, specifically in the Animal Ramp. And, they are alluded to in the characterization of the Templo Mayor as the Flower World that was home to the souls of warriors in the form of butterflies too.

<sup>&</sup>lt;sup>451</sup> Ibid., 110.

the changing of the seasons. The idea of resurrection was connected to the sun's daily rebirth or rising,<sup>452</sup> which was a process thought to be accompanied by the souls of deceased warriors who were specifically devoted to maintaining the motion of the sun.<sup>453</sup> Hummingbirds also reference the Mexica god of war, Huitzilopochtli, or "hummingbird on the left," further establishing a connection between this iconography and pre-Hispanic ritualized militarism. Importantly, here again, there is considerable parity between Christian associations of hummingbirds with paradise gardens and the resurrection and the Indigenous meaning assigned to these birds.

Several birds of prey, including falcons and eagle-hawks, also appear in the Malinalco murals (Fig. 4.30). As carnivores and hunters, falcons and eagle-hawks were admired by the Mexica and, according to Peterson, their consumption of blood was associated with the need to provide blood sacrifice to the gods, including the god of war, Huitzilopotchli.<sup>454</sup> Eagles were also closely associated with warriors, representing a high ranking class comparable to the jaguar class of warriors. At Structure I, the importance of eagles is memorialized in the sculptural eagle thrones that are carved into the inner sanctum of the temple, which specifically celebrate the link between war and ritual. Colonial chronicler Durán also recorded the importance of hawk feathers in the funeral rites of Indigenous fallen warriors.<sup>455</sup> In Christianity, eagles and hawks are associated with St. John the Evangelist, the resurrection of Christ, and in some cases the idea that Christ bears the souls of the faithful heavenward.<sup>456</sup> Arguably, this association is quite similar in

<sup>&</sup>lt;sup>452</sup> Ibid., 112.

<sup>&</sup>lt;sup>453</sup> Maffie, 232.

<sup>&</sup>lt;sup>454</sup> Peterson, *The Paradise Garden Murals*, 116.

<sup>&</sup>lt;sup>455</sup> Durán, 1964, 172. In his sixteenth-century account, Durán notes that four days after these rites were administered, images of fallen warriors were carved from wood and these effigies were attached to hawk feathers as a means of encouraging their ability to fly with the sun each day.

<sup>&</sup>lt;sup>456</sup> Peterson, *The Paradise Garden Murals*, 116.

concept to the pre-Hispanic belief that feathers from these specific birds encourage the flight of the souls of deceased warriors.

Although these birds are associated with the transport of souls, the murals at San Salvador seem not to associate these birds so much with this purpose and instead focus more on the predatory nature of them. As Peterson points out in her analysis,<sup>457</sup> the manner in which eagle-hawks and falcons are depicted in the Malinalco murals seems to highlight their lust for blood and carnivorous nature far more than it points to their function in soul-bearing. Thus, in this case, the iconography can also accommodate pre-Hispanic associations between the fierce nature of these birds and their relation to warfare and ritual blood sacrifice.

The paradise garden that is depicted on the interior walls of the cloister at Malinalco is certainly an allusion to Christian notions of earthly paradise. However, it can also be interpreted as a depiction of the cosmically significant garden found in the House of the Sun or *Tonatiuh Ilhuicatl* in pre-Hispanic traditions, which was specifically the celestial home of deceased warriors, sacrificial victims, and women who died in childbirth,<sup>458</sup> who were frequently likened to warriors as well. That a mural depicting this garden paradise home to warriors is embedded within and on the walls of a Christian religious edifice that also has an architecturally militaristic bearing is again strikingly similar to the iconographic link between militarism and ritual evident in pre-Hispanic spaces like Structure I and in older sites including Cacaxtla, Xochicalco, and Teotihuacan.

The garden murals at San Salvador could further be interpreted as visual references to the gardens maintained by the ruling warrior class that was responsible for expanding the Mexica

<sup>457</sup> Ibid., 116.

<sup>&</sup>lt;sup>458</sup> Ibid., 133.

empire prior to the Spanish invasion. As Peterson notes, these aristocratic gardens were planted with various plants brought in tribute from far-flung territories across the empire. The plants, therefore, are symbolic of the extent of Mexica conquest and the power it exerted over other settlements.<sup>459</sup> If we understand the garden mural, in part, as an allusion to Mexica tribute gardens, it bears noting that tribute was an outcome of military conquest, as the sculptural frieze of the Temple of the Feathered Serpent at Xochicalco makes evident. Thus, the murals of San Salvador are better understood not just as Christian depictions of paradise gardens, but also as visual linkages to Mexica ritualized militarism wherein some forms of tribute were used in ritual sacrifice.

Taking into account Indigenous artistic agency and cosmology, the Malinalco murals' connection to ritualized warfare and sacrifice becomes more evident to the modern viewer and as such illuminates the critical hybridity of these images and the space in which they are found. As at Huejotzingo, the participation and subsequent agency of Indigenous creators at San Salvador cannot be overlooked. Although, as has been shown here, the iconography of the cloister murals can be read as testaments to Christian teachings, they are much more than Spanish-Catholic didactic images intended to further the evangelizing objectives of the Augustians. They are instead multivalent and complex indicators of the conflation of Indigenous and European traditions that occurred in this space and as such, they are powerful visual testaments to the complexities of the colonial period in which they were created.

<sup>459</sup> Ibid., 126.

### San Miguel, Ixmiquilpan

Although the murals at Malinalco provide allusions to or symbolic links between flora and fauna and Christian as well as Indigenous beliefs associated with ritualized militarism, in some instances the connection between ritual space and militarism inside the fortress monasteries is even more literal. For example, at San Miguel, Ixmiquilpan in Hidalgo, the walls of the nave are adorned with murals that depict a battle in action. Like its contemporaries, this fortress monastery boasts a battlemented façade, complete with a square tower and the stark planarity common to the walls of such edifices as well as of fortresses of Early Modern Europe (Fig. 4.31). Built between 1550 and the early 1560s, San Miguel at Ixmiquilpan was planned by Fray Andrés de Mata.<sup>460</sup> And, the fortress style architecture of this monastery is particularly notable given that the populace of Ixmiquilpan allied with the Spanish in a series of armed conflicts that took place against Indigenous Chichimecs from 1550 to 1590, often termed the "Chichimec Wars."<sup>461</sup>

This historical context is particularly relevant not just to the exterior fortress-style architecture of this building but most notably because the nave of this church is adorned with a complex battle scene, which includes images of captives along the north wall and warriors in action along each side of the nave (Fig. 4.32). Like the Indigenous warriors of the pre-Hispanic past, the figures in Ixmiquilpan's battle mural wear jaguar skins and are armed with *macanas*, or obsidian-edged slashing swords, which were common weapons in pre-Hispanic Mesoamerica.<sup>462</sup> Their battle costumes are strikingly reminiscent of those depicted in the Battle Mural at Cacaxtla.

<sup>&</sup>lt;sup>460</sup> De Mata was also responsible for the design of the Augustinian convent at Actopan, which similarly reflects the militaristic style that was characteristic of the Mexican colonial monasteries of this period. Edgerton, *Theaters of Conversion*, 165.

<sup>&</sup>lt;sup>461</sup> Donna Pierce, "The Sixteenth-Century Nave Frescoes in the Augustinian Mission Church at Ixmiquilpan, Hidalgo, Mexico." Ph.D. dissertation, University of New Mexico, Albuquerque, 1987: 1-8.

<sup>&</sup>lt;sup>462</sup> Edgerton, *Theaters of Conversion*, 167.

At Ixmiquilpan, the enemies under attack are depicted half-naked in a visual convention common in pre-Hispanic mural renderings of those who are being defeated in battle. The battle scene is notably violent, with severed limbs appearing along the mural as it traverses the space of the nave. Trophy heads, of the recently beheaded, are held aloft and hang from the belts of the triumphant warriors as well (Fig. 4.33). The blatant visual violence of the mural at Ixmiquilpan is reminiscent of the explicit violence evident in the iconography of Cacaxtla's Battle Mural, where combatants are depicted suffering great physical brutality and the severed limbs of enemies are worn as war trophies.

Several different interpretations of this scene have been offered by scholars of the colonial period. Donna Pierce, for example, argues that the battle mural here depicts aspects of the Chichimec War, in which the population of Ixmiquilpan participated.<sup>463</sup> This interpretation has, however, been questioned by several other scholars, each of whom offers differing interpretations of the iconography at Ixmiquilpan.<sup>464</sup> Oliver Debroise, for example, suggests the scene depicts a commemorative *danza de mecos* that tells a heroic tale of Otomí participation in the Chichimec War.<sup>465</sup> Wake, by contrast, identifies the warriors as Aztecs and suggests that the scene is a visual rendering of a commemorative Nahuatl song about their heroism associated

<sup>&</sup>lt;sup>463</sup> Pierce, "The Sixteenth-Century Nave Frescoes," 7.

<sup>&</sup>lt;sup>464</sup> As noted by Caleb Zuñiga in his "Constructing Relational Identities: The Trope of the Chichimec in New Spain, 1526-1653," MA Thesis, University of Colorado, Boulder (2013), 37, there are several scholars, including himself, as well as Debroise (1994), 155; Abel-Turbey (1996), 17); Wake (2000), 100; and Lara (2004), 88, all of whom Zuñiga cites, who disagree with Pierce's interpretation.

<sup>&</sup>lt;sup>465</sup> This interpretation is referenced by Zuñiga, "Constructing Relational Identities," 38. It is also found in Oliver, Debroise, "Imaginario fronterizo/identidades en tránsito: El caso de las murales de San Miguel Ixmiquilpan," in *Arte, historia, e identidad en América, visiones comparativas: XVII coloquio international de historia del arte,* edited by Gustavo Curiel Méndez, Renáto González Mello, and Juana Gutiérrez Haces (Mexico: UNAM, Instituto de Investigaciones Estéticas, 1994), 159.

with guarding the House of the Sun.<sup>466</sup> She further argues that the mural's location inside this monastery creates an alignment between Indigenous understandings of penance and renewal and Christian associations with the coming of Christ.<sup>467</sup> Edgerton argues the conflict between combatants could be interpreted as an allegorical clash of good and evil.<sup>468</sup> And, Torres describes the scene as one reminiscent of classical *mêlées* wherein warriors are featured overpowering captives and where common Mesoamerican warfare practices are also featured.<sup>469</sup>

I argue that in any of these interpretations, we find another example of a hybrid iconographic program that testifies to the ongoing importance of ritualized militarism and its polysemy in the colonial context as well as another visual indication of the agency and power of Indigenous creators. Like the fortress monastery at Huejotzingo, Ixmiquilpan is dedicated to the warrior San Miguel, who is responsible for protecting Heaven from fallen angels according to the Book of Revelation.<sup>470</sup> The mural's jaguar warriors are undertaking a similar protective role as they defeat their enemies. Whether the battle depicted here is a literal one undertaken in the

<sup>&</sup>lt;sup>466</sup> Eleanor Wake, "Sacred Books and Sacred Songs from Former Days: Sourcing the Mural Paintings at San Miguel Arcángel Ixmiquilpan" *Estudios de cultura Náhuatl*, 31 (2000): 113-117. Zuñiga also cites Wake's interpretation in "Constructing Relational Identities," 38.

<sup>&</sup>lt;sup>467</sup> Wake "Sacred Books and Sacred Songs," 116-117. Zuñiga complicates Wake's interpretation by suggesting that the frescoes are a testament to the multicultural nature of Ixmiquilpan's populace, which could have interpreted the warriors depicted in the nave as those who shared their own cultural affiliations and as such read the scene as a testament to the parallels between Indigenous afterlife and Christian salvation. Zuñiga, "Constructing Relational Identities," 39-40.

<sup>&</sup>lt;sup>468</sup> Edgerton., *Theaters of Conversion*, 167.

<sup>&</sup>lt;sup>469</sup>Torres, *Military Ethos and Visual Culture in Post-Conquest Mexico*, 188-196. Torres notes similarities to Roman and Renaissance friezes. She also discusses the importance of acquiring captives as an outcome of warfare and its depiction in this mural via images of warriors grasping foes by the hair. She further argues that the scene is one in which Indigenous communities could relate their colonial experiences to past traditions specific to warfare.

<sup>&</sup>lt;sup>470</sup> Zuñiga, "Constructing Relational Identities," 38 and Wake, "Sacred Books and Sacred Songs," 116-117. Both authors note that San Miguel is responsible for the defense of Heaven in the Book of Revelation. Wake further argues that this parallels the guardianship of the House of the Sun undertaken by Aztec warriors thus establishing a link between the cosmic battles fought by these warriors and that undertaken by San Miguel.

Chichimec War as argued by Pierce,<sup>471</sup> a battle of good over evil as Edgerton has suggested,<sup>472</sup> a reference to the Indigenous past presented in a classical or Renaissance mode as argued by Torres,<sup>473</sup> or a metaphorical rendering of the Aztec warriors' guardianship of the House of the Sun that is paralleled in Christian teachings, as suggested by Wake,<sup>474</sup> it is undoubtedly demonstrative of the ongoing conflation of ritual and militarism. As such, it is another multivalent testament to the complexities of the cultural intersections its Indigenous creators were experiencing and to their agency in rendering those complexities within colonial spaces.

### Fortress Monasteries, Identity, and Place in the Colonial Context

The connection between agency, identity, and place is an important consideration here too. Indigenous creators were primarily responsible for the construction of the fortress monasteries and their artistic adornment. In many cases, this was accomplished through conscripted labor. Perhaps unsurprisingly, as Indigenous peoples were encouraged to adopt Christianity, some refused to participate in some manifestations of the imposed religion, like attending Catholic Mass. Yet, according to Wake, others embraced the construction of churches, including the fortress monasteries.<sup>475</sup> Additionally, Lockhart, in his research, also notes that some Indigenous communities took specific credit for and pride in building colonial churches, often

<sup>&</sup>lt;sup>471</sup> Pierce, "The Sixteenth Century Nave Frescoes," 1-8.

<sup>&</sup>lt;sup>472</sup> Edgerton, *Theaters of Conversion*, 167.

<sup>&</sup>lt;sup>473</sup> Torres, *Military Ethos and Visual Culture in Post-Conquest Mexico*, 196.

<sup>&</sup>lt;sup>474</sup> Wake, "Sacred Books and Sacred Songs from Former Days," 116-117.

<sup>&</sup>lt;sup>475</sup> Wake, *Framing the Sacred*, 84-87.

completing the construction of these monumental edifices in the very short time period of just six to seven months.<sup>476</sup>

Given this sense of ownership and agency in the construction of these structures, it is noteworthy that many of the pictorial renderings of the colonial *conventos* in the *Relaciones geográficas*, which were also produced by Indigenous creators,<sup>477</sup> not only feature their militaristic architectural character, but also highlight architectural allusions to pre-Hispanic ritual spaces where ritualized militarism was practiced. For example, in a 1579 map of Suchitepec, the central image of the church is enveloped in a jaguar skin (Fig. 4.34), which recalls a connection between jaguar warriors and sacred ritual spaces that is similar to that which we see in Structure I at Malinalco. This image of the jaguar skin-enveloped church at Suchitepec also contains several church glyphs that Wake characterizes as irregular and rounded caves (Fig. 4.35).<sup>478</sup> Caves, which were sacred spaces in the pre-Hispanic context, and their ongoing association with colonial religious edifices alludes to an important enduring connection between the pre-Hispanic ritual past and the colonial experience.

<sup>&</sup>lt;sup>476</sup> James Lockhart, *The Nahuas after the Conquest*, 257.

<sup>&</sup>lt;sup>477</sup> Per Barbara Mundy, the *Relaciones geográficas* are a collection of maps that were painted around 1580 by local Indigenous artists in colonial Mexico. Each features a different city, village or province. These maps were created in response to a fifty item questionnaire circulated across Spain as well as its American colonies at the request of King Philip II. The replies to the questionnaire produced in the Americas were termed "*Relaciones geográficas*" because they depict histories of Indigenous peoples as well as geographies. These collected maps were intended to inform Spanish-commissioned cartographer Juan López de Velasco's creation of a map of the "New World." They also provide critical insight into Indigenous conceptualization of place in the early colonial period. Barbara E. Mundy in The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas (Chicago and London: The University of Chicago Press, 1996) xviii, 2, 22, 67. According to Albert A. Palacios and the information published by LLILAS Benson Latin American Studies and Collections at the University of Texas, Austin, the Relaciones geográficas were created between 1579 and 1585 in response to King Philip II's order to prepare a general description of Spain's territories in the Indies. This description was to be informed by the responses to a questionnaire that was completed by Indigenous respondents. The *Relaciones* provide historical. cultural, and geographic information on colonial Mexico and its peoples during the sixteenth century. Albert A. Palacios, "Relaciones geográficas," Benson Latin American Collection, LLILAS Benson Latin American Students and Collections, The University of Texas at Austin. Updated October 5, 2020. https://ut-austin.maps.arcgis.com/apps/Cascade/index.html?appid=b43ddf4e011646a58404162d4cddc1c8.

<sup>&</sup>lt;sup>478</sup> Wake, "Sacred Books and Sacred Songs from Former Days," 116.

Further, well into the 1550s, Christian churches and monasteries continued to be referred to as *teocallis* in written records. For example, records appearing in the Indian *cabildo* (municipal council) of Tlaxcala in 1553 refer to monasteries as *teocallis*, using this Nahuatl term as a synonym of *yglesia*.<sup>479</sup> This terminology indicates that the association of pre-Hispanic ritual sites with colonial religious edifices continued, despite the extirpation and conversion efforts of the clergy, well into the sixteenth century. This continuity is further supported by the continued use of the pre-Hispanic temple naming system to describe churches in the decades after conquest.<sup>480</sup> For example, the 1580 *relación geográfica* of Huexotla in Hidalgo describes its Augustinian convent as a *teopa[n]cali huexutla*.<sup>481</sup> The conflation of this terminology speaks to the hybridity of these edifices, not just in form, but in concept as well. It also connects to the sense of ownership or identity with which these fortress monasteries were imbued.

Further bolstering the argument for associating the fortress monasteries with issues of identity, is understanding the *altepetl* to be a symbol of both sovereignty and identity.<sup>482</sup> *Altepetls*, in the Nahua context, were local, ethnically-based political entities. Tenochtitlan and Malinalco are examples of *altepetls* that the Spanish encountered upon their invasion in 1519. Arguably, older settlements like Cacaxtla, Xochicalco, and Teotihuacan, can also be characterized as *altepetls* or *altepetl*-like too, in that they were localized political entities that are believed to have been ethnically-based. In understanding these settlements to be *altepetls* or *altepetl-*like, we can characterize them as spaces and symbols of sovereignty and communal identity. The fortification of sites like Cacaxtla, Xochicalco, and others can thus be understood as

<sup>&</sup>lt;sup>479</sup> *The Tlaxcalan Actas: A Compendium of the Records of the Cabildo of Tlaxcala (1545-1627),* eds. James Lockhart, Frances Berdan and Arthur J.O. Anderson (Salt Lake City: University of Utah Press, 1986) 90, 123-124.

<sup>&</sup>lt;sup>480</sup> Wake, "Sacred Books and Sacred Songs from Former Days," 115.

<sup>&</sup>lt;sup>481</sup> Ibid., 116.

<sup>&</sup>lt;sup>482</sup> Lockhart, Nahuas After the Conquest, 206.

having served a practical defensive purpose in protecting the sovereignty of the settlement as well as defending its place-based identity. That these defensive features were, more often than not, coupled with ritual purpose makes drawing a through-line to understanding the *conventos*, which were also militaristic and ritual spaces, as central to the ongoing notion of the *altepetl* as symbolic of sovereignty and identity in the colonial period possible as well. As Lockhart argues:

the *convento* or parish church 'belonged to the *altepetl*' even before it belonged to friars, priests, or to Christendom itself. Even as these churches materially marked the presence of Christianity in the New World, they were even more immediately symbols of the unshakable persistence of local Indigenous identity.<sup>483</sup>

Thus, we can read the fortress monasteries that occupied the heart of the colonial *altepetls* through a decolonial lens that recognizes their hybridity and subsequently the important role they played in defining place-based identity in the colonial context.

Although the writings of Indigenous authors do not specifically account for the associations between *altepetls* and place-based identity, the ongoing use of the Indigenous pictograph for *altepetl*<sup>484</sup> in the *Relaciones geográficas* is an indication that the association continued long into the colonial period. As Barbara Mundy articulates, the *Relaciones geográficas* are examples of the ways in which Indigenous elites shaped their new colonial realities via depictions of their communities.<sup>485</sup> The *relaciones* frequently feature Indigenous symbols and visual conventions alongside depictions of what might be described as "European-looking buildings," though this description should not be understood as the sole applicable perspective for understanding these buildings.

<sup>&</sup>lt;sup>483</sup> Ibid., 209-210.

<sup>&</sup>lt;sup>484</sup> *Altepetl* glyphs typically consist of a hill or mountain-like shape that is paired with various other visual place-based identifiers that are associated with a specific location. For example, the glyph of the *altepetl* of Tlacopan includes the hill or mountain-like shape paired with three rods. This corresponds to the place name for Tlacopan as "place in or on the rods."

<sup>&</sup>lt;sup>485</sup> Mundy, The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas, 67.

We see this, for example, in the 1581 *relación geográfica* map of Tetlistaca (Fig. 4.36). In this map, multiple *conventos*, including a large central one, are rendered with crenelated rooflines, a nod to their architectural militarism, and are juxtaposed directly with the symbol of the *altepetl*. As Indigenous elites created these maps, they actively shaped the perceptions of their communities for a primarily Spanish audience and the continued inclusion of *altepetl* glyphs alludes to an ongoing connection between the pre-Hispanic notion of sovereignty and identity that these places carried and thus to their fundamental hybridity. Further, that Indigenous elites used these maps to paint a picture of their communities specifically featuring their *conventos* speaks to the importance of these edifices as indicators of identity in the colonial context as well. That these edifices architecturally combine aspects of militarism, literally in the case of the Teslistaca example and figuratively in the jaguar skin-enveloped fortress monastery of Suchitepec, is further testament to the important and ongoing conflation of the pre-Hispanic past and colonial present in the place-based identity that developed in the sixteenth century.

In conclusion, this exploration of hybrid colonial architecture in the specific form of the fortress monastery is not intended to be an exhaustive study. Rather, my intent is to account for Indigenous perspectives so as to add to our understanding of militaristic architecture in ways that do not exclusively privilege European perspectives. By examining more fully the conflation of militarism and ritual in architectural spaces, which developed well before the Spanish invasion of Mesoamerica, I seek to decenter the focus on European forms and ideology in early colonial ritual spaces. In accounting for cross-cultural interpretations of ritualized militaristic architecture built in the sixteenth century, it is also my intention to disrupt the notion that the spaces of the fortress monasteries can solely and unilaterally be understood to be manifestations of Spanish power. These ritualized militaristic spaces and the iconography that adorns them were

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meaningful to Spanish and Indigenous populations in colonial Mexico in their own, and shared, terms. Thus, they are best understood as spaces wherein power can and was effectively negotiated between colonizers and the colonized.

#### CONCLUSION

# REFRAMING COLONIAL DEFENSIVE ARCHITECTURE VIA THE GLOBAL SOUTH

This study of defensive and militaristic architecture challenges the colonial matrix of power and argues that, regardless of their outward Europeanate appearance, these structures are most accurately understood as hybrid cultural artifacts. My argument is partially premised on a study of the relationship between militaristic architecture and aspects of Indigenous ritual militarism before and after the Spanish invasion. Such a cross-cultural analysis accounts for these structures' hybridity and disrupts the notion that they are solely demonstrative of Spanish power. It also expands our knowledge of defensive and militaristic architecture's hybridity in the colonial context of sixteenth-century Mexico.

Acknowledging this hybridity is essential to de-centering Europe and reconstituting our understandings of the power dynamics that are intrinsic to the study of defensive and militaristic edifices. Recognizing the multivalence that is associated with hybridity allows us to advocate for a "pluriversal" understanding of the colonial experience, as articulated by Mignolo and Walsh, wherein a multiplicity of understandings of that experience, including acknowledgement of non-Western temporalities, is possible.<sup>486</sup> It further speaks to the importance of acknowledging reality as perception and to the significance of ontological relativism as a mechanism for positively recognizing multiple concurrent realities and the ways they are made visible.<sup>487</sup> In

<sup>&</sup>lt;sup>486</sup> Mignolo and Walsh, On Decoloniality, 3.

<sup>&</sup>lt;sup>487</sup> Carolyn Dean, "Reviewing Representation: The Subject-Object in Pre-Hispanic and Colonial Inka Visual Culture." in *Colonial Latin American Review*, 23, no. 3 (2014): 313. Dean here counters Latour's warning against ontological relativism in *We have never been modern* (1993), in which he says such relativism 'plunges us into a darkness in which all cows are grey.' Dean, by contrast, argues that things can be heuristic devices for teaching us about other ways of knowing, thinking, and perceiving.

advocating for regarding colonial defensive and militaristic architecture and its iconography differently, I am engaging with Mignolo and Walsh's approach to decoloniality in an effort to transcend the Western ideas<sup>488</sup> that have dominated scholarship on this subject.

Audre Lorde's admonition that "master's tools cannot be used to dismantle the master's house,"<sup>489</sup> is also resonant in this effort. However, such tools, per Lewis Gordon and Jane Anna Gordon have effectively been used by subaltern populations to do "something more provocative...than attempt to dismantle the Big House. There are those who used those tools, developed additional ones, and built houses of their own on more or less generous soil."<sup>490</sup> In challenging the superficial characterization of colonial defensive and militaristic architecture as primarily "Europeanate" expressions of Spanish power, and advocating for understanding these structures as concurrently products of Indigenous ways of knowing and spaces of negotiated power, I elevate them as critically important cultural artifacts that speak to the complexities of the period in which they were created.

Complicating previous interpretations of this style of Mexican colonial architecture is a critically important step in the effort to de-center Europe. However, further efforts to elevate the perspectives of the Global South and to rearticulate our approach to art and architectural history are also needed. To effectively engage a decolonial approach to Latin American art and architecture, it is imperative that power dynamics and the pervasive inequalities associated with European colonialism be actively recognized and challenged.<sup>491</sup> As Cohen-Aponte argues, it is

<sup>&</sup>lt;sup>488</sup> Ibid., 7. Mignolo's work in *The Darker Side of the Renaissance* and *Local Histories/Global Designs: Coloniality, Subaltern Knowledges, and Border Thinking,* is also relevant.

<sup>&</sup>lt;sup>489</sup> Audre Lorde, "The Master's Tools will Never Dismantle The Master's House" (London: Penguin UK, 2018).

<sup>&</sup>lt;sup>490</sup> Mignolo and Walsh, *On Decoloniality*, 7.

<sup>&</sup>lt;sup>491</sup> Ananda Cohen-Aponte and Chakrabarty assert the need for more complex understandings of colonialism in which power and inequality are introduced more tangibly into our paradigms for interpreting the exchange between Europe and its colonies. Ananda Cohen-Aponte, "Decolonizing the Global Renaissance: A View from the Andes" in

not enough to "artificially confe[r] equal footing to Indigenous, mixed-race or Black artists with respect to their European counterparts" in an effort to grant agency without accounting for the coercion that underlies this intersection.<sup>492</sup> Instead, we must actively acknowledge the systems of power that naturalize the subjugation of Indigenous aesthetic practices<sup>493</sup> and, in so doing, account for the complexities that underlie colonial art and architecture.

Recognizing and elevating these complexities and the power dynamics that are inextricably embedded in colonial cultural production requires that we adopt an interdisciplinary approach to the study of art and architecture in Latin America. Cohen-Aponte models this approach in her study of Andean colonial murals by advocating for expanding research parameters and working across disciplines so as to see these images not merely as decorations or as tools of evangelization but as visual archives that reveal the complex ways in which artists and viewers negotiated the conceptual space in the world of the Andes, the Spanish Empire, and beyond.<sup>494</sup> As I have argued throughout this study, a similar cross-disciplinary approach that draws on art history, archaeology, ethnic studies, postcolonial and decolonial studies, and other disciplines is essential to more accurately engage with and understand the defensive and militaristic architecture of sixteenth-century Mexico, too.

*The Globalization of Renaissance Art: A Critical Review,* ed. Daniel Savoy (Leiden: Brill, 2017), 72. Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton and Oxford: Princeton University Press, 2000).

<sup>&</sup>lt;sup>492</sup> Ananda Cohen-Aponte, "Decolonizing the Global Renaissance: A View from the Andes" in *The Globalization of Renaissance Art: A Critical Review*, ed. Daniel Savoy (Leiden: Brill, 2017), 72.

<sup>&</sup>lt;sup>493</sup> Ibid., 73. In making this argument, Cohen-Aponte also acknowledges that contributions to understanding decoloniality furthered by Mignolo, Aníbal Quijano, Silvia Rivera Cisucanqui, and Silvia Wynter may serve as effective starting points from which to build a decolonial model of Early Modern art and architectural history that acknowledges and even emphasizes the systems of power that must be recognized in considerations of colonialism and the artistic production associated therewith.

<sup>&</sup>lt;sup>494</sup> Ananda Cohen Suarez, *Heaven, Hell, and Everything in Between: Murals of the Colonial Andes* (Austin, Texas: University of Texas Press, 2016), 26.

In adopting a multidisciplinary approach to the study of Latin American colonial art and architecture, the voices of the Global South, which have long been relegated to the periphery,<sup>495</sup> may be more effectively elevated. Further, in centering issues of power in the study of colonial artistic and cultural production, we have the opportunity not just to acknowledge the asymmetries of power that exist in colonial relationships but also to address the epistemic violence that was a central tenet of colonialism in practice.<sup>496</sup>

In this study, I argue that colonial Mexico's defensive and militaristic edifices are testaments to patterns of conflation between ritual and militarism that reflect the power of Europeans and Indigenous peoples in the process of their creation and in their reception. Although this is true, it would be disingenuous and frankly wholly inaccurate to argue that this convergence was the result of some sort of peaceful hybridization. It was not. In some cases, artists and craftsmen were coerced into the construction of colonial Mexico; and, issues of power and inequality are inherent in colonial spaces. That is not to say that all artists and craftsmen were coerced. As the sixteenth century progressed, some fought for the right to work as professional artists in lieu of being forced into other forms of tribute labor.<sup>497</sup> And, some operated from positions of relative privilege within the context of colonial society, in some instances

<sup>&</sup>lt;sup>495</sup> Cohen-Aponte, "Decolonizing the Global Renaissance," 74.

<sup>&</sup>lt;sup>496</sup> Cohen-Aponte speaks to the imperative of acknowledging and addressing epistemic violence in noting the extent to which the arts reflect these violences. She writes, "the visual arts have the ability to hold multitudes; a single object can express both the generative, creative aspects of the cross-cultural interactions that made the work possible while also standing as a testament to the mechanisms of colonial control that uphold the socioeconomic milieu in which the artist participates." Ibid., 73.

<sup>&</sup>lt;sup>497</sup> Maya Stanfield-Mazzi, "Artists as Activists: The Development of Indigenous Artists' Rights during the Sixteenth Century," in *Collective Creativity and Artistic Agency in Colonial Latin America*, eds. Maya Stanfield-Mazzi and Margarita Vargas-Betancourt (Gainesville: University of Florida Press, 2023) 18-19. In her essay in this volume, Stanfield-Mazzi explores sixteenth-century developments specific to the agency of artists and craftsmen as their positions in colonial society evolved. She notes that in the first half of the sixteenth century, artists' rights were limited and craftsmen were often enslaved and forced to work without compensation (24). However, as Indigenous slavery was outlawed after mid-century, and was replaced by the *repartimiento* (a system of forced tribute labor that was supposed to pay Indigenous people a daily wage), Stanfield-Mazzi points to efforts on the part of artisans to advocate for the right to demand payment for their work and the ability to use that payment to pay tribute obligations (29).

operating public shops, the income from which they used to pay tribute obligations directly.<sup>498</sup> Although these developments attest to the furtherance of aspects of Indigenous artistic agency in the colonial context, we cannot fail to acknowledge, when attempting to re-envision the history of colonial art in the Americas from the perspectives of the Global South, that conquest and the theft of territory, genocide, disease, enslavement, and conversion were all used as tools aimed at suppressing Indigenous epistemologies and robbing Indigenous peoples of their lands.<sup>499</sup> Yet, despite this violence and perhaps even through acknowledgement of it, it remains imperative that scholarship create opportunities for Indigenous colonial voices to be heard through the artistic and architectural works that they authored. Reinterpreting the defensive and militaristic structures of sixteenth-century Mexico as negotiated spaces that speak to issues of power, inequality, and hybridity in unique and critically important ways elevates these voices.

Recognizing defensive and militaristic buildings as negotiated spaces of power in the colonial context, creates opportunities to further reconceptualize how the discipline of art and architectural history can more accurately treat these and other hybrid colonial spaces. To shift the discipline in new directions, however, comprehensive efforts to address issues of temporality and periodization, terminology, teleology, and hierarchies of genre must be undertaken. If Europe continues to be positioned as an origin point in the study of art and architectural history, the development of artistic practices in the Global South will continue to be seen as inferior.

To effectively address this challenge, it is essential that studies of colonial art and architecture move away from reliance on periodization and the categorization of extra-European

<sup>&</sup>lt;sup>498</sup> Ibid., 43-47. Later in the sixteenth and early seventeenth centuries, per Stanfield-Mazzi, artisans' fought for and secured the right to operate public shops, which is a testament to the emergence of artists as professionals outside of the colonial monasteries.

<sup>&</sup>lt;sup>499</sup> Ibid., 71.

works using terms like Medieval, Renaissance, Mannerist, and Baroque, among others.<sup>500</sup> These terms center Europe and developments in European artistic practices that may have little to no bearing on those practices developed elsewhere in the world.<sup>501</sup> To this end, I have highlighted the robust and technologically advanced practice of pre-Hispanic defensive and militaristic design with a focus on their architectural elements that scholarship has often characterized as "European inventions." In doing so, I am intentionally disrupting the narrative of artistic and architectural progress that devalues Indigenous practices in fortification design while elevating those of the Italian Renaissance as a culmination.<sup>502</sup> Indigenous defensive and militaristic structures are not "precursors" to European ones. Rather, they belong to an autonomous architectural tradition that influenced colonial fortified and fortress-style architecture of sixteenth-century Mexico alongside the traditions established in Renaissance Italy and Early Modern Spain.

Adopting this approach requires moving away from what Farago characterizes as monolithic cultural constructs that facilitate the tendency in the discipline of art and architectural history to create an overarching binary that pits Europe against all other cultural traditions.<sup>503</sup> As

<sup>&</sup>lt;sup>500</sup> Ibid., 60-69. Farago, like Cohen-Aponte, advocates for shifting our understanding of periodization via the adoption of a more open-minded approach to categories like "Renaissance" or "Early Modern." In lieu of seeing these named periods as hard-and-fast categories, she argues that the boundaries between them must be porous and that they are better understood as "heuristic device[s] [rather] than stone wall[s]." Claire Farago, "The 'Global Turn' in Art History: Why, When, and How Does it Matter?" in *The Globalization of Renaissance Art*, ed. Daniel Savoy (Leiden: Brill, 2017), 299-301.

<sup>&</sup>lt;sup>501</sup> Ibid., 60-69.

<sup>&</sup>lt;sup>502</sup> This approach draws on Farago's call for abandoning teleological narratives of progress that generally cast Europe as a cultural and artistic culmination while Asia is seen as the beginning of a linear developmental trajectory. Claire Farago, "The 'Global Turn' in Art History: Why, When, and How Does it Matter?" in *The Globalization of Renaissance Art*, ed. Daniel Savoy (Leiden: Brill, 2017), 305.

<sup>&</sup>lt;sup>503</sup> Ibid., 304. In her introduction to *Reframing the Renaissance*, Farago further develops this call for a re-envisioning of the discipline of art and architectural history. In her view, disrupting binaries and critical examinations of art historical classification and the judgment of artistic excellence that account for global contact initiated in the fifteenth century are needed. Farago emphasizes the ongoing need to ask why scholarship largely fails to account for the artistic contributions of non-European cultures following the professionalization of the discipline of art and

such, we cannot characterize buildings like colonial fortifications as "European" merely because they "look European" or were commissioned by Europeans. Instead, colonial Mexican defensive and militaristic architecture is best understood as the result of a compendium of influences that led to the development of a new and unique style specific to the cultural context in which it was created.

It is further essential to acknowledge that though structures like the fortress monasteries and fortifications built in colonial Mexico were constructed for practical purposes, their value as artistic and architectural contributions is not defined by notions of hierarchical genres. Such hierarchies of genre are fundamentally based in European value judgements.<sup>504</sup> In the space of architecture, the "utilitarian," is often characterized as inferior or of less value to the art historian than other types of architecture. As articulated at the outset of this study, the disciplinary tendency to devalue "utilitarian" architecture based on its function is misplaced. For example, the Gothic cathedrals of Europe are considered to be architecture of value and fortresses, by and large, are not, despite both types of buildings serving a utilitarian purpose.

In challenging the validity of hierarchies of genre, it is again helpful to return to the ideas of Sauerländer, who makes clear that art and architectural history's disciplinary insistence on classification is fundamentally flawed and further propagates certain value judgments.<sup>505</sup> In lieu of engaging with these artificial hierarchies, Sauerländer advocates for more comprehensive consideration of forms of architecture beyond the ecclesiastical constructions that dominate the

architectural history in the nineteenth century. Claire Farago, "Introduction" in *Reframing the Renaissance: Visual Culture in Europe and Latin America*, 1450-1650 (New Haven: Yale University Press, 1995), 1.

<sup>&</sup>lt;sup>504</sup> For example, the notion that there exist "minor arts" and "fine arts" implies that those works that fall into the category of "minor arts" are of less value and importance than other types of works. Farago, "The 'Global Turn," 305.

<sup>&</sup>lt;sup>505</sup> Willibald Sauerländer, "Romanesque Art 2000: A Worn Out Notion?," 41.

study of architectural history in the medieval and Early Modern periods. He instead argues that to understand the architectural styles of any period, it is essential to consider the secular alongside the spiritual.<sup>506</sup> This approach accounts for a study of "high" as well as "low" forms of architecture that is not based on a binary distinction between the two.

In arguing that art and architectural historians ought to be less concerned with traditional stylistic classifications, like the Romanesque, or high and low art, or engineering and architecture, our capacity for understanding the works produced in any period within their specific context is vastly expanded. A Sauerländerian approach would not confine the study of defensive and militaristic structures to an artificial classification that distinguishes between edifices of utilitarian engineering that occupy the field of military history and works of art or architecture that are taken up by art and architectural history. Nor would it characterize structures as exclusively European or Indigenous in origin. Instead, it would allow these constructions to exist within and speak to their broad cultural, social, historical, and political contexts. This approach contributes more richly to our understanding of the period in which they were created.

To further reframe how we approach the study of art and architecture, Farago argues for a reorganization of the discipline such that it focuses on understanding critical issues and large-scale trading networks as opposed to traditional disciplinary categories. Doing so would allow for an entirely different history of art fundamentally based on cultural interactions and their artistic and architectural outcomes.<sup>507</sup> To this end, in this study, I have centered issues of hybridity as they relate to power as well as local and global perspectives while asserting that acknowledging these is essential to better understanding the architectural styles of the colonial

<sup>&</sup>lt;sup>506</sup> Ibid., 42-43.

<sup>&</sup>lt;sup>507</sup> Farago, "The 'Global Turn'," 309-310.

period. This approach inherently foregrounds the critical intersections that occur through cultural interactions.<sup>508</sup> In accounting for Indigenous and European approaches to defensive and militaristic construction, I find important parity in the conflation of ritual and militarism that informs a rewriting of defensive and militaristic architecture's history. In this manner, the unique hybridities of these structures and their importance as cultural artifacts can be more aptly acknowledged.

Reimagining the treatment of this architecture also requires re-examining the sources used to investigate it. Ann Laura Stoler has argued, the colonial archive is a "supreme technology of the imperial state, a repository of codified beliefs that clustered (and bore witness to) connections between secrecy, the law, and power."<sup>509</sup> Utilizing the archive above other sources of information in the study of the defensive and militaristic architecture of colonial Mexico is sure to reproduce the overshadowing position of Spanish power at the expense of a more sophisticated understanding of the period. As has been shown throughout this study, there is far more that this architecture tells us and to capture it, we must engage with the project of telling history, as Lowe refers to it, differently.

Lowe eloquently argues that to challenge the archive is not "a project of merely telling history differently, but one of returning to the past, its gaps, uncertainties, impasses, and elisions; it is tracing those moments of eclipse when obscure, unknown, or unperceived elements are lost, those significant moments in which transformations have begun to take place, but have not yet been inserted into historical time."<sup>510</sup> In the case of this study, we do not find archival records

<sup>&</sup>lt;sup>508</sup> Farago suggests that art and architectural history ought to be "a synthetic account of world culture that foregrounds cultural interaction [which] depends on accumulating many individual case studies for comparison in order to build a larger picture." Ibid., 311.

<sup>&</sup>lt;sup>509</sup> Ann Laura Stoler is quoted by Lowe in Lisa Lowe, *The Intimacies of Four Continents* (Durham: Duke University Press, 2015), 4.

<sup>&</sup>lt;sup>510</sup> Lowe, The Intimacies of the Four Continents, 175.

that identify the individual creators of fortresses or fortress monasteries. We do not find comprehensive descriptions of relevant Indigenous building techniques, although we have ample visual evidence of their extensive use. And, we certainly do not find accounts written by Indigenous peoples that indicate a direct link between the forms of pre-Hispanic defensive and militaristic architecture and the structures of similar style and purpose built in the sixteenth century. However, the absence of such records does not invalidate this kind of study.<sup>511</sup> It is these gaps in the archive that must be acknowledged and accounted for in a retelling of history, or in this case of the art and architectural history of colonial Mexico.

### **Opportunities for Further Study**

This study offers a starting point for future examinations of the conflation of ritual and militarism that was central to the architectural and iconographic developments of early colonial Mexico. There are opportunities to engage more deeply with parallels in Indigenous and European iconography related to ritualized militarism and many more fortress monasteries in which unique conflations may be found. More case studies would also create opportunities to

<sup>&</sup>lt;sup>511</sup> Along these lines, Saidiya Hartman's "critical fabulation" is a valuable interpretive tool for challenging the Eurocentrism of the archive as well as art and art history's traditional approach to defensive and militaristic architecture. Hartman asserts that history is fundamentally contested in character, and that in that contestation, there are voiceless participants, who are largely absent from the archive. Hartman, "Venus in Two Acts," 12. Hartman suggests that voice may be given to the voiceless through "critical fabulation" wherein cultural histories are created through an imagining of what might have been from the perspective of the traditionally voiceless (11). In this study, I have not gone so far as to offer a fabula associated specifically with the architecture and iconography of defensive and militaristic structures in sixteenth-century Mexico. However, I do seek to elevate the voices of those who are typically absent from the archive in offering new interpretations of defensive and militaristic architecture that acknowledge the long tradition of this style of architecture and its association with ritualized militarism in Mesoamerica. I also recognize the agency and power of Indigenous creators who were responsible for building and adorning these spaces in the colonial context. It is through interventions like those articulated by Hartman, Lowe, Farago, Cohen-Aponte, and others, as well as that which I offer in this study, that the discipline of art and architectural history may continue to evolve in new directions.

further examine the relationship between power, place, and politics in the colonial period, specifically as it relates to the construction and adornment of the fortress monasteries.

Examination of the local nature of San Juan de Ulúa could be expanded to include an exploration of Indigenous understandings of materiality, which in some but not all instances, assign presence to the likes of stone in addition to significance to the process of construction. The notion that some stone has presence as well as symbolic power is a common thread found across many Mesoamerican civilizations.<sup>512</sup> For example, at Xochicalco, Brittenham has argued that the architect-builders of the temples and fortified site intentionally incorporated materials gathered from across Central Mesoamerica into their buildings as a means of visibly and tangibly manifesting the site's cosmopolitan nature and power.<sup>513</sup> I further argue that the integration of these diverse materials into the ritualized militaristic architecture at Xochicalco is a symbolic and material testament to conquest and the power to collect tribute that came with it.<sup>514</sup> Further consideration of belief systems regarding the materiality of stone that may have been shared by the Mexica, and the local Totonacs who were responsible for the construction of San Juan de Ulúa, and their implications for understanding the local nature of this fortress would be an interesting extension of this study. This is particularly the case given the long history of using

<sup>&</sup>lt;sup>512</sup> Dean and Leibsohn, "Scorned Subjects in Colonial Objects," 419. Dean and Leibsohn discuss the Mexica belief in *teixiptla*, or presentation of *teteo* (representations of the gods) in material construction noting that it could manifest in nearly any material, including stone and wood, thus bringing a living vitality and power to that material. Given that the Totonacs, who were the Indigenous population primarily responsible for the construction of San Juan de Ulúa were a tribute state of the Mexica, it would be interesting to further explore the relationship of their possible understandings of presence and the materiality of construction materials to those of the Mexica and the extent to which these suggest the possibility of more complex interpretations of the coraline blocks used to build the fortress. Kelly and Palerm discuss the "Nahuatalization" of the Totonac population, a process defined as an adoption of Nahua culture following conquest by the Mexica. The Mexica were Nahua speakers and are the group specifically referenced in Kelly and Palerm's use of the term "Nahuatalization." Kelly and Palerm, *The Tajin Totonac*, 19.

<sup>&</sup>lt;sup>513</sup> Brittenham, *The Murals of Cacaxtla*, 37-38.

<sup>&</sup>lt;sup>514</sup> Xochicalco's tribute relationships as established through warfare and conquest would have created a mechanism for collecting materials from far-flung places such that they could be incorporated into the architecture of this site.

coral as a critical building material in this region by the Olmecs, Huastecs, and the Totonacs, most notably in their construction of their capital city at Cempoala.<sup>515</sup>

Future studies could also expand on the continued importance of ritualized militarism in colonial Mexico through consideration of examples of hybridity not examined here. For example, Christian pageants written by friars and performed by Indigenous peoples in sixteenth-century fortress monasteries are notable. The 1539 Tlaxcalan performance of the conquests of Tenochtitlan and Jerusalem by a combined army from Spain and New Spain, with assistance from other European forces, speaks to Spanish millenarian interests in establishing a New Jerusalem in the Americas.<sup>516</sup>

Pageants, like this one, add significant layers of complexity in examinations of ritualized militarism in colonial Mexico beyond those presented in this study.<sup>517</sup> This is all the more true as the militaristic figures of St. James, St. Hippolytus,<sup>518</sup> and the archangel Michael or San Miguel<sup>519</sup> are integrated into the narrative of the Tlaxcalan pageant. The performative reenactment of Christian conquest and warfare is a complex manifestation of the conflation of ritual and militarism as well as the intricacies of the negotiated power dynamics between the Spaniards and Indigenous peoples. Further examination of these pageants and their relationships

<sup>519</sup> Ibid., 143.

<sup>&</sup>lt;sup>515</sup> The use of coral as a critical construction material is discussed by Wendt and Cypher (2008) in the Olmec and Huastec context and by Báez-Jorge, et.al. at Cempoala (2016).

<sup>&</sup>lt;sup>516</sup> Max Harris, *Aztecs, Moors, and Christians: Festivals of Reconquest in Mexico and Spain* (Austin: University of Texas Press, 2000), 132. Mónica Domíguez Torres also discusses this 1539 pageant and includes an excerpt of Motolinía's account of it in which he notes the military garb and insignia of the Indigenous actors in her analysis. She also explores the participation of Indigenous nobility dressed in "eagle-knight" and "jaguar-knight" costumes in dances and mock-battle scenes in association with colonial celebrations. Torres, *Military Ethos and Visual Culture in Post-Conquest Mexico*, 207-210.

<sup>&</sup>lt;sup>517</sup> Harris, Aztecs, Moors, and Christians: Festivals of Reconquest in Mexico and Spain, 133.

<sup>&</sup>lt;sup>518</sup> Ibid., 143. The feast day of St. Hippolytus occurs on August 13, which was the date in 1521 that the Mexica surrendered Tenochtitlan to the Spanish.

to the fortress monasteries of the sixteenth century would be a valuable continuation of this study.

Beyond Mexico, colonial South America also has a strong tradition of militaristic and fortified architecture and an argument related to mine can also be made in this geographic context. The scholarship of Elizabeth N. Arkush on the hillforts (*pukaras*) of the ancient Andes,<sup>520</sup> Wernke and Robert Gamer work's on the pre-Inka fortification of the Colca Valley,<sup>521</sup> Wernke's consideration of imperial Inka fortification,<sup>522</sup> and Colleen Zori and Simón Urbina's archaeological studies of the imperial expansion of the Inka into Tarapacá Viejo in northern Chile<sup>523</sup> examine the history of defensive and militaristic architecture across what would become the Viceroyalty of Peru. In addition, research on the Inka fortification of Saqsayhuaman by J. Ricardo Mar, Alejandro Beltrán-Caballero,<sup>524</sup> and Michael Schreffler,<sup>525</sup> is particularly relevant. Inka defensive and militaristic warrants further examination in light of recent studies of Inka

<sup>&</sup>lt;sup>520</sup> Elizabeth N. Arkush, *Hillforts of the Ancient Andes: Colla Warfare, Society, and Landscape* (Gainesville: University of Florida Press, 2011).

<sup>&</sup>lt;sup>521</sup> Steven A. Wernke and Robert E. Gamer, *Negotiated Settlements: Andean Communities and Landscapes under Inka and Spanish Colonialism* (Tallahassee: University of Florida Press, 2013). <u>https://ebookcentral.proquest.com/lib/ucb/detail.action?docID=1119304</u>.

<sup>&</sup>lt;sup>522</sup> Steven Wernke, "The Politics of Community and Inka Statecraft in the Colca Valley, Peru," *Latin American Antiquity* 17, no. 2 (June 2006): 177-208.

<sup>&</sup>lt;sup>523</sup> Colleen Zori and Simón Urbina. "Architecture and Empire at Late Prehispanic Tarapacá Viejo, Northern Chile" *Revista de Antropología Chilena* 46, no. 2 (Abril-Junio 2014): 211-232.

<sup>&</sup>lt;sup>524</sup> Ricardo Mar and J. Alejandro Beltrán-Caballero, "El conjunto arqueológico de Saqsaywaman (Cusco): una aproximación a su arquitectura" *Revista Española de Antropología Americana* 44, no. 1(2014): 9-38. Included in this study are primary source descriptions of Cusco dated to 1532 wherein the structure and features of Saqsaywaman at the time of Spanish arrival are described.

<sup>&</sup>lt;sup>525</sup> Michael J. Schreffler, "Inca Architecture from the Andes to the Adriatic: Pedro Sancho's Description of Cuzco" *Renaissance Quarterly* 67 (2014): 1191-1223. Schreffler's work contemplates a variety of primary sources including the letters of Francisco Pizarro's secretary Pedro Sancho, which offer insight into the architecture of the fortification of Cuzco around the time of Spanish arrival.

materiality by Dean<sup>526</sup> and Nair.<sup>527</sup> Although these Andean examples are not explored in depth in this study, these architectural traditions ought also be considered within the scope of a decolonial architectural history that includes not just European and colonial defensive and militaristic architecture, but that of the Indigenous peoples across the broader expanse of the Americas.

Other opportunities for further exploration of military architecture in the Americas could include a comparative study of Portuguese and Spanish colonial defensive and militaristic architecture through a decolonial lens. The Portuguese, much like the Spanish, brought with them to the Americas a robust tradition in architectural practice, including well-developed theoretical and practical design principles specific to fortification. In Early Modern Portugal, the theoretical writings of Luís Serrão Pimentel and Nicolau de Langres, both of whom produced treatises on fortification in the seventeenth century would be particularly relevant. Pimentel's Methodo lusitanico de desenhar as fortificaçoens das praças regulares, irregulares, fortes de campanha, e outras obras pertencentes a architectura militar distribuído em duas partes, written decades earlier, but published for the first time in 1680, became the basis for his instruction of architects at the Aula de Fortificação, established in Lisbon in 1647. Architects trained by Pimentel at the Aula de Fortificação were the architects charged with the design and construction of Portuguese fortifications in the Americas. Architect-author Nicolau de Langres also produced a treatise on fortification in 1661 entitled *Desenhos e plantas de todas as praças do reino de* Portugal, pelo tenente-general Nicolao de Langres, francez, que servio na guerra da

<sup>&</sup>lt;sup>526</sup> Carolyn Dean, *A Culture of Stone: Inka Perspectives on Rock* (Durham and London: Duke University Press, 2010). In this text, Dean offers an in-depth study of Inka understandings of rock, which is relevant to my research interest given the use of stone to build the fortifications of Spanish colonial Peru.

<sup>&</sup>lt;sup>527</sup> Stella Nair, "Witnessing the In-visibility of Inca Architecture in Colonial Peru" in *Buildings & Landscapes: Journal of the Vernacular Architectural Forum* 14 (Fall 2007): 50-65. In this article, Nair makes clear that though Inka-style buildings may not have been readily visible in Spanish colonial Peru, the meaning that the Inka attached to building materials and to the building process itself creates opportunity for understanding Spanish colonial buildings from a perspective that privileges Inka understandings thereof as opposed to a Eurocentric viewpoint.

*Acclamação*. Further study of these treatises and their practical applications might provide insight about the relation between iteration on Italian School theoretical models and the actual structures themselves.

Building on the examination of the theoretical and practical models of Portugal, a future study could subsequently analyze the specific plans and designs for several Portuguese-commissioned fortresses in Brazil. These could include the Fortim de Santa Maria in Bahia (1652, rebuilt 1694), Santo Antônio da Barra in Salvador (1701), Santo Amaro da Barra Grande in Santos (1584), São Marcelo in Salvador do Bahia (1608, reconstructed in 1650), the Fortaleza de Santa Cruz de Anhatomirim (1740), and São João in Bertioga (1710). Each of these fortresses, though built by European architect-engineers and in most cases by military engineers specifically trained in fortification practices in Portugal using Pimentel's theory, is architecturally unique, suggesting that considerable colonial architectural innovation occurred in the Brazilian context between the mid-seventeenth and early eighteenth century.

A final path for future investigation, which specifically draws on examination of trading networks as a basis for a revised approach to art and architectural history would be to consider Spanish and Portuguese colonial defensive and militaristic architecture across their far-flung empires. Both Portugal and Spain established territories in the Americas, Asia, and in Africa and there are numerous examples of their fortifications in these locations. Some prominent examples that warrant further consideration include the Portuguese fortresses at Mombasa in Kenya, Elmina in present-day Ghana, and at Diu and Damão in India, as well as the Spanish fortresses in Florida, California, Macau, and in the Philippines. In each of these instances, patterns of cultural exchange inform the design and construction such that they too are unique cultural artifacts that warrant further scholarly exploration.

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### **Concluding Remarks**

Margaret Kovach, in her *Indigenous Methodologies: Characteristics, Conversations, and Contexts,* asks scholars a direct question: "What knowledge do you privilege?"<sup>528</sup> Her point in asking this question is to "unmask the personal choice of epistemology."<sup>529</sup> In proactively identifying the knowledge that we privilege and in examining our epistemologies closely and critically, we have opportunities to recognize the deeply embedded influence and ongoing legacy of colonialism in scholarship and subsequently to challenge it.

The objective of decolonization, specifically the repatriation of Indigenous lands and Indigenous life, is not one that can be achieved here. Yet, it is my hope that through this work, steps can be taken toward acknowledging and elevating perspectives and knowledge systems that are not governed by Eurocentric points of view. I also hope that this study contributes to ongoing efforts in the field of art and architectural history, particularly in the Latin American context, to re-envision the discipline such that it acknowledges and elevates the Global South. And, I hope that, through this study, it is amply clear that examples of defensive and militaristic architecture are best understood as more than engineering, more than utilitarian, and more than military. They are unique, hybrid cultural artifacts that are worthy of contemplation within the broader scope of art and architectural history. So, to return to the question that I posed at the beginning of this study: are we willing to give defensive and militaristic architecture the opportunity to be understood as more than military? It is my sincerest hope that the answer is and will always be: yes.

<sup>&</sup>lt;sup>528</sup> Margaret Kovach, *Indigenous Methodologies: Characteristics, Conversations, and Contexts* (Toronto: University of Toronto Press, 2009), 75.

<sup>&</sup>lt;sup>529</sup> Ibid., 75.

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delle città e castella, ne sono tirati gli alzati per ordine di Prospettiva: nel quarto si dimostrano per diverse piante l'ordine di più palazzi & casamenti, venendo dal palazzo regale e signorile, come di honorato gentilhuomo, sino alle case di persone private. Venezia, 1554.

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## **APPENDIX A: FIGURES**

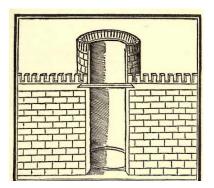


Figure 1.1 Form of protruding towers, c. 30-15 BCE. Marcus Vitruvius Pollio, *Ten Books on Architecture*, translated by Morris Hicky Morgan (Cambridge: Harvard University Press, 1914) 23.



Figure 1.2 Brunelleschi, <u>Rocca di Vicopisano</u>, 15th century, Wikimedia Commons, 2019. Creative Commons Attribution-Share Alike 4.0 International.



Figure 1.3 Brunelleschi, <u>Corniced Tower, Rocca di Vicopisano</u>, 15th century, Wikimedia Commons, 2022. Creative Commons Attribution-Share Alike 4.0 International.



Figure 1.4 <u>Donjon de Gouzon, Castle of Chauvigny</u>, 11th-13th centuries, Daniel Jolivet, Wikimedia Commons, 2017. Creative Commons Attribution 2.0 Generic.



Figure 1.5 <u>Keep, Castle of Coucy</u>, 13th century, Médiathèque de l'architecture et du patrimoine, Wikimedia Commons, Licence Ouverte 1.0.



Figure 1.6 Enceinte of Avignon, 14th century, Creative Commons.

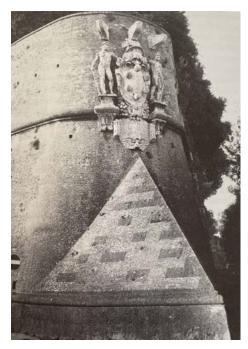


Figure 1.7 Angle Bastion, Baldassare Lanci, Fortress of Santa Barbara, Siena, 1560. Simon Pepper and Nicholas Adams. *Firearms and Fortifications: Military Architecture and Siege Warfare in Sixteenth-Century Siena* (Chicago and London: University of Chicago Press, 1986), 77.

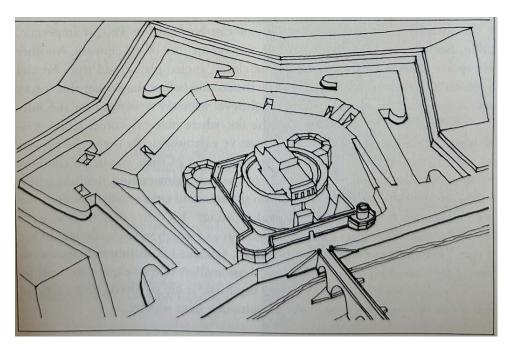


Figure 1.8 Octagonal bastions, Antonio da Sangallo the Elder, Castel Sant'Angelo, Rome, 1492-1493. Simon Pepper and Nicholas Adams. *Firearms and Fortifications: Military Architecture and Siege Warfare in Sixteenth-Century Siena* (Chicago and London: University of Chicago Press, 1986), 5.

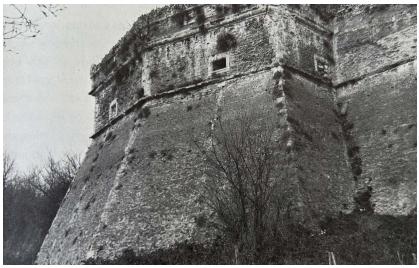


Figure 1.9 Giuliano da Sangallo and Antonio da Sangallo the Elder, Poggio Imperiale, 15th century. Simon Pepper and Nicholas Adams. *Firearms and Fortifications: Military Architecture and Siege Warfare in Sixteenth-Century Siena* (Chicago and London: University of Chicago Press, 1986), 7.

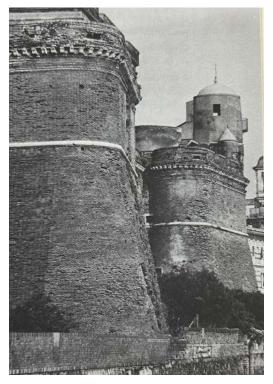


Figure 1.10 Giuliano da Sangallo and Antonio da Sangallo the Elder, Fortress of Nettuno, 1501. Simon Pepper and Nicholas Adams. *Firearms and Fortifications: Military Architecture and Siege Warfare in Sixteenth-Century Siena* (Chicago and London: University of Chicago Press, 1986), 7.



Figure 1.11 Illustration of angle bastion, Giovanni Battista Antonelli, *Epitomi delle fortificationi moderne*, folio 22r, no. EMHA\_1534, 1560. Sandro Parrinello and Silvia Bertacchi. "Geometric Proportioning in Sixteenth-Century Fortifications: The Design Proposals of Italian Military Engineer Giovanni Battista Antonelli" in *Nexus Network Journal*, 17 (2015): 403.

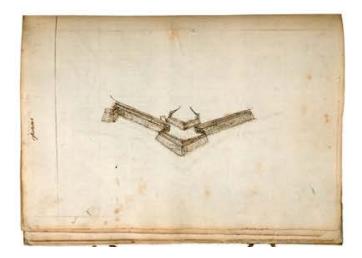


Figure 1.12 Illustration of angle bastion, Giovanni Battista Antonelli, *Epitomi delle fortificationi moderne*, folio 22v, no. EMHA\_1689, 1560. Sandro Parrinello and Silvia Bertacchi. "Geometric Proportioning in Sixteenth-Century Fortifications: The Design Proposals of Italian Military Engineer Giovanni Battista Antonelli" in *Nexus Network Journal*, 17 (2015): 403.

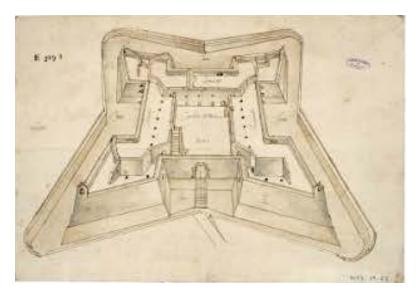


Figure 1.13 Perspective view of "universal model" as implemented in the Fort of Bernia, Giovanni Battista Antonelli, Ministerio de Educación, Cultura y Deporte. Archivo General de Simancas, MPD, 19, 063, 1560-1563. Sandro Parinello and Silvia Bertacchi. "The Fort of Bernia by Giovanni Battista Antonelli" in *Nexus Network Journal*, 16 (2014): 712.



Figure 1.14 Cristóbal de Rojas, <u>Castillo de Santa Catalina</u> in Cádiz, Spain, 1598. © Axel Cotón Gutiérrez, Wikimedia Commons, License CC BY-SA.

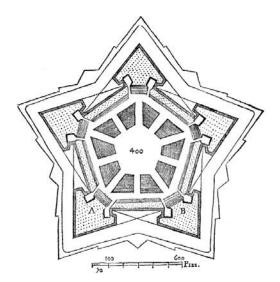


Figure 1.15 Drawing of angle bastions, Cristóbal de Rojas, 1598. Cristóbal de Rojas. *Teoría y práctica de fortificación, conforme las medidas y defensas destos tiempos, repartidas en tres partes por el capitán Christoval de Rojas, Ingegnero del Rey Nuestra Senor Don Felipe III* (Madrid: Luis Sanchez, 1598), 43.

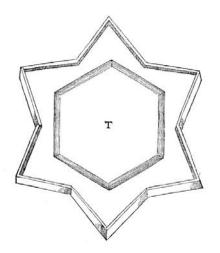


Figure 1.16 Drawing of angle bastions, alternate arrangement, Cristóbal de Rojas, 1598. Cristóbal de Rojas. *Teoría y práctica de fortificación, conforme las medidas y defensas destos tiempos, repartidas en tres partes por el capitán Christoval de Rojas, Ingegnero del Rey Nuestra Senor Don Felipe III* (Madrid: Luis Sanchez, 1598), 46.



Figure 2.1 <u>Map of Teotihuacan</u>. David Carballo, "Power, Politics, and Governance at Teotihuacan," in *Teotihuacan, The World Beyond the City,* edited by Kenneth G. Hirth, David M. Carballo, and Barbara Arroyo (Washington DC: Dumbarton Oaks, 2020), 58.



Figure 2.2 <u>Pyramidal structures guarding the courtyard, Ciudadela, Teotihuacan</u>, 150-650 CE. Julián Monge-Nájera, Wikimedia Commons, 2013. Creative Commons Attribution-Share Alike 3.0.

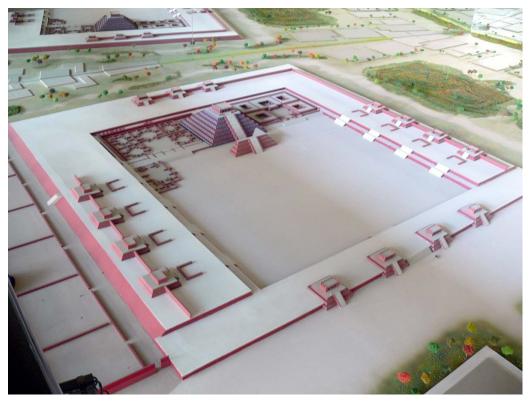


Figure 2.3 <u>Model of Ciudadela complex</u>, Teotihuacan, 150-650 CE. Wolfgang Sauber, Wikimedia Commons, 2008.



Figure 2.4 <u>Temple of the Feathered Serpent</u>, Teotihuacan, 150-650 CE. Diego Delso, Wikimedia Commons, 2013.

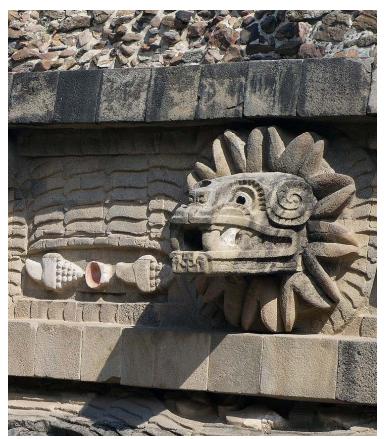


Figure 2.5 <u>Feathered Serpent from Temple of the Feathered Serpent</u>, Teotihuacan, 150-650 CE. Wikimedia Commons, 2013. Creative Commons Attribution-Share Alike 3.0.



Figure 2.6 <u>Feathered Serpents on balustrade from Temple of the Feathered Serpent</u>, Teotihuacan, 150-650 CE. Artotem Co., Flickr, 2013. CC-BY-2.0 DEED.



Figure 2.7 "War Serpent," <u>Temple of the Feathered Serpent</u>, Teotihuacan, 150-650 CE. Wikimedia Commons, 2013. Creative Commons Attribution-Share Alike 3.0.

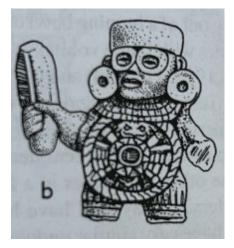


Figure 2.8 Rounded goggles of Teotihuacano military dress, 150-650 CE. Karl Taube, "The Turquoise Hearth: Fire, Self Sacrifice, and the Central Mexican Cult of War," in *Mesoamerica's Classic Heritage: From Teotihuacan to the Aztecs*, eds. David Carrasco, Lindsay Jones, and Scott Sessions (Boulder, Colorado: University of Colorado Press, 2000), 273.



2.9 Warrior with butterfly antennae, goggles, and atlatl darts, mural on white patio, Atetelco, Teotihuacan, 150-650 CE. Annabeth Headrick, "Butterfly War at Teotihuacan," in *Ancient Mesoamerican Warfare*, eds. M. Kathryn Brown and Travis W. Stanton (Walnut Creek, Lanham, New York and Oxford: Altamira Press, 2003), 151.



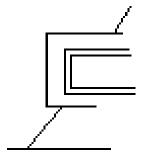
2.10 Flowering branches and butterflies of warrior paradise, photograph of reproduction of the <u>Tepantitla Mural of the Great Deity</u>, Teotihuacan, 150-650 CE. Juan Carlos Fonseca Mata, Wikimedia Commons, 2010. Creative Commons Attribution-Share Alike 4.0 International.



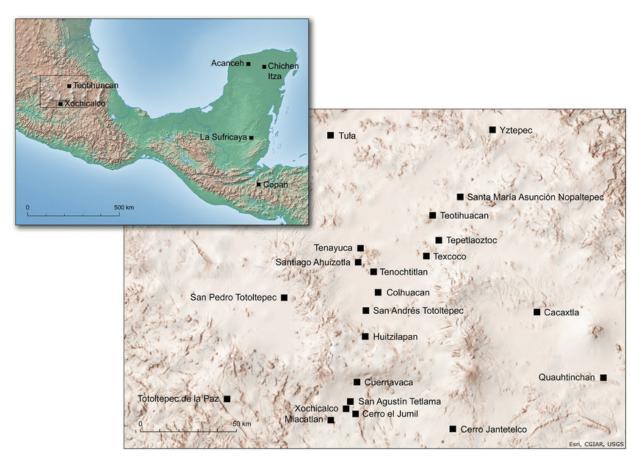
2.11 Warrior with proboscis and Tlaloc-like goggles on a frescoed vase, Teotihuacan, 150-650 CE. Drawing by Annabeth Headrick, "Butterfly War at Teotihuacan," in *Ancient Mesoamerican Warfare*, eds. M. Kathryn Brown and Travis W. Stanton (Walnut Creek, Lanham, New York and Oxford: Altamira Press, 2003), 153.



2.12 Warrior with butterfly nose ornament, *incensario*, Teotihuacan, 150-650 CE. Drawing by Annabeth Headrick, "Butterfly War at Teotihuacan," in *Ancient Mesoamerican Warfare*, eds. M. Kathryn Brown and Travis W. Stanton (Walnut Creek, Lanham, New York and Oxford: Altamira Press, 2003), 156.



2.13 Line drawing of Teotihuacan *talud-tablero*, 150-650 CE. Compare the shape of the nose ornament in Figure 2.12.



2.14 Map of prominent Mesoamerican sites, including Xochicalco, 700-900 CE. Christopher Helmke, Jesper Nielsen, Ángel Iván Rivera Guzmán, "The Origins and Development of the Cartographic Tradition in the Central Mexican Highlands," *Contributions in New World Archaeology*, 12 (2019): 57.



Figure 2.15 Temple of the Feathered Serpent, Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.16 Downslope façades at Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.17 Angle bastion at Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.18 Templo de las Estelas, Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.19 Unnamed pyramid at Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.20 Feathered serpents encircling the Temple of the Feathered Serpent, Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.

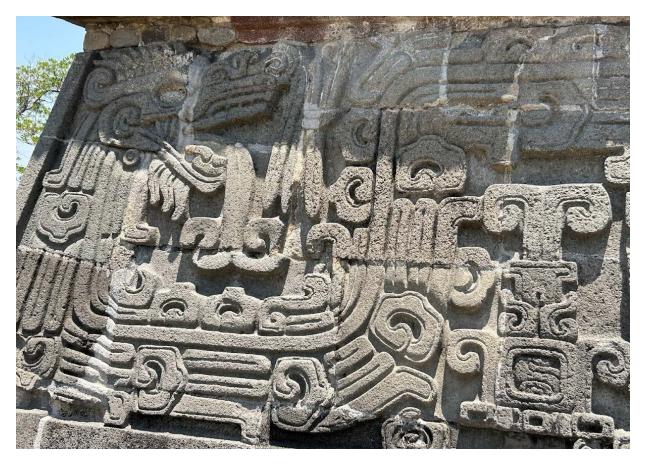


Figure 2.21 Dramatic plumes and forked tongue of feathered serpent, Temple of the Feathered Serpent, Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.22 Seated warrior in low relief, lower *talud*, Temple of the Feathered Serpent, Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.23 Seated warrior adjacent to four-part circle (*olin*) and open mouth, upper frieze at Temple of the Feathered Serpent at Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.24 Four-part circle (*olin*) and open mouth with teeth, upper frieze at Temple of the Feathered Serpent at Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.25 Juxtaposition of four-part circle and sacrificial heart glyph in Battle Mural at Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.

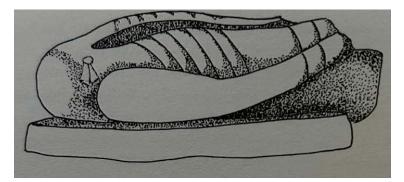


Figure 2.26 Drawing of dismembered torso sculpture in the round found in the central plaza at Xochicalco, 700-900 CE. Drawing by Kenneth G. Hirth in "Militarism and Social Organization at Xochicalco, Morelos," in *Mesoamerica After the Decline of Teotihuacan, A.D. 700-900,* edited by Janet Catherino Berlo and Richard A. Diehl (Washington, D.C.: Dumbarton Oaks, 1989), 76.

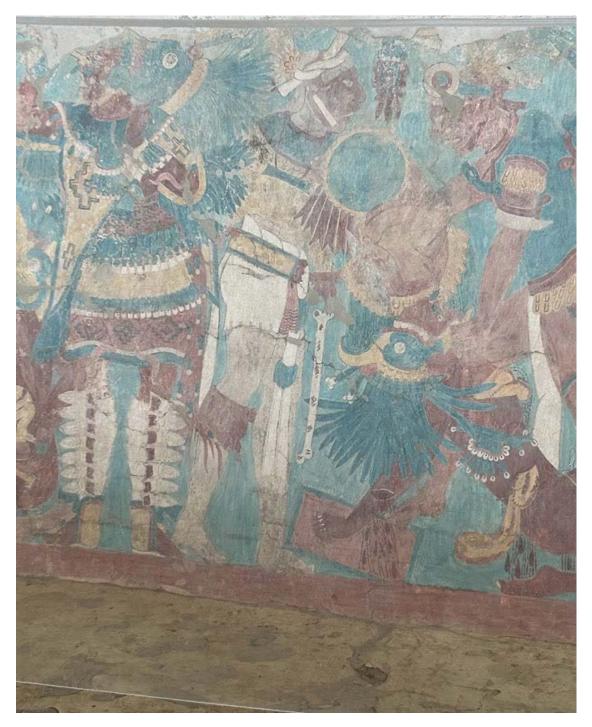


Figure 2.27 Warrior adorned with human femur, Battle Mural, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.

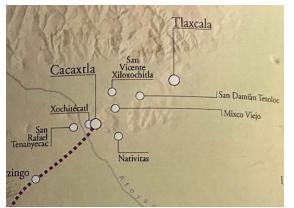


Figure 2.28 Map of Cacaxtla settlement complex, 650-95 CE. Claudia Brittenham, *The Murals of Cacaxtla: The Power of Painting in Ancient Central Mexico* (Austin: University of Texas Press, 2015), 14.



Figure 2.29 Elevated ritual space with rectangular space for sacrifice, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.30 Aviary, acropolis, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.31 Parallel moats (now dry) cut across the hilltop at Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.32 Sentinel pyramid, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.33 Stairways and ramps at Cacaxtla, creating many structural levels, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.34 Jaguar warrior carrying a bundle of spears from Structure A at Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.35 Companion figure in door jamb, Jaguar Warrior, Structure A, Cacaxtla, 650-950 CE. Painted replica in Cacaxtla Site Museum. Photograph by Lauren Hooten 2023.



Figure 2.36 Warrior holding a bag, upper frieze, Temple of the Feathered Serpent, Xochicalco, 700-900 CE. Photograph by Lauren Hooten 2023.



Figure 2.37 Bird Warrior, Structure A, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.38 Bird Warrior Companion Figure in door jamb, holding shell, Structure A, Cacaxtla, , 650-950 CE. Painted replica in Cacaxtla Site Museum. Photograph by Lauren Hooten 2023.



Figure 2.39 Dismembered torso, Battle Mural, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.40 War trophy, human femur, Battle Mural, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.41 Sacrificial heart glyphs, Battle Mural, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.42 Imagery of bloodshed, Battle Mural, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 2.43 Three Deer Antler wearing triple knot of self-sacrifice, Battle Mural, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.

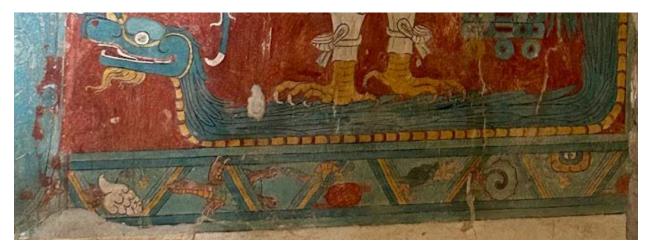


Figure 2.44 Close up of aquatic imagery of frogs, turtles, snakes, snails in Structure A border, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.

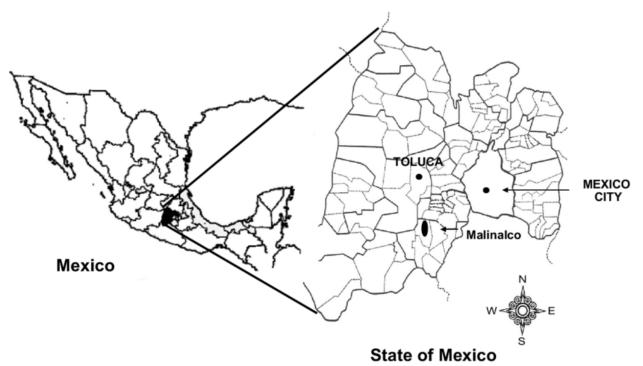


Figure 2.45 Map of Malinalco. Alberto Barbabosa-Pliego and Sandra González-Vieyra, Ninfa Ramírez Durán, Ángel Sandoval-Trujillo, and Juan Carlos Vazquez Chagoyan, "Trypanosoma cruzi in dogs: electrocardiographic and echocardiographic evaluation, in Malinalco, State of Mexico," *Research and Reports in Tropical Medicine*, 2 (2011): 156.



Figure 2.46 View of valley floor from Malinalco complex, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.



Figure 2.47 Structure I, Temple of the Eagle Warriors, Malinalco, front view, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.



Figure 2.48 Jaguar sentinel at Malinalco, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.



Figure 2.49 Seated warrior on stairs at Structure I, Malinalco, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.



Figure 2.50 Sacrificial stone atop stairs at Structure I, Malinalco, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.

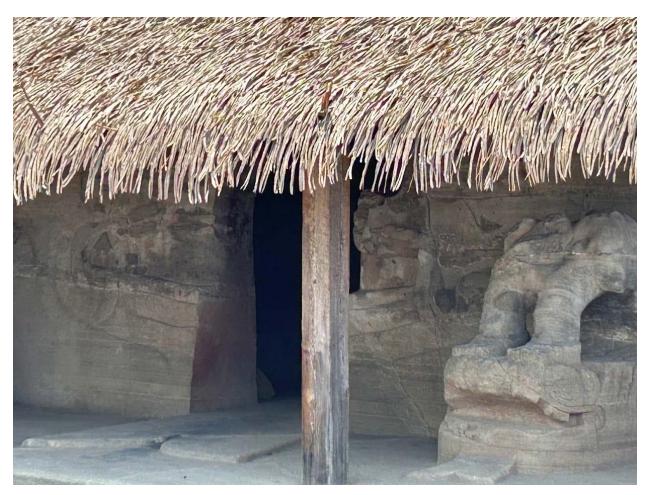


Figure 2.51 Seated figure, likely a warrior, atop feathered serpent head, east of entrance to Structure I on patio, Malinalco, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.

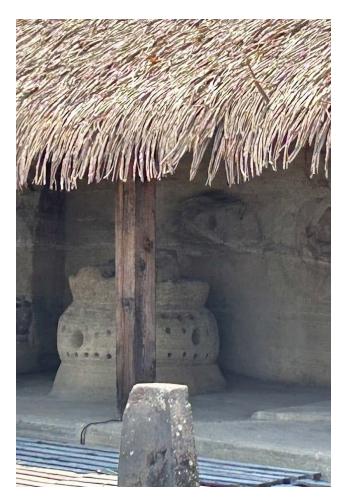


Figure 2.52 Drum, west of entrance to Structure I on patio, Malinalco, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.



Figure 2.53 Arrow-like points resembling *atlatl* darts on serpent head adjacent the entrance to Structure I on patio, Malinalco, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.



Figure 2.54 Serpent with bifurcated tongue surrounding door to interior cella, Structure I, Malinalco, mid-1400s-1520s CE. Photograph by Lauren Hooten 2023.

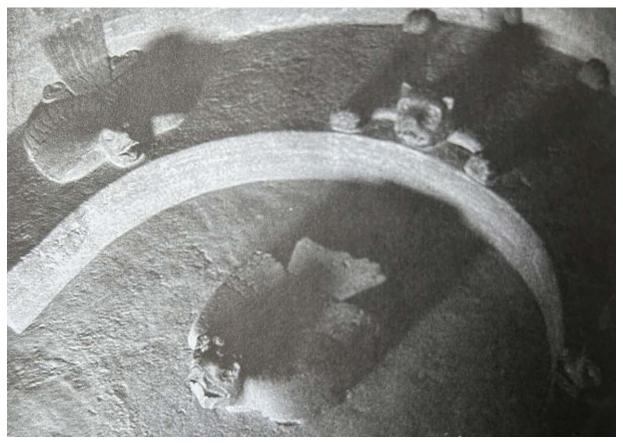


Figure 2.55 Jaguar head on bench in interior cella, Structure I, Malinalco. mid-1400s-1520s CE. Patrick Thomas Hajovsky. *On the Lips of Others: Moteuczoma's Fame in Aztec Monuments and Rituals*. (Austin: University of Texas Press, 2015), 30.



Figure 2.56 <u>Eagle heads in interior cella</u>, Structure I. Malinalco, mid-1400s-1520s CE. Rafael Saldaña, Flickr, 2018. CC-BY-2.0 DEED.

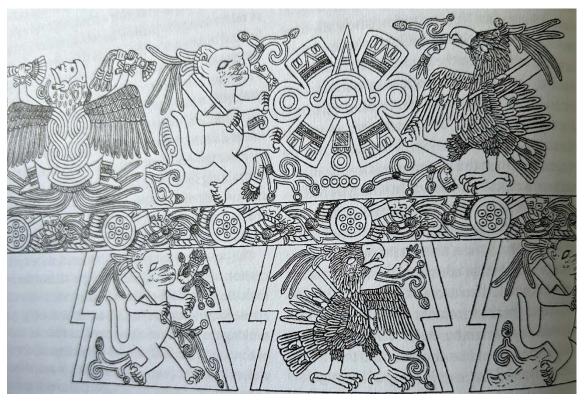


Figure 2.57 *Huehuetl* with imagery of war from Malinalco, mid-1400s-1520s CE. Patrick Thomas Hajovsky. *On the Lips of Others: Moteuczoma's Fame in Aztec Monuments and Rituals.* (Austin: University of Texas Press, 2015), 34.

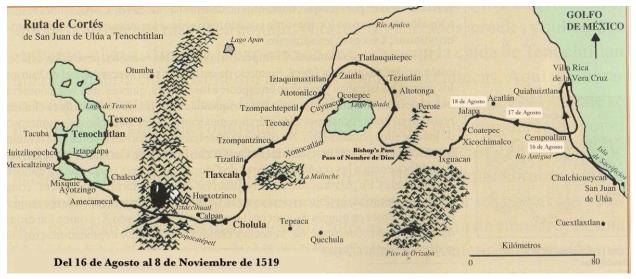


Figure 2.58 <u>Map of Cortés's path</u> from Veracruz to Tenochtitlan, including Iztaquimaxtitlan. Public Consulting Media, Creative Commons Attribution 4.0 International License.

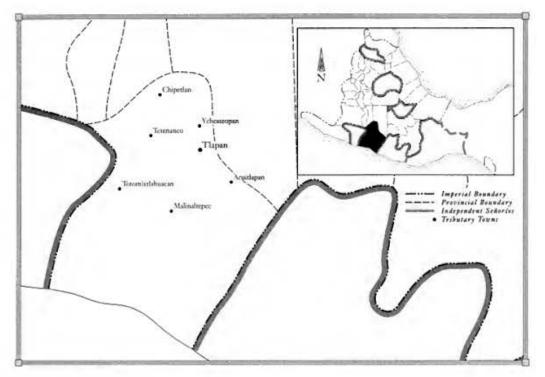


Figure 2.59 Map of Tetenanco, near Tlapa. *The Essential Codex Mendoza,* edited by Frances F. Berdan and Patricia Rieff Anawalt (Berkeley and Los Angeles, California: The Regents of the University of California, 1997), 85.



Figure 2.60 Toponym of Tetenanco with merlons, *Codex Mendoza*, Folio 39r, 16th century. *The Essential Codex Mendoza*, edited by Frances F. Berdan and Patricia Rieff Anawalt (Berkeley and Los Angeles, California: The Regents of the University of California, 1997), 83.



Figure 3.1 <u>Map of Mexico</u>, including Veracruz and Acapulco. Wikimedia Commons, Creative Commons Attribution-Share Alike 4.0 International.

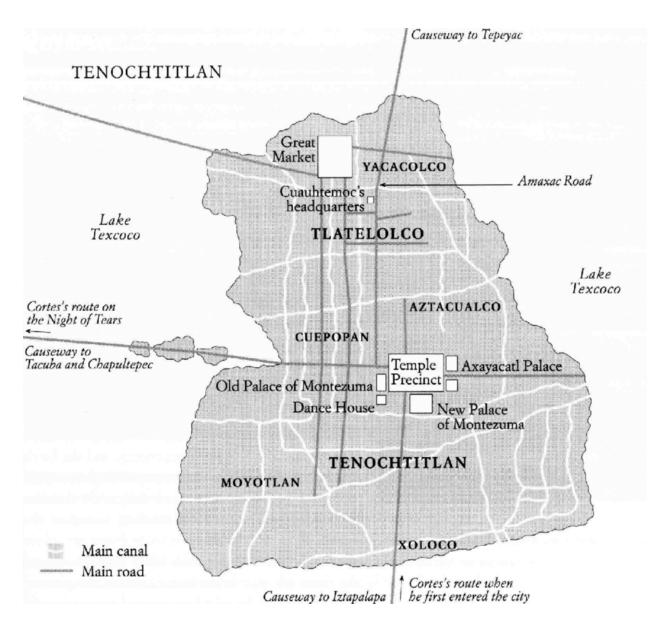


Figure 3.2 Map of Tenochtitlan/Mexico City with named causeways. Anastasia Kalyuta, "Una versión más de la Conquista de México: análisis etnohistórico y antropológico de la "Información de don Juan de Guzman Itztlolinqui," *Revista Española de Antropología Americana*, 47 (November 2018): 122.



Figure 3.3 Atarazanas depicted in the Mapa de Santa Cruz, 1537-1555. Public Domain.

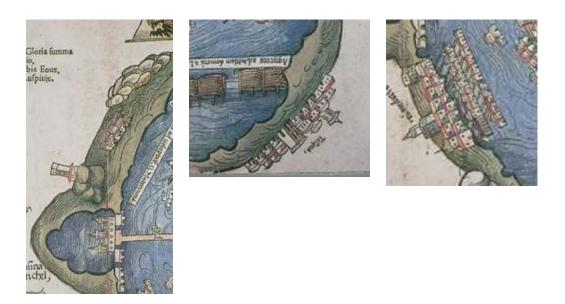


Figure 3.4 (Above left) Cylindrical standalone tower, *Nuremberg Map*, 1524. Public Domain. Figure 3.5 (Above center) Rectangular standalone tower, *Nuremberg Map*, 1524. Public Domain. Figure 3.6 (Above right) Rectangular standalone tower, *Nuremberg Map*, 1524. Public Domain.



Figure 3.7 Cylindrical towers, central precinct, Nuremberg Map, 1524. Public Domain.

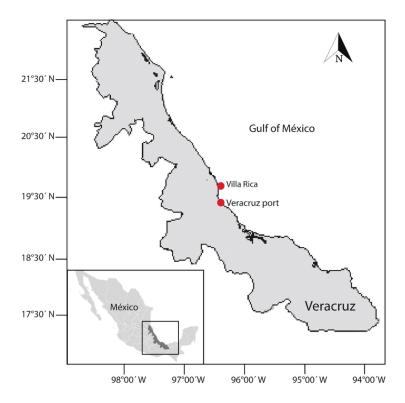


Figure 3.8 Map of Villa Rica de Veracruz, David Siqueiros-Beltrones, "Prospective floristics of epiphytic diatoms on Rhodophyta from the Southern Gulf of Mexico," *CICIMAR Oceanides*, 32 (November 2017): 36.



Figure 3.9 Battista Antonelli drawing of San Juan de Ulúa, *La fortaleza de San Juan de Ulúa, Veracruz,* 1590, Archivo General de Indias, Sevilla, España. Pilar Moya Olmedo. "Algunos dibujos de la primera arquitectura de Nueva España: mapa, planos y proyectos de arquitectura del siglo XVI," in P+C, v. 5(2014): 85.

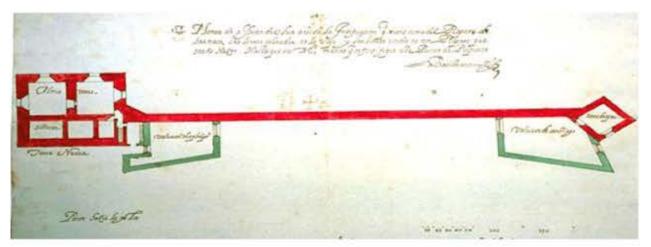


Figure 3.10 Battista Antonelli revised drawing of San Juan de Ulua, indicating renovations, *La fortaleza de San Juan de Ulúa, Veracruz*, 1590, Archivo General de Indias, Sevilla, España. Pilar Moya Olmedo. "Algunos dibujos de la primera arquitectura de Nueva España: mapa, planos y proyectos de arquitectura del siglo XVI," in P+C, 5(2014): 85.

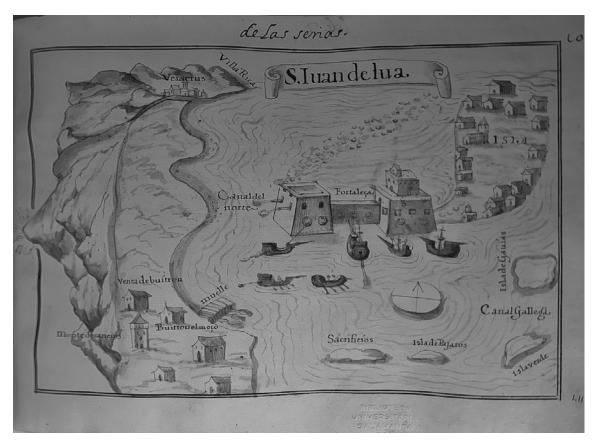


Figure 3.11 Vellerino de Villalobos rendering of San Juan de Ulua, 1592, Biblioteca de la Universidad de Salamanca, Spain. Wikimedia Commons, Creative Commons Attribution-Share Alike 4.0 International.



3.12 Battista Antonelli, redesign of San Juan de Ulua, 1608, Archivo General de Indias, Sevilla, España. Pilar Moya Olmedo. "Algunos dibujos de la primera arquitectura de Nueva España: mapa, planos y proyectos de arquitectura del siglo XVI," in P+C, v. 5(2014): 87.



3.13 <u>San Diego de Acapulco</u>, designed by Adrian Boot, 1615-1617. Wikimedia Commons, 2019. Creative Commons Attribution-Share Alike 4.0 International.



3.14 Adrian Boot, *Puerto de Acapulco en el Reino de la Nueva España en el Mar del Sur.* Bibliotèquenational de France, P183569 [Vd-29 (5)-Ft 6]. 17th century. Gabriel Granado-Castro and Joaquin Aguilar-Camacho, "Las maquetas de Acapulco y el proyecto de bajorrelieves de Carlos III," in *Quiroga*, no. 18 (July-December 2020): 87.



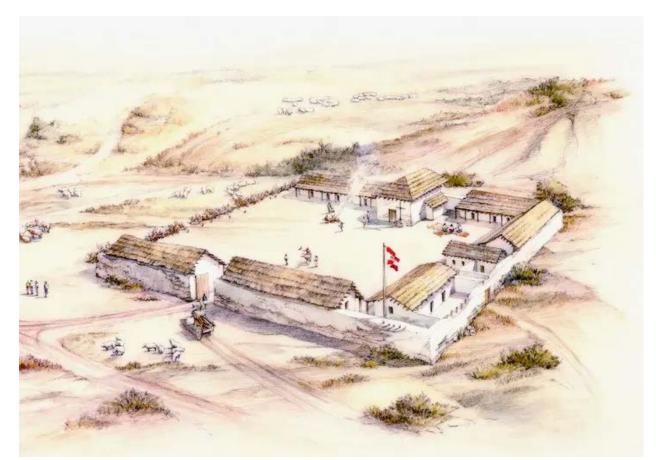
3.15 Plan of Castillo del Morro (El Morro), designed by Battista Antonelli, Cuba, 16th century. Ministerio de Educación, Cultura y Deporte, Archivo General de Indias, Mapas y Planos, MP-SANTO\_DOMINGO27, Series geográficas 1596-1801, La Habana (Cuba). Olimpia Niglio, "Geometry and Genius Loci: Battista Antonelli's Fortifications in Havana." *Nexus Network Journal* 16, no.3 (2014): 729.



3.16 <u>La Punta, aerial view</u>, designed by Battista Antonelli, Cuba, 16th century. Osvaldo Valdes, Wikimedia Commons, 2021. CC BY-SA 4.0.



3.17 <u>Real Felipe de Callao</u>, designed by Louis Godon, 1747-1774. TavoPeru. Wikimedia Commons, 2019. Creative Commons Attribution-Share Alike 4.0 International.



3.18 <u>Presidio</u>, San Francisco, 1776. <u>www.presidio.gov</u>. Presidio Trust 2023. Accessed February 8, 2024.



3.19 Spanish red brick *ladrillos*, used as ballast and building material, inside the older portion of San Juan de Ulúa, 16th century. Photograph by Lauren Hooten 2023.



3.20 Spanish red brick *ladrillos*, used as ballast and building material, inside an older portion of San Juan de Ulúa, 16th century. © Photograph by Lauren Hooten 2023.

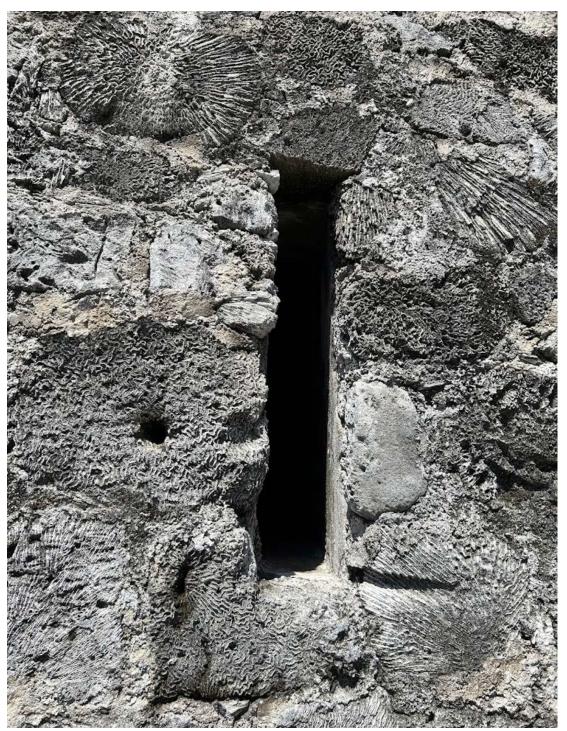


Figure 3.21 *Piedras de coral* of the walls of San Juan de Ulúa, 16th century. Photograph by Lauren Hooten 2023.

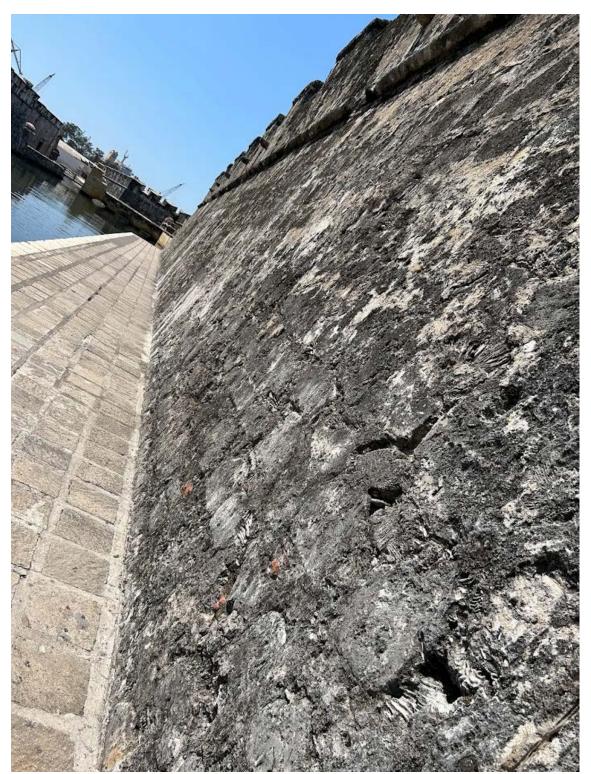


Figure 3.22 *Piedras de coral* of the walls of San Juan de Ulúa, 16th century. Photograph by Lauren Hooten 2023.



Figure 3.23 <u>Pre-Hispanic structures made of river rock at Cempoala</u>, Veracruz. Gustavo Von, Wikimedia Commons, 2008. Creative Commons Attribution-Share Alike 3.0.



Figure 3.24 "Casa de Cortés," built of *piedras de coral*, Huitzilapan, México. Chivista. Wikimedia Commons, 2009. Creative Commons Attribution-Share Alike 3.0.



4.1 Dwellings with crenelated or merloned rooflines, *Mapa de Santa Cruz*, 1537-1555. Public Domain.



Figure 4.2 Pointed merlons adorning roofline of Palace of Cortés, Cuernavaca, 1526. Photograph by Lauren Hooten 2023



Figure 4.3 <u>Map of Huejotzingo</u>, Programa Destinos México, <u>https://programadestinosmexico.com/que-ver-y-hacer-en-chignahuapan</u>. Accessed February 8, 2024.



Figure 4.4 Merloned wall, *atrio* of San Miguel, el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.5 Pierced merlons, San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.

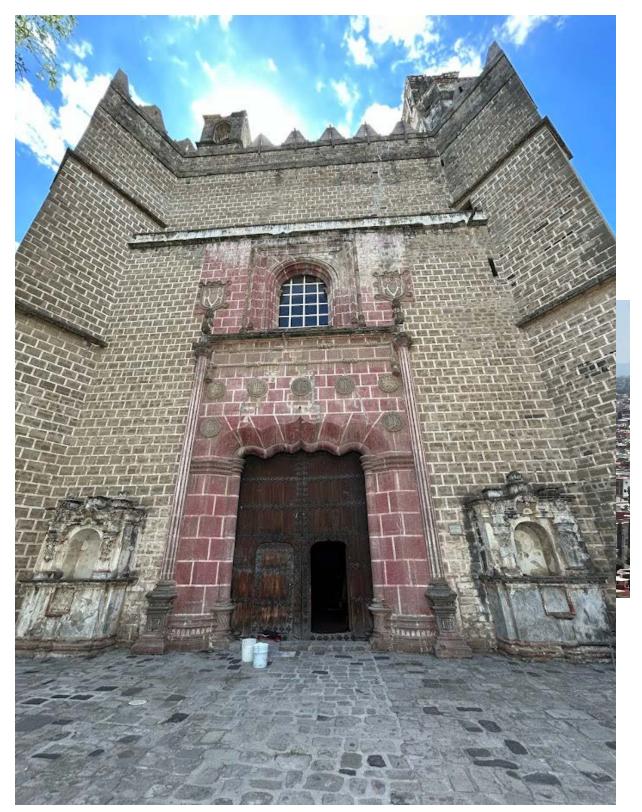
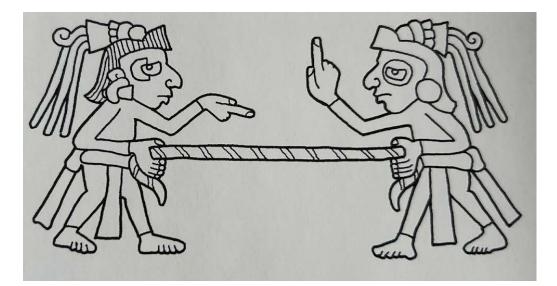


Figure 4.6 Façade of San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.7 Interior open wall inside friars' quarters at San Miguel el arcángel, Huejotzingo featuring indigenous construction technique, 16th century. Photograph by Lauren Hooten 2023.



4.8 Use of measuring rope, from detail after folio 22, *Codex Vindobonensis*, Samuel Y. Edgerton. *Theaters of Conversion: Religious Architecture and Indian Artisans in Colonial Mexico* (Albuquerque: University of New Mexico Press, 2001) 58.



4.9 Painting of San Miguel, interior of San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.

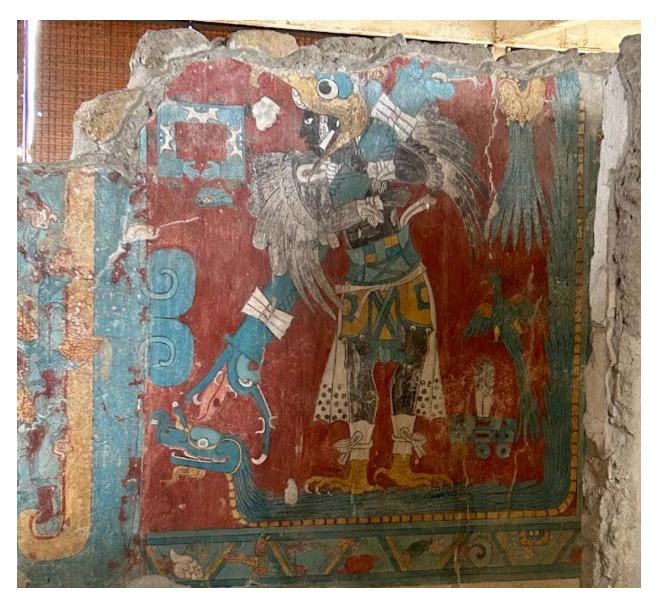


Figure 4.10 Bird warrior, Structure A, north end of acropolis, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 4.11 Franciscan knotted cord framing *posa* archways at San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.12 Crest of the Franciscans in the Americas from *posa* facade at San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.13 Knotted cord of ritualized sacrifice, Bird warrior, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.

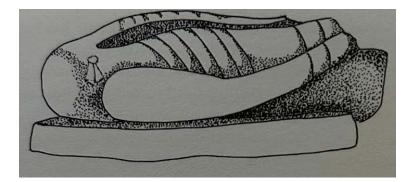


Figure 4.14 Drawing of dismembered torso sculpture in the round found in the central plaza at Xochicalco, 700-900 CE. Drawing by Kenneth G. Hirth in "Militarism and Social Organization at Xochicalco, Morelos," in *Mesoamerica After the Decline of Teotihuacan, A.D. 700-900,* edited by Janet Catherino Berlo and Richard A. Diehl (Washington, D.C.: Dumbarton Oaks, 1989), 76.



Figure 4.15 (Above left) Franciscan crest of five stigmata, visually resembling the sacrificial hearth glyph from Cacaxtla (Fig. 4.16) from *posa* facade at San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.

Figure 4.16 (Above right) Sacrificial heart glyph, Battle Mural, Cacaxtla, 650-950 CE. Photograph by Lauren Hooten 2023.



Figure 4.17 Goggle-eyed figure, roof of *posa* chapel, San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.18 Goggle-eyed figure inner *atrio* walls in high relief at San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023



Figure 4.19 Possible goggle-eyed relief in stones used to build interior of *convento* at San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.

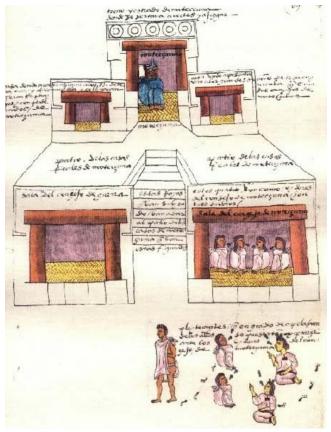


Figure 4.20 *Chalchihuitl* on the upper façade of the palace of Moctezuma in *Codex Mendoza*, folio 69r, 16th century. *The Essential Codex Mendoza*, edited by Frances F. Berdan and Patricia Rieff Anawalt (Berkeley and Los Angeles, California: The Regents of the University of California, 1997), 143.



Figure 4.21 Close up, pyramidal pierced merlons, San Miguel el arcángel, Huejotzingo, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.22 Exterior of San Salvador, Malinalco, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.23 Sculptural medallions, exterior of San Salvador, Malinalco, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.24 *Malinalli* glyph, exterior San Salvador, Malinalco. 16th century. Photograph by Lauren Hooten 2023.

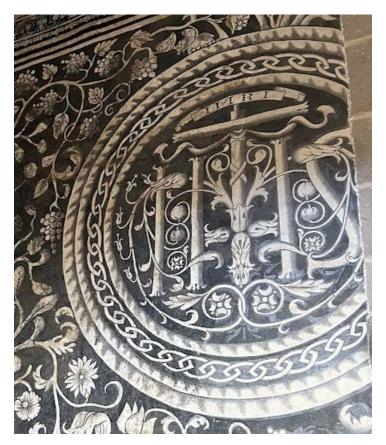


Figure 4.25 IHS symbol for Jesus Savior of Humankind in medallion, interior cloister, San Salvador, Malinalco, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.26 Three darts piercing heart, Order of St. Augustine, San Salvador, Malinalco, inner lower cloister mural, 16th century. Photograph by Lauren Hooten 2023



Figure 4.27 Grapevines, interior cloister mural, San Salvador, Malinalco, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.28 *Oceloxochitl*, "Flower of the ocelot or jaguar," interior cloister mural San Salvador, Malinalco, 16th century. Jeanette Favrot Peterson. *The Paradise Garden Murals of Malinalco: Utopia and Empire in Sixteenth-Century Mexico* (Austin: University of Texas Press, 1993), 101.



Figure 4.29 Hummingbirds, interior cloister mural, San Salvador, Malinalco, 16th century. Jeanette Favrot Peterson. *The Paradise Garden Murals of Malinalco: Utopia and Empire in Sixteenth-Century Mexico* (Austin: University of Texas Press, 1993), 112.

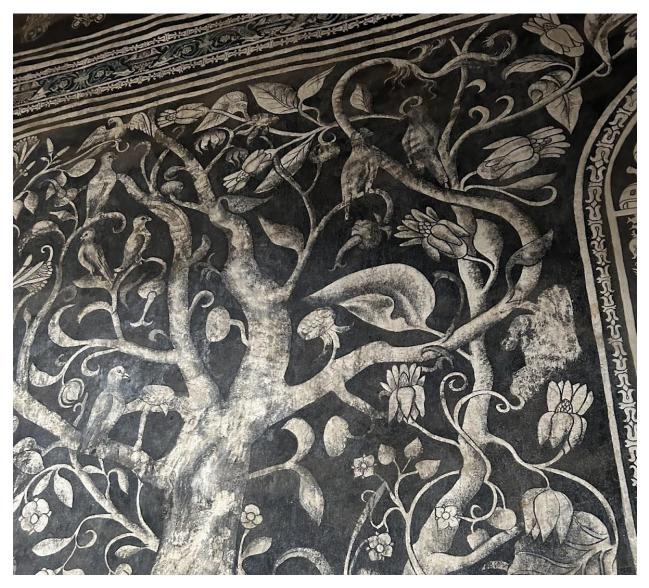


Figure 4.30 Various birds, including birds of prey, cloister mural, San Salvador, 16th century. Photograph by Lauren Hooten 2023.



Figure 4.31 <u>Exterior façade, San Miguel, Ixmiquilpan, Hidalgo</u>, c. 1550-1560s. Jolivaresb, Wikimedia Commons, 2010. Creative Commons Attribution-Share Alike 3.0.



Figure 4.32 Battle mural, interior of San Miguel, Ixmiquilpan, c. 1550-1560s. Thelmadatter, Wikimedia Commons, 2017. Creative Commons Attribution-Share Alike 4.0 International.



Figure 4.33 Jaguar-clad warrior with trophy head, battle mural, San Miguel, Ixmiquilpan, c. 1550-1560s. Richard Perry, "Ixmiquilpan. The Church Murals 2: The Battle Frescoes," *Mexicosmurals*. <u>https://mexicosmurals.blogspot.com/2017/12/ixmiquilpan-church-murals-2-battle.html</u>. Accessed February 8, 2024.

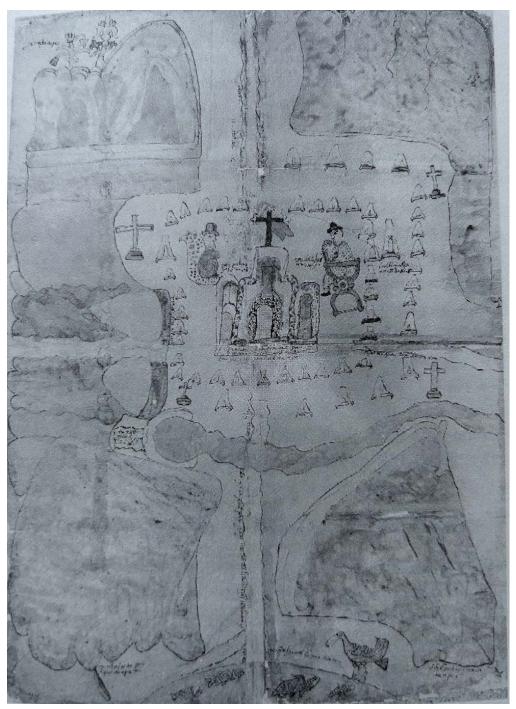


Figure 4.34 Relación geográfica de Suchitepec, 1579. Barbara E. Mundy. The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas (Chicago: University of Chicago Press, 1996), 163.

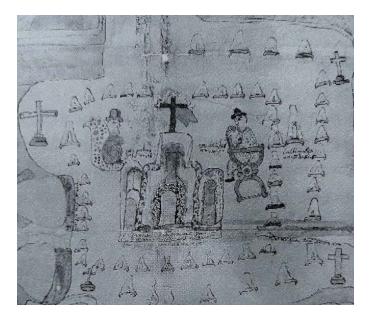


Figure 4.35 Cave-like images, close up, *Relación geográfica de Suchitepec*, 1579. Barbara E. Mundy. *The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas* (Chicago: University of Chicago Press, 1996), 163.

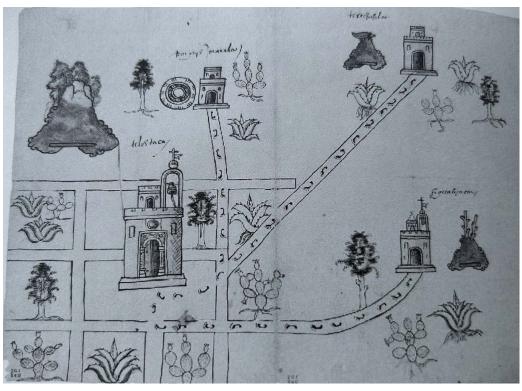


Figure 4.36 *Relación geográfica de Tetlistaca*, 1581.Barbara E. Mundy. *The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas* (Chicago: University of Chicago Press, 1996), 96.