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UNIVERSITY OF CALIFORNIA
RIVERSIDE

Leadership and Community Identity at Postclassic Xaltocan, Mexico

A Dissertation submitted in partial satisfaction
of the requirements for the degree of

Doctor of Philosophy

in

Anthropology

by

Kirby Elizabeth Farah

June 2017

Dissertation Committee:

Dr. Wendy Ashmore, Chairperson

Dr. Travis Stanton

Dr. Karl Taube

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The Dissertation of Kirby Elizabeth Farah is approved:

Committee Chairperson

University of California, Riverside

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ABSTRACT OF THE DISSERTATION

Leadership and Community Identity at Postclassic Xaltocan, Mexico

by

Kirby Elizabeth Farah

Doctor of Philosophy, Graduate Program in Anthropology

University of California, Riverside, June 2017

Dr. Wendy Ashmore, Chairperson

This dissertation uses archaeological evidence to address the ways that local leaders at Postclassic (A.D. 900-1521) Xaltocan, Mexico negotiated their complex social and political roles over time. Archaeological investigations were conducted at a large mound near the center of modern day Xaltocan (Cerrito Central), and focused on the strategies used by Xaltocan's leaders to assert authority at the local and regional levels, while also engaging in shared practices to grow solidarity within their home community. Drawing on practice theory and theories of identity, this research used the household as a lens, which facilitated a more nuanced study of the everyday practices of Xaltocan's leaders, and created datasets that were comparable to existing datasets from commoner contexts at Xaltocan. As a result, the archaeological remains recovered from Cerrito Central were easily compared to and contextualized by site-wide data. These intra-community comparisons indicated that Xaltocan's leaders engaged in many of same domestic practices as commoners, but also maintained unique practices and symbol systems that distinguished them from commoners. In particular, Xaltocan's leaders

produced, expressed and maintained their authority through monumental construction programs and ritual activities. Together, these data suggest that although Xaltocan's leaders were powerful members of society, their status was also dependent on local support. Accordingly, they established their legitimacy using public ritual and place-making practices, which generated shared memories and transformed their houses into socially meaningful places.

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CHAPTER 1

VIVÍAN AQUÍ LOS REYES: INTRODUCTION

Community interactions, or the connections and communications among individuals sharing a common social and physical space, underpin and impact our everyday lives today as they did in the past. As a lens for analysis, communities are distinct from archaeological sites. While archaeological sites are defined spatially, based on the clustering of archaeological materials, communities may be outlined by spatial or political limits (like many archaeological sites), but may also sprawl beyond the boundaries of physical sites or be embedded within site limits, defined based on social connections and shared identities. Communities, then, are socially constituted, situated within particular time spans and places, structured by day-to-day interactions (Yaeger and Canuto 2000), and united through shared identities. These community identities are essential to maintaining unity, but are fluid and constantly adapting to any number of social factors. Unlike political structures, which might be more tightly controlled and maintained over time, communities and community identity define and are perpetually redefined by human interactions, and involve and serve *all* members of the community, not just those in power. For this reason, I argue that the community is a productive lens for analyzing the social relationships that enable and sustain leadership. This framework demonstrates how local power might have been contingent upon social interactions, and provides an alternative interpretation of socio-political structures. I suggest that local leaders made efforts to build and perpetuate a shared community identity and that

maintaining strong local relationships was more significant for maintaining authority than outright expressions of power in the form of material wealth, military prowess, or control over religious institutions.

In this dissertation, I define and demonstrate a methodology for understanding social relationships between community leaders and community members in Postclassic central Mexico. This approach draws from theories of practice and identity to demonstrate how leaders at Xaltocan, a regional capital in the Northern Basin of Mexico, negotiated power and sustained local unity. My framework moves away from preconceptions about class binaries, rigid political structures, and relationships among regional elites, all of which are topics emphasized in historical texts written during the Colonial period (A.D. 1521-1800) (*Anales de Cuauhtitlan* 1992; *Anales de Tlatelolco* 2004; Bierhorst 1992; Carrasco 1950; Tezozomac 1943; see also, Gillespie 1989; Hassig 1995; Smith et al. 2008). These documents provide a fount of information about the Late Postclassic period and the Aztec imperial structure, but are less reliable in their references to earlier periods and peripheral communities. As an alternative, this dissertation uses material evidence as a starting point, and compares archaeological remains found at successive structures (possibly residences) belonging to Xaltocan's leaders with those found at commoner households elsewhere in the community. The similarities and differences among artifacts and architectural features reflect social and political relationships at the local level. I also consider how large-scale building programs and public ritual, among other place-making practices, may have been used to promote a community identity and to sustain favor at the local level. This model challenges

traditional investigations of leaders and their spaces by suggesting that power is earned from the community through strategic practices that simultaneously assert status and promote local interests. The interpretations gleaned from this perspective challenge inferences extrapolated from archaeological evidence and historical documents chronicling Late Postclassic Aztec society, and lead to new conclusions about social and political structures of central Mexican polities, especially during the Early Postclassic (A.D. 900-1350).

Context of the Case Study: Postclassic Xaltocan

Xaltocan is located in the northern Basin of Mexico on a human-made island in what was once the shallow and brackish Lake Xaltocan (Figure 1.1). Lake Xaltocan was contained within an expansive lake system that was exploited by nearly every central Mexican polity during the Postclassic. The lake was drained about 60 years ago, and today the modern town is surrounded by communal farmland (*ejidos*) and other community owned land (*tierras comunales*). Xaltocan was first inhabited sometime during the tenth-century A.D., well after the demise of nearby Teotihuacan and roughly contemporaneous with the Early Postclassic (A.D. 900-1200) center of Tula about 60 km to the North. Although the details of Xaltocan's political ascent are unclear, ethnohistorical sources indicate that it rose to prominence sometime in the twelfth-century as the capital of the Otomí city-state (Alva Ixtlilxochitl 1975-77 I:293, 423, II:299; *Anales de Tlatelolco* 2004; Barlow 1949, 1999; Berdan 1992; Bierhorst 1992; Hicks 1994; Perez Rocha 2000; Rodriguez Alegría 2010; see Carrasco 1950). At its peak,

Xaltocan controlled a domain that included 73 towns, 24 of which contained agricultural fields for tribute (*Anales de Cuauhtitlan* 1992; Nazareo de Xaltocan 1940) (Table 1.1; Figure 1.2). However, the relationship between Xaltocan and its subsidiaries remains unclear on multiple levels. First, how these places became wards of the Otomí capital, whether through alliance or conquest, has not been determined (Brumfiel 1991; 1994; Hicks 2005). Furthermore, although sixteenth-century sources do suggest that tribute exchange was taking place at places like Xaltocan during the Early Postclassic, these reports are conflicted and were certainly biased by economic and political structures of the time (Overholtzer 2012). As a result, Colonial period documents cannot necessarily be trusted to accurately define the exchange and tribute networks that fueled the economy of the Basin of Mexico, especially during the earliest centuries of the Postclassic. More on this topic is discussed in Chapter 7.



Figure 1.1. Major towns and capitals in the Postclassic Basin of Mexico

Table 1.1. List of communities subordinate to Xaltocan during the Middle Postclassic. Reproduced from Morehart (2010: Table 4.2). Code number corresponds to locations in Figure 1.2. Reference: A, *Anales de Cuauhtitlan* (1992); B, Nazareo (1940); C, Carrasco (1950); D, Alva Ixtlilxochitl (1975-77).

Name	Code	Qualification	Ref.	Name	Code	Qualification	Ref.
ACAYUCA	1	Farms/Villages	B, C	TEPEAPULCO	25	Farms/Villages	B, C
APAXCO	2	Farms/Villages	B, C	TEQUIXQUIAC	26	Farms/Villages	B, C
ATITALAQUIA	3	Farms/Villages	B, C	TETEPANGO	27	Farms/Villages	B, C
ATLACOMULCO	4	Farms/Villages	B, C	TEXCATEPEC	28	Farms/Villages	B, C
ATOTONILCO	5	Farms/Villages	B, C	TIZAYUCA	29	Farms/Villages	B, C
CUAUTITLAN	6	Farms/Villages	B, C, D	TLAQUILPA	30	Farms/Villages	B, C
CUAUTLALPAN	7	Farms/Villages	B, C	TONANITLA	31	Farms/Villages	A, B
CUAUTLALPAN	8	Farms/Villages	B	TULANCINGO	32	Farms/Villages	B, C
ECATEPEC	9	Farms/Villages	A, B, C	TUTOTEPEC	33	Farms/Villages	B, C
EPAZOYUCAN	10	Farms/Villages	B, C	XOLOC	34	Farms/Villages	B
HUEHUETOCA	11	Territory	C	ZEMPOALA	35	Farms/Villages	B, C
HUEYPOXTLA	12	Territory	C	ZITALTEPEC	36	Farms/Villages	B, C
IXMIQUILPAN	13	Farms/Villages	B, C	ZUMPANGO	37	Farms/Villages	A, B, C
IXTLAHUACA	14	Farms/Villages	B, C	TOLTEPEC	38	Farms/Villages	B
JALTENCO	15	Territory	A	TEMACPALCO	39	Territory	A
JOCOTITLAN	16	Farms/Villages	B, C	TENOPALCO	40	Territory	A
METZTITLAN	17	Farms/Villages	B, C, D	TELOYUCAN	41	Farms/Villages	B
NEXTLALPAN	18	Territory	A	TOLTITLAN	42	Farms/Villages	B, C
OTUMBA	19	Farms/Villages	B, C	CHICONAUTLA	43	Farms/Villages	A, B, C, D
PACHUCA	20	Place of Mines	B, C	TECALCO	44	Farms/Villages	B
SANGUILUCAN	21	Farms/Villages	B, C	COACLACO	45	Territory	A
TECAMAC	22	Farms/Villages	A, B, C	JIQUIPILCO	46	Farms/Villages	B, C
TEMASCALAPA	23	Farms/Villages	B, C	JILOTEPEC	47	Territory	D
TEMOAYA	24	Farms/Villages	B, C	TEPOTZOTLAN	48	Territory	D

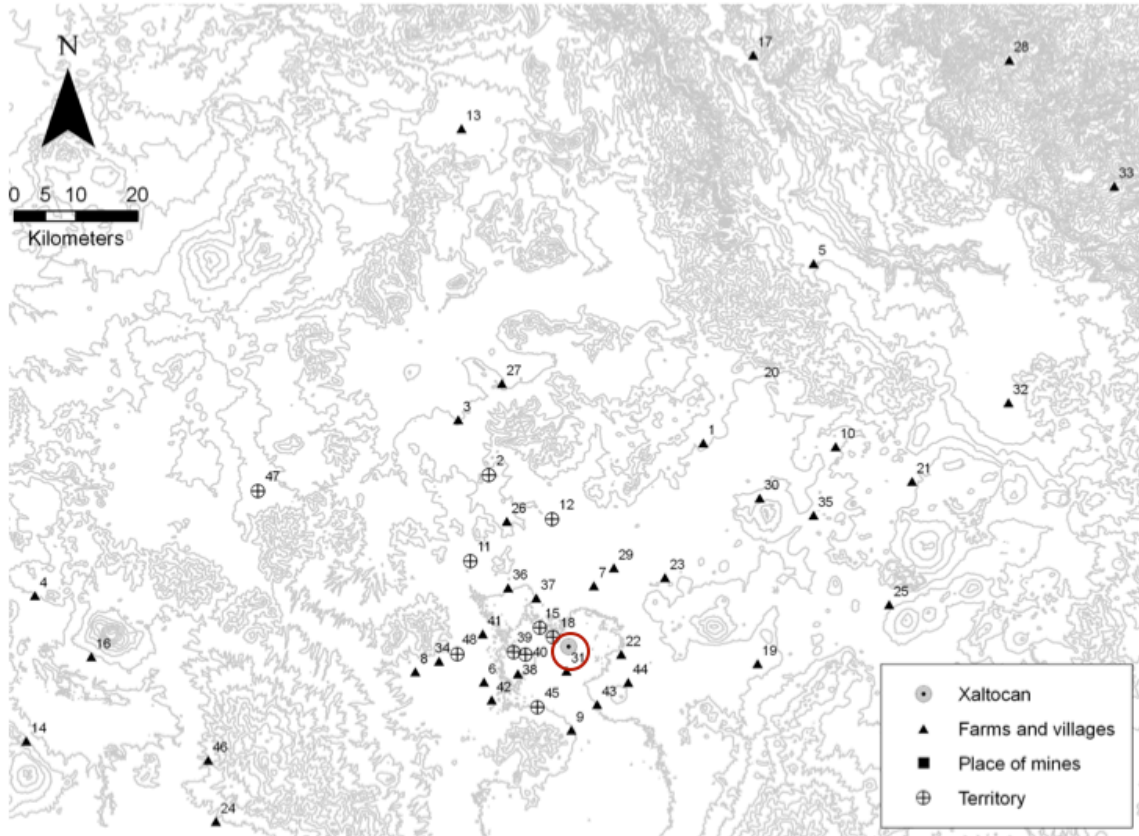


Figure 1.2. Reconstructed political domain of Xaltocan. From Morehart (2010: Figure 4.7). Adapted by author to highlight the location of Xaltocan (circled in red).

Whatever degree of regional prowess Xaltocan enjoyed was short-lived. Starting in about A.D. 1250 Xaltocan entered into a sustained conflict with nearby Cuauhtitlan that lasted nearly 150 years. According to the *Anales de Cuauhtitlan* (1992:58) conflict erupted over hunting rights to Zoltepec or “Quail Hill”, which was controlled by Xaltocan. Scholars have also argued that competition for other natural resources, particularly wood and water, may have been motivating factors (Hicks 1994; Morehart 2010). Specifically, wood was necessary for a wide range of ritual and practical uses and was found in abundance in the foothills surrounding the basin, which was probably part

of Xaltocan's domain during the thirteenth-century. It is worth noting that the Early Postclassic was a generally violent period in central Mexico, with multiple polities vying for power, access to natural resources, and taxation rights (Brumfiel 1983; Morehart 2010; Overholtzer 2012). Persistent clashes with nearby Cuauhtitlan and other local rivals may have been largely unavoidable in an ecological context where populations were rising and access to natural resources was limited.

Although the "war" with Cuauhtitlan is probably better understood as a period of sporadic clashes rather than sustained violence (explored in greater detail in Chapter 7), considerable damage was done over time. Xaltocan sustained successive losses through the years as Cuauhtitlan chipped away at the city-state's frontiers, slowly encroaching on the island capital (*Anales de Cuauhtitlan* 1992:59-61). The deathblow for Xaltocan came when Cuauhtitlan formed an alliance with the increasingly powerful Tepanecs of Azcapotzalco. Together, Azcapotzalco and Cuauhtitlan defeated Xaltocan in A.D. 1395 (Alva Ixtlilxochitl 1975-1977 I: 323; *Annals of Cuauhtitlan* 1992). Ethnohistoric accounts report that in the wake of its conquest Xaltocan was abandoned by most of its inhabitants, who fled to Metztitlan, Tlaxcala, and Otumba (Alva Ixtlilxóchitl 1975-77 II: 36; *Anales de Cuauhtitlan* 1992:60-61, 75). However, recent archaeological research has demonstrated that at least some residents did not flee the island, and continued to occupy their houses well after the conquest (Overholtzer 2012; 2013). In A.D. 1428, Xaltocan was formally incorporated into the newly formed Aztec Triple Alliance, commonly called the Aztec empire, and in A.D. 1435 it was repopulated with tribute payers sent by the

state, described as being Acolman, Colhua, Tenochca, and Otomí peoples (*Anales de Cuauhtitlan* 1992:104; Hicks 1994).

With the resettlement came new political organization that functioned within the Aztec empire. Specifically, Hicks (1994, 2005) has argued that under Aztec rule, Xaltocan was overseen by one or two *tlacateuctli*, or governing nobles, and otherwise composed of mostly peasants. These individuals functioned differently than independent leaders, and were beholden to the Aztec ruler as opposed to the community itself. They would have administered the political and economic affairs of the town and its dependencies on behalf of the Aztec empire. Presumably, Xaltocan's Late Postclassic residents were loyal to the Aztecs. Díaz del Castillo (1956:355) recounts that Xaltocan warriors fought a violent battle against Hernán Cortés when he arrived in 1521 in route to Tenochtitlan. During this battle Xaltocan warriors demolished the causeway linking the island to the mainland, and were initially effective at protecting the town (Díaz del Castillo 1956:356-357). However, Cortés' forces eventually found their way across the lake and won the battle, burning some of the houses in retaliation after many inhabitants were able to flee with valuable property via canoe (Díaz del Castillo 1956:357). Following the conquest of Xaltocan, Cortés and his army continued on to Tenochtitlan, where they eventually defeated the Mexicas leading to the fall of the Aztec empire. Soon thereafter the entirety of the Basin of Mexico was incorporated under Spanish rule.

In light of this brief introduction to the Postclassic history of Xaltocan, I find it necessary to address the terminology used in this dissertation to refer to the political entity that would come to rule over much of the Basin of Mexico during the Late

Postclassic—that is, the Aztec empire. Throughout the Postclassic, the Basin of Mexico was a multi-ethnic, multi-lingual place. Even in places like Xaltocan, widely considered to be ethnically Otomí, people of many ethnicities most certainly lived within the city-state's domain. During the Late Postclassic, an alliance was formed among three major Basin of Mexico polities: Tenochtitlan (ruled by the Mexica), Texcoco (ruled by the Alcolhua) and Tlacopan (ruled by the Tepanecs). This Triple Alliance, through incorporation and conquest, quickly rose to power and came to rule over the vast majority of the Basin of Mexico and many territories well beyond.

It is increasingly common for scholars today, especially those working in and around the Aztec capital of Tenochtitlan, to refer to the people they study by their ethnic name—Mexica. The Mexicas, however, were a distinct ethnic group, and while the term may be accurate in referencing the rulers of Tenochtitlan, it is not useful for referring to the many people (from diverse ethnic backgrounds) that comprised the Aztec empire. Thus, in this dissertation I only use the terms “Mexica” or “Mexicas” in reference to people who were specifically ethnically Mexica. I use the term above, for example, to refer to the people that ruled Tenochtitlan when the Spanish arrived. I do not use Mexicas, or any iteration of the term, to refer to the political entity that came to rule much of the Basin of Mexico during the Late Postclassic, opting to use the more traditional term “Aztec” or “Aztec empire”. Although the term has been problematized for over-generalizing a large group of people, and for not accurately reflecting the way people living in the Basin of Mexico identified themselves, for the purposes of studying broad political relationships the term is quite useful. In this dissertation, I use the term

“Aztec” to temporally and politically situate Xaltocan. That is, pre-Aztec (also pre-imperial) period Xaltocan refers to the period during which Xaltocan was an autonomous city-state, and Aztec period Xaltocan refers to the period during which Xaltocan was under Aztec rule. The designation is political and site-specific, and is especially useful for a place like Xaltocan that even under Aztec rule was not ethnically Mexica.

Epistemic Background

To examine the identity making and daily practices of Xaltocan’s leaders, my research draws on a growing body of archaeological literature on household dynamics, with a focus on everyday life and the construction of place (Ashmore, 2009; Ashmore and Wilk 1988; Brumfiel 1998, 2000; Joyce 2001; Robin 2002, 2003). Much of this work (Ashmore 2002; Dobres and Robb 2000; Hendon 1996; Hutson 2009; Robin 2002) engages theories of practice, which posit that people in the past were social agents who had goals and intentions, but who lived in a social and historical context only partly of their own making (Bourdieu 1977; de Certeau 1984; Giddens 1979, 1984). Household archaeology has been a useful mode for better understanding social groups that are invisible in grand theories, which emphasize larger political and economic processes and ignore the struggles of individuals (Santley and Hirth 1993; Wilk and Ashmore 1988; Wilk and Rathje 1982). Moreover, the fine-tuned methodology associated with household archaeology has opened the door for studies of important social dynamics that are often overlooked in macro-theories (Brumfiel 1992; Hendon 2006; Robin 2002; Tringham 1991). This project seeks to understand how Xaltocan’s leaders created, utilized and

experienced their domestic spaces by examining the relationship between social agents, their everyday practices and the established structures of culture.

This dissertation also explores the complexities of social status and identity. Social status is one of many relational components that contribute to identity-making and broader social and political processes (Brumfiel 1992). Michael Smith (1987) has convincingly argued that household possessions, when studied with proper methodological rigor, may be employed by archaeologists to determine household wealth. Drawing in part from this model, my research pursues material evidence of social difference as well as evidence for practices that were shared across the community. Practices and materials that are found at every level of the community may be evidence that local leaders garnered loyalty by allying themselves with their local constituents through shared cultural symbols (Schortman et al. 2001).

To examine how Xaltocan's leaders managed such contradictions, this research also incorporates theories of identity (Berdan 2008; Bruchac et al. 2010; Diaz-Andreu 2005; Harrison-Buck 2012; Jones 1997; Meskell 2001; Shennan 1994). Bringing together issues of community cohesion, class identity and organization of space, my research differs markedly from previous studies of political leaders in central Mexico, which focus primarily on larger political and economic processes (Berdan et al. 1996, 2005; Hodge 1984; Hodge and Smith 1994). By drawing on theories of household dynamics, practice and identity formation, my research takes a unique approach that gleans new perspectives on the complexities of elite daily life in central Mexico.

Finally, in creating this project I worked closely with the local descendant community in Xaltocan. Although the details of this collaboration are outlined in Chapter 8, I must mention from the outset that these collaborations did guide the research questions and the interpretations of archaeological data. Specifically, communication and collaboration with local descendants led me to question how community identity was created and maintained at Xaltocan throughout the Postclassic.

The History and Archaeology of Xaltocan's Leaders

Over the past three decades archaeological projects, directed primarily by Elizabeth Brumfiel and her former students, have provided a considerable corpus of data from the site (Brumfiel 1991, 1998, 2000, 2005b; De Lucia 2011; Morehart 2010; Overholtzer 2012). The site has been mapped and surveyed, and a chronology has been established via a test-pitting program directed by Elizabeth Brumfiel (2005b). The majority of the work performed at Xaltocan has been concerned with topics including domestic production (Brumfiel 1991, 1996, 2005b, 2006; Hodge and Neff 2005), agriculture (Morehart 2010; Morehart and Eisenberg 2008), and everyday life (De Lucia 2010, 2011; Overholtzer 2012). While these research endeavors have made important contributions to our understanding of social and economic relations at Xaltocan, they focused primarily on commoner practices and thus far very little research has examined the material remains of Xaltocan's leaders.

In spite of a lack of archaeological data, the historical record contains numerous references to the leaders of Xaltocan (Alva Ixtlilxóchitl 1891; Barlow 1999), even

sometimes merging with myth in the case of the legend of *Ahuitzotl* (Ramírez Casas 2008). For example, historical documents report that Xaltocan’s leaders routinely formed marriage alliances with leaders and nobles from other Basin of Mexico polities (Table 1.2 and 1.3) including Chalco, Huexotla, and Azcapotzalco (Alva Ixtlilxóchitl 1975-77; Nazareo de Xaltocan 1940; Tlatelolco 2004).

Table 1.2 Xaltocan marriage alliances during the Pre-imperial period. Adapted from Overholtzer (2012: Figure 3.2) (Nazareo de Xaltocan 1940: 124-125)

XALTOCAN’S RULER	MARRIAGE TO THE DAUGHTER OF:
Teuctlacocauqui	Ruler of Tollan
Hopanteuctli	Ruler of Azcapotzalco
Chalchiuhtlatonac	Ruler of Tlacopan (and this ruler was the son or son-in-law of the ruler of Azcapotzalco)
Xiuitlemoc	Ruler of Tetzcotonco
Hopanteuctli	Ruler of Coatlinchan

Table 1.3 Xaltocan marriage alliances during the Imperial period (after A.D. 1430). Adapted from Overholtzer (2012: Figure 3.2) (Nazareo de Xaltocan 1940: 124-125)

XALTOCAN’S RULER	MARRIAGE TO THE DAUGHTER OF:
Coatzinteuctli	Ruler of Tenochtitlan, Izcoatl, who ruled from A.D. 1427-1440
Cuicuitzcatzinteuctli	A nobleman from Tenochtitlan
Coatzinteuctli	A nobleman from Tenochtitlan who was a cousin of Xaltocan’s military ruler

Frequent references to the leaders of Xaltocan in historical texts make the dearth of archaeological information all the more glaring. Until this project, the lack of material evidence relevant to Xaltocan's leaders had been a major obstacle to understanding broad community dynamics at Xaltocan. Xaltocan is not alone in this respect. Generally speaking, relatively little is known about the everyday lives of the Postclassic leaders of Basin of Mexico centers, with the notable exception of a few key places including Tenochtitlan and Tlatelolco. This is due largely to the fact that many towns in the Basin of Mexico have been continuously occupied since the Postclassic, and considerable colonial and modern architecture hinders substantial excavations in town centers. This dissertation contributes to understanding the function, relationships, and changing roles of community leaders in the Basin of Mexico. This research not only advances our understanding of a poorly understood and historically complicated time period, but also provides a cross-culturally relevant case study of leaders' spaces, utilizing archaeological theories and methodologies honed through the practice of household archaeologies.

Chronology

Xaltocan's chronology has been fine-tuned over the decades, and this research benefits greatly from the meticulous work of former researchers. Although different authors have chosen to use slightly different terminology to refer to Xaltocan's phases, they are all broken up into roughly similar date ranges. I have chosen to use the most recently revised chronology established by Lisa Overholtzer (2012: 124) (Table 1.4),

which differs only somewhat from Brumfiel’s (2005b) chronology, and amends it based on more recent research results, including new radiocarbon dates.

Table 1.4. Ceramic Chronology at Xaltocan. Reproduced from Overholtzer (2012:Table 4.4).

Time Period	Ceramic Type	Phase Name	Calendar Dates
Early Postclassic	Aztec I	<i>Dehe</i> (water in Otomí)	AD 920-1240
Middle Postclassic	Aztec II	<i>Hai</i> (land in Otomí)	AD 1240-1350
Late Postclassic	Aztec III	<i>Tlalli</i> (land in Nahuatl)	AD 1350-1521
Colonial	Aztec III and IV	<i>Isla</i> (island in Spanish)	AD 1521-1680

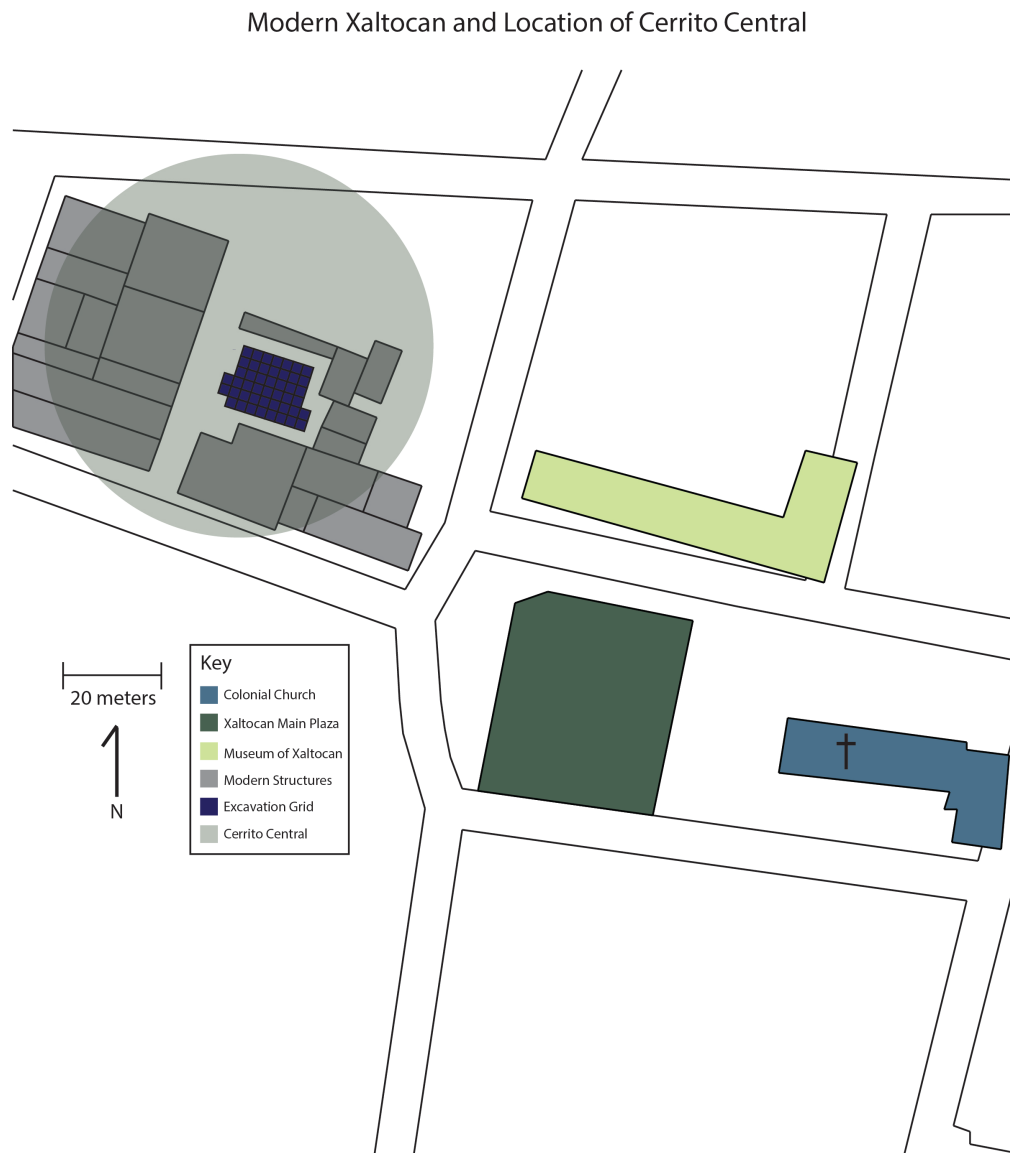
Although Overholtzer used Phase names to temporally frame her research, in this dissertation I have opted to use time periods (listed in the far left column of Table 1.4). I have chosen to use time periods for the sake of simplicity. Previous research conducted at Xaltocan and throughout the Basin of Mexico typically used similar terminology to frame research, and although the current chronology from Xaltocan is site-specific, the site chronology does roughly correspond to the broad chronologies used throughout the Basin of Mexico. More on this subject is explained in Chapter 4.

Research Area: Cerrito Central

The site of my archaeological investigations was a large mound near the center of modern day Xaltocan known as Cerrito Central, but called Structure 120 by Elizabeth Brumfiel in her 1987 survey. Cerrito Central is about 3 m tall, covering an area of about 6,000 m², and is located just west of the sixteenth-century church that dominates the main square (Figure 1.3). Despite being hidden from view by modern structures, the area is locally known, and many believe that it was the location of Xaltocan’s Postclassic palace.

When questioned about the ancient significance of the place locals consistently and unequivocally responded, “the kings lived there”.

Figure 1.3. Modern Xaltocan and Location of Cerrito Central.



Cerrito Central was chosen based on a number of criteria, paramount among which were the results of Brumfiel's early survey work and specifically data collected from Operation H. This test pit, excavated on the southern edge of the mound, revealed fragments of stucco paint and larger cut stones, suggesting that the mound may have contained monumental architecture. Additionally, despite some modern construction, the mound is relatively well preserved and free of major plant growth or other natural and unnatural obstacles. The surface of the mound contains stone, a material that does not naturally occur on this human-made island, and had to be brought in for construction. Surface collections on the mound included Aztec I and II ceramics (Brumfiel 2005b), indicating that Cerrito Central was probably inhabited during the centuries when Xaltocan functioned as an independent polity and enjoyed a great deal of prominence in the region (A.D. 1100 – 1350).

The only previous archaeological evidence of monumental architecture at Xaltocan was recovered during a test-pitting project directed by Brumfiel (2005b: 55). Operation H, located only a few meters south of Cerrito Central, contained the remnants of two stone platforms that were associated with Aztec II phase ceramic fragments, dating to the Middle Postclassic (A.D. 1240-1350). These test pit results, in addition to local folklore and its conspicuous location, contributed to the hypothesis that the Postclassic leaders of Xaltocan inhabited Cerrito Central.

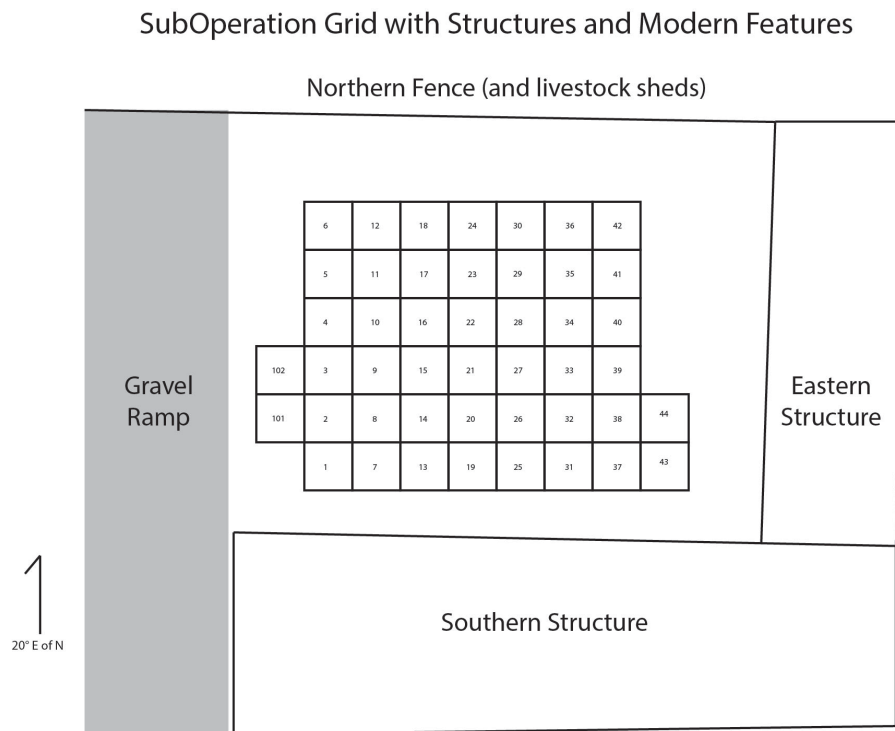
Research Goals and Research Questions

A number of broad goals and specific research questions guided this research. The two broad research objectives, which were created in collaboration with the local descendant community, were to develop an archaeological project that is transparent and quickly disseminates findings to the local community, and to develop research questions that would create locally meaningful knowledge. This knowledge might also include knowledge that is of particular interest to people living in Xaltocan today and that intersects with or adds perspective to issues facing communities in the Basin of Mexico. The first set of research questions, which were informed by communications with the local community included: How did growing political turbulence in the region during the Postclassic impact Xaltocan's leaders? Did shifting political and trade alliances cause Xaltocan's leaders to change their domestic practices? These, first set of questions focus on the regional ties of Xaltocan's leaders and how they were linked to changes in practices over time. The second set of research questions included: How did Xaltocan's leaders express their identity? How did these technique change over time as Xaltocan was incorporated into the Aztec empire? How did Xaltocan's leaders create and maintain local identity and solidarity? This second set of questions focused more on the relationship between Xaltocan's leaders and the rest of the community and specifically on identity-making practices.

Methodology

Despite widely held suspicions among locals and archaeologists alike about the Postclassic significance of the mound, until this project formal archaeological investigations had not been conducted at Cerrito Central. This is partially attributable to the fact that the mound is almost completely covered by modern construction, limiting the horizontal expanse of excavations significantly. Maintaining the integrity of modern structures and features that flanked the excavation area on all four sides required that excavations were conducted at a safe distance from building walls (Figure 1.4). This reduced the already restricted space for excavations significantly, and as a result excavations only recovered partial architecture from each building phase.

Figure 1.4. Schematic of Sub-Operation Grid



Given the lack of previous data from Cerrito Central, subsurface remote sensing tests were performed with the goal of attaining guidance for excavations. A team of researchers from Universidad Autónoma de México (UNAM), led by Luis Barba, performed magnetometry and electrical resistivity tests on the area. Unfortunately, these tests were unable to concretely identify the location of any buried features. Barba and I have attributed the inconclusive results to interference from metal in the foundations of nearby buildings and other debris found in a large modern trash pit located near the middle of the excavation grid.

Left with little guidance from remote sensing, excavation trenches were initially employed, sweeping south to north and east to west across the grid. These methods were adapted as features were encountered. In addition to the limited horizontal space, excavations were further complicated as architectural elements were discovered, blocking further excavation in certain areas. In response to these obstacles, methodology was once again adapted, and ultimately resulted in excavations that were more stratigraphic than horizontal. This shift in approach was productive, and gleaned significant information concerning changes at Cerrito Central over time. Excavations encountered archaeological remains spanning more than five centuries and revealed three major building phases, dating roughly to the Early, Middle, and Late Postclassic periods (see Table 1.3 for reference).

Dissertation Organization

The plan of this dissertation follows a less traditional format. The first half of the dissertation (Chapters 1-4) serve to introduce the site, outline the theoretical and historical frameworks that underpin the dissertation, and present a summary of the data recovered through excavations. The second half of the dissertation (Chapters 5-8) critically examines certain aspects of archaeological data with more focus, employing slightly different theoretical models in each chapter. However, all of these chapters draw from the same broad theoretical frameworks, particularly theories of practice and identity. A brief description of the contents of each chapter is as follows:

Chapters 1 and 9 provide introductory and concluding thoughts, and broadly frame the overarching arguments in this dissertation. Chapter 2 provides a more detailed explanation of the theoretical frameworks that underpin this dissertation (theories of practice and identity) and explains how they interdigitate with other bodies of theory that underpin this dissertation (social memory, space and place, and postcolonial). Chapter 3 provides a detailed analysis of the historical documents that have provided context for this dissertation and for other archaeological investigations at Xaltocan. A critical examination of these documents, and particularly the motivations and implicit biases of their authors, serves to situate their benefits and limitations as archaeological resources. Chapter 4 reports the bulk of the data recovered through excavations and outlines the basic chronology and depositional patterns found at Cerrito Central. Chapter 4 also outlines comparative data collected from commoner contexts at Xaltocan and elsewhere in the Basin of Mexico.

An analytical shift occurs with Chapter 5. Drawing from data already outlined in Chapters 3 and 4, Chapters 5-7 focus on specific archaeological features and time periods to propose interpretations about corresponding meanings and motivations of ancient Xaltocamecas. Chapter 5 focuses on how Xaltocan's leaders used monumental architectural programs to create and perpetuate a sense of community and to assert their fundamental role within it. Chapter 6 moves away from the public realm, and looks inward to the use of private domestic ritual and examines how the private domestic practices of Xaltocan's leaders and their kin differed from the practices of commoners, and expressed their unique, and even secret, worldviews. Chapter 7 makes comparisons between the historical record (outlined in Chapter 3) and archaeological materials (outlined in Chapter 4). As has been the case with other archaeological research at Xaltocan (Brumfiel 1991; Overholtzer 2012), data collected from Cerrito Central does not always corroborate historical claims. Comparing archaeological materials to written histories provide evidence for specific areas in which written documents may have misrepresented the social and political dynamics at Postclassic Xaltocan. Chapter 7 suggests an alternative model of political structure at pre-Imperial Xaltocan that may be useful for understanding other pre-Aztec polities in the Basin of Mexico.

Finally, Chapter 8 addresses the relationship between this archaeological project and the modern community in which it is situated. Xaltocan is a community that is proud of its heritage and many people living in the town today consider themselves "descendants" of Xaltocan's Prehispanic inhabitants. The interests and goals of the local community shaped my dissertation project and research questions. As a result, the data

and interpretations gleaned from this work have significant, local relevance. This chapter addresses the significance of community archaeology in general, and specifically elaborates on how research at Xaltocan has been positively influenced by local insight. The conclusions drawn from all of the foregoing research are concisely reviewed and reiterated in Chapter 9. Chapter 9 also explores the implications of this dissertation for future archaeological research, and outlines specific methodologies that may prove effective moving forward.

Conclusions

In this dissertation, I suggest that the social relationships between Xaltocan's leaders and the larger community were more complex and interactional than previous interpretations, based largely on written histories, might suggest. This research differed from typical investigations of spaces occupied by leaders because rather than focusing on the material elements that differentiated leaders from the rest of the community, it focused on the practices and physical manifestations of ideologies that were shared throughout the community. These practices ultimately helped Xaltocan create a distinctive community identity that differentiated it from other Postclassic polities. Maintaining a united community may have been particularly significant during the Early Postclassic (A.D. 900-1240) and Middle Postclassic (A.D. 1240-1350), when Xaltocan was an autonomous, regional capital, and probably became less important in the Late Postclassic (A.D. 1350-1521), when Xaltocan was ultimately conquered and incorporated into the Aztec empire.

Using the remains recovered at Cerrito Central and comparative data from commoner spaces throughout Xaltocan, I present an alternative interpretation for how Xaltocan's leaders established legitimacy locally. I argue that Xaltocan's leaders utilized public architecture and ritual to express their commonalities, rather than differences, with the community at large, thus privileging local symbols and norms over regional expressions of power and wealth that are found elsewhere in the basin of Mexico. My research also explores how Xaltocan leaders' domestic practices, including those that were probably not visible to the community at large, compared with those found elsewhere at Xaltocan. I argue that Xaltocan's leaders do not appear to have had dramatically different daily practices from members of the larger community, nor do they appear to have accumulated significant wealth in the form of prestige goods. Finally, I analyze the private ritual practices of Xaltocan's leaders to determine how they defined their own identities outside of the public eye. The results of this research fundamentally challenge the political structures outlined by historical sources, and provide a new perspective, using the interactional community as a starting point for analysis. This dissertation research explores only one community in the Basin of Mexico, but has the potential to influence how future researchers investigate issues of identity, social differentiation and political structure at central Mexican polities and beyond.

CHAPTER 2

PRACTICE AND IDENTITY: THEORETICAL UNDERPINNINGS

In my analysis of archaeological data from Cerrito Central I draw on a wide range of theoretical perspectives. Most broadly however, this dissertation is underpinned by theories of practice and identity. Theories of practice facilitate a nuanced study of how leaders and other community members at Xaltocan *acted* to adapt to and transform their world. The Postclassic Basin of Mexico was a dynamic, politically complicated, and diverse setting in which the inhabitants of Xaltocan, including Xaltocan's leaders, were agents of change. This standpoint recognizes the significance of relationships at the macro-scale, between the community of Xaltocan and its counterparts (both rivals and allies) in the Basin of Mexico, and at the micro-scale, among members of the local community. As a starting point, practice theory recognizes that all material remains are indicative of human agency, and therefore archaeologists are capable of detailed analyses of the human behaviors and choices that impacted and were impacted by social relationships and political structures. I expand on this assertion in more detail below.

Working in concert with practice theory, theories of identity support an exploration of the ways in which Xaltocan's leaders expressed, cultivated, experienced, and were imbued with different social, symbolic, and political roles or personae. Particularly important in this analysis is the context in which these many identities were formed and how they responded to and were framed within diverse and constantly shifting political and social environments. Comparing the identity-making practices of

Xaltocan's leaders with the identity-making practices of commoners may highlight aspects of social differences but may also point to areas of continuity and evidence for shared identities. Together, this mosaic of individual and collective identities contribute to the community identity of Xaltocan, the characteristics that make it a distinct, physically and socially bounded place, both in the eyes of its inhabitants and outsiders. Thus, the material expressions of identity, particularly those employed by Xaltocan's leaders, might also help situate Xaltocan within the greater region.

In addition and complementary to theories of practice and identity, I draw from a number of other epistemological frameworks including theories of space and place, social memory, and public or community archaeologies. These concepts are discussed and contextually employed in greater detail in topically specific chapters, as they are relevant. In this theoretical chapter I will only briefly discuss their relationship to this research, and instead focus more intensively on theories of practice and identity, as they are foundational to my dissertation research as a whole.

Theories of Practice

Theories of practice posit that people in the past were social agents who had goals and intentions, but who lived in a social and historical context only partly of their own making (Bourdieu 1977; de Certeau 1984; Giddens 1984). The daily lives of individuals were shaped by both social structures and agency, which are mutually constitutive—a process known as structuration (Giddens 1979, 1984). Different scholars have defined agency in many different ways. For the purposes of this dissertation, agency is defined as

the socially-informed actions of individuals. That is to say, human actions and behaviors that are shaped, structured, and informed by the social frameworks within which they exist (Dobres and Robb 2000). Although agency might be most easily observed through transformations, wherein large changes are driven by individual or group action (sometimes as resistance), it is not only observed as change, nor does it inherently result from or cause change. Agency is also the choice to reproduce structures, to participate in traditions, and to adhere to societal norms. As interpreters of the past, every material remnant of action or practice is also reflective of a human choice, even if that action is firmly within the realm of expected behavior. The degree to which actors do or do not adhere to societal or structural norms can reveal a great deal about the stability and cohesiveness of the structure itself. Thus, actions that reproduce extant structures or traditions, might suggest that actors understand, even subconsciously, that those structures are stable, beneficial, or not easily challenged. Actions that sustain structures, then, are arguably reflective of deeper beliefs or dispositions and do help inform archaeological interpretations of social dynamics and individual motivations.

Given the above definition of agency, practice theory is a useful framework for understanding the past because it emphasizes the relationship between human actions and the structures that guided them. Although many scholars have often framed this relationship as dialectical (Moore 2000), Joyce and Lopiparo (2005: 365) have argued that rather than interpreting structuration as a process of alternation between structure informing agency and agency producing structure, the process “is simultaneously the exercise of agency and the constitution of society” (see also, Giddens 1979; 1984).

Rather than a reciprocal cycle, structure and action are entangled elements of the social process, mutually dependent and impossible to separate into distinct units. All human actions are fundamentally structured, and as they are enacted they concurrently reproduce, amend, or overthrow the structures that frame them.

In archaeological investigations, theories of practices are especially useful for drawing attention to the significance of human decision-making in shaping the past. They demonstrate that individuals and groups *do* have the power to change the very frameworks that shape and give meaning to their everyday lives, and through this process exercise agency. Not to over-state the significance of changing structural frameworks, theories of practice also remind us that actions that perpetuate existing structures are also agentive—in fact, all human behavior is agency. This perspective frames human actors in the past as co-producers and co-reproducers of the structures in which they functioned. They made decisions about how to act within structural bounds and were not mere cogs in the societal machine. Breaking free of the ecosystem approach and putting people back into the past by emphasizing aspects of human identity that inform practice (particularly, gender, class and faction), archaeologists may begin to recognize that structure or “behavioral ‘systems’ are the composite outcomes of negotiation between positioned social agents pursuing their goals under both ecological and social constraints” (Brumfiel 1992: 551).

An approach grounded in practice theory—that is, an approach that recognizes the mutually constitutive nature of human action and social structures—encourages archaeologists to utilize material expressions of past practices to consider the complex

and fluid structures within which they took place and the motivations that drove these actions. Methodologically, practice-based research questions have resulted in datasets that fundamentally transform how we understand past societies and social dynamics. These research models recognize that even the most mundane depositional patterns were the result of human practice and provide evidence about larger social processes, and their influences on individual behavior (e.g. Pauketat and Alt 2005).

While practice theories enable more diverse interpretations of the past, that recognize the agency of all individuals, one might argue that the decisions or actions made by leaders had greater potential to impact social structures than did the actions of other members of society. De Certeau (1984:xviii-xx, 35-37) discusses the discrepancy in action between the “strong” and the “weak” suggesting that while those in power may use strategies to create and impose social order, those not in power use tactics of resistive actions to assert some control over their world. However, the creation of an enduring political structure necessitates that leaders transcend their status divisions to instill a sense of solidarity and ensure loyalty from their constituents (Brumfiel 1994; McGuire 1983; Paynter and McGuire 1991; Schortman et al. 2001). Thus, it may have been advantageous for the leaders of certain societies to deemphasize their differences in status or political station, and instead to promulgate symbol systems or cultural practices shared by all members of a community (Brumfiel 1994; Gillman 1991; Paynter and McGuire 1991). This may have been especially true in Early Postclassic central Mexico, wherein numerous polities coexisted and vied for power. In societies like these, including Xaltocan, if status divisions are not clear through archaeological materials, then that

might suggest that leaders derived power mostly from community support. In these instances, when the decision-making by leaders was largely driven to appease the larger community (“weak” agents), leaders may not so easily be understood as “strong” agents *ala* De Certeau (1984:xviii-xx, 35-37). If the right to rule a given society was more dependent on garnering local support than exerting domination, the decisions made by leaders, and whether or not these decisions corresponded with or contradicted the larger political and social structures, would reveal a great deal about their role within the social and political structures in which they functioned.

Just as commoners and marginalized people perform structured actions that may or may not ultimately affect change, the actions of leaders were also structured and limited. I argue that this was particularly true in the case of Xaltocan, where I believe that leaders’ authority was more fragile than at some other Postclassic polities. Thus, the actions of Xaltocan’s leaders, particularly actions that might upset the balance or break from tradition, might be especially demonstrative of socio-political strategies. Xaltocan’s leaders existed and benefited from a structured social landscape that was partially shaped by their decisions but also shaped by the decisions and disposition of others, and this fundamental concept of practice establishes the basis for framing this study within the community. Comparing the structured practices of those in power to those of other members of society, and critically examining the significance of the discrepancies and continuities in these practices as they pertain to community cohesion (see chapters 5, 6 and 8), identity (see chapters 5 and 6), and relative power at the local and regional level (see chapter 5 and 7) are significant and recurring analytical strategies throughout this

dissertation. In conjunction with theories of identity, I attempt to determine how the practices of Xaltocan's leaders were responses to community needs or assertions of local power, and how these structured actions and the implicit impact they made on the structure of society shaped Xaltocan's community identity at the local and regional levels.

Theories of Identity

Identity refers to the constellation of characteristics that interpolate to characterize an individual, community, state, or any other cluster of humans (Cohen 2000; Insoll 2007; Jones 1997; Meskell 2001; Schortman et al. 2001; Shennan 1994). When applied anthropologically, identity is often deconstructed into more manageable aspects or axes, which may include features such as: class, ethnicity, gender, age, status, or sexual orientation. While compartmentalizing these topics does facilitate more focused analyses, the process is problematic because it easily ignores the dynamic and inherently multifaceted nature of identity. Archaeological interpretations of identity are also problematic because they are gleaned from material objects that might only reflect one aspect or even moment of an individual's being. Thus identity is easily interpreted as a stagnant state of being, when in fact it is a constantly shifting, fluid and even flexible state that responds to changing environments and subjectivities. Although approaching identity holistically is more technically challenging, the results recognize the relationships and specific scenarios that form and reshape certain identities.

A holistic approach to identity takes into account all the factors, internal and external that contribute to an individual's or group's identity, and considers how social and spatial structures shape these identities (Brumfiel 1992; Joyce and Gillespie 2000; Meskell 1999, 2002; Meskell and Joyce 2003). This is not to criticize approaches that more strongly emphasize certain aspects of identity over others. In fact, this dissertation focuses more intensively on community identity and social status than on other important aspects of identity, including gender and occupation. A holistic approach to identity does not imply that all aspects of identity will be treated equally in any given analysis, but that the dynamic and complicated nature of identity will be acknowledged, and that identity as a whole will not be reduced to only its aspects (e.g., class, ethnicity, status, gender, occupation, and sexuality, among others).

I take the position that individuals and groups are composed of numerous historically contingent social identities that are inextricably linked to and constantly negotiated with other individuals and groups within their social world (Craib 1998; Schortman et al. 2001). Thus, an understanding of individual and group identity is facilitated through comparative studies of a wide range of practices: private and public, individual and group. Such comparisons not only reveal how these relationships were negotiated but also provide greater context for how and why different identities might have been created, maintained, and transformed. This approach is especially useful for revealing the multiple and sometimes conflicting motivations that drove the identity-making practices of Xaltocan's leaders.

In Mesoamerica, leaders occupied a uniquely liminal place in society. They garnered loyalty by allying themselves with their local constituents through shared cultural symbols, while simultaneously establishing their legitimacy at the regional level through interdynastic marriage alliances (Calnek 1982; Carrasco 1984; Hodge 1984) and possibly the trade of prestige goods (Schortman et al. 2001; see also, Brumfiel et al. 1994). Leaders necessarily balanced multiple personas, and strategically performed these personas at different times, for different audiences, and to meet different ends. Therefore, identity embodies not only multiple qualities, but also multiple and sometimes conflicting façades. This dissertation assumes that the identity of Xaltocan's leaders was situated temporally and subjectively. As archetypical Xaltocamecas the inhabitants of Cerrito Central needed to simultaneously reflect locally held ideals while still utilizing public expressions of power to legitimize themselves both locally and within the greater region. A critical examination of the multiple and nuanced motivations for material expressions may not necessarily result in a *complete* understanding of the complex identities of Xaltocan's leaders, but it does acknowledge the wide range of considerations that influenced identity-making practices and better demonstrates the complicated and sometimes conflicting qualities that they embodied. Although each chapter draws on theories of identity, identity will be analyzed in detail in Chapters 5 and 6. Chapter 5 focuses primarily on public displays of identity in the form of monumental architecture, while Chapter 6 focuses on ritual, which involved both private and public identity-making practices.

This dissertation is also situated to explore the more private identities of Xaltocan's leaders. Lynn Meskell (2001:188), in her overview of the state of archaeological theory surrounding identity, comments on the often-overlooked "subjective, inner world of the individual". I argue that this "inner world" while possibly never completely attainable through archaeological research, may be best understood in those environments where people spent the most time, where people felt most truly themselves, and where people experienced their most intimate and private feelings. I argue that this space was the home.

Practice, Identity, and the Household

This dissertation integrates practice and identity theories using the community as the context and the household as the nexus. The structures and associated artifacts unearthed at Cerrito Central, and discussed in detail in this dissertation, likely served numerous symbolic and functional roles as the (possible) residences of Xaltocan's leaders and as locally symbolic *places*. As venues for public presentations of identity, expressed through architecture and public performance, as well as loci of private domestic practices, wherein leaders and their families could conceivably be "themselves" (Meskell's "subjective, inner-world") or at least the versions of themselves that existed outside of the public gaze, the houses of leaders serve as unique junctions where the remains of a variety of material practices manifested.

Thus, in addition to theories of practice and identity, this dissertation draws strongly from theories and methods developed for analyzing households (Ashmore 2009;

Ashmore and Wilk 1988; Brumfiel 1998, 2000; Hendon 1996, 2002, 2004, 2006, 2009; Hutson 2009; Hutson and Stanton 2007; Joyce 2001; Robin 2001, 2002a, 2003). This approach shifts the focus from outward expressions of power, and instead focuses inward to everyday practices, and reframes the residence as a nuanced and gendered domestic space, where men, women, and children resided for generations producing and reproducing public and private identities. More specifically, this dissertation draws from household archaeologies that engage theories of practice (Ashmore 2002; Dobres and Robb 2000; Hendon 1996; Robin 2002b) and posit that people in the past were social agents who had goals and intentions, but who lived in a social and historical context only partly of their own making (Bourdieu 1977; de Certeau 1984; Giddens 1984).

Household archaeology has already had important implications for research on commoners and has resulted in new and exciting theoretical and methodological models for studying the past (Lohse and Valdez 2005; Robin 2001, 2002a, 2002b, 2003, 2012; Smith et al. 1999; Santley and Hirth 1993). Household archaeology facilitates a better understanding of social groups that are invisible in grand theories, which latter emphasize larger political and economic processes and ignore the struggles and other experiences of individuals (Santley and Hirth 1993; Wilk and Rathje 1982; Wilk and Ashmore 1988). However, archaeological approaches to understanding the lives and motivations of leaders remain largely unchanged. These spaces and materials are still framed primarily as components of larger political and social complexes (see Chase and Chase 2003). Inquiries into the spaces of leaders focus on overt displays of power, especially in the form of monumental architecture and artistic works, as well as on ritual and performative

activities that reflect political and religious ideals. Such an approach overemphasizes the idealized role of the local leaders and minimizes those private domestic practices that shaped everyday life (Brumfiel 1996, 2005b; Morehart and Eisenberg 2008; Morehart 2010).

I argue that by utilizing approaches developed for studying common household spaces, we may begin to recognize that in addition to symbols of power, the domestic spaces belonging Xaltocan's leaders were also important loci of identity-making through quotidian practices (Brumfiel 1991). From a more practical standpoint, drawing on methods and theory developed for studying households, the datasets that have resulted from this research are comparable to those gleaned from commoner household contexts elsewhere at Xaltocan (Brumfiel 2005b, 2009; De Lucia 2010, 2011; Espejel 2005; Overholtzer 2012, 2013). Facilitating comparative analysis, this approach has enabled useful insights into how social status impacted domestic life and has provided evidence that challenges the assumed class binary by considering what practices Xaltocan's leaders and the rest of the population had in common.

From this standpoint, we may also reconsider how the material record demonstrates the *negotiation* of identity and social status in the community by leaders, acknowledging that the practices and physical implements of leaders may not have always been intended to project power, but may also have contributed to "social solidarity and community cohesion" (Schortman et al. 2001). To gain and retain authority leaders necessarily worked to legitimize themselves as the embodiment of the local community, while simultaneously demonstrating their preeminence and distinctiveness

within it. Thus, research at Cerrito Central will help us to determine the ways that Xaltocan's Postclassic leaders used their houses—as palaces and as homes—to fit in with and to stand out from the local community.

Conclusions

Drawing from theories of practice and identity, and using the house as a starting point for analysis, this dissertation pushes past the limitations of class analysis. I frame the actions and motivations of Xaltocan's leaders as structured and influenced by the actions of their constituents as much as by their own. Giddens' theory of structuration (1981) suggests that the power or authority bestowed upon leaders was generated or perpetuated through the reproduction of power structures. Building on this framework, I argue that the reproduction of these structures required constant, implicit and sometimes symbolic negotiations between Xaltocan's leaders and the wider community. As part of these negotiations, Xaltocan's leaders used identity-making practices, especially public rituals and the construction of symbolically rich monumental architecture to establish their physical and social place in the community. As the following chapters will demonstrate, public actions and materials associated with Xaltocan's leaders do not necessarily appear to project domination, but rather reflect shared practices and symbols that were probably socially meaningful for all of Xaltocan's inhabitants. Although the successive houses associated with Xaltocan's leaders were relatively large in scale, high in quality, and consistently built atop the prominent Cerrito Central, material evidence of shared practices and symbolic gestures that might have facilitated or championed local

unity, indicate that leadership depended on balancing symbols of authority with acts of local solidarity. The theoretical frameworks outlined in this chapter enable more nuanced interpretations of material remains that take into account individual agency, social dynamics, and shared identity practices. Critical analyses of these concepts and how they intersect result in more complex interpretations of leadership and social relations at central Mexican polities during the Postclassic.

CHAPTER 3

AN ANALYSIS OF CENTRAL MEXICAN ETHNOHISTORICAL DOCUMENTS

Ethnohistorical documents, created before, during, and after the Spanish conquest, have long been valuable resources for archaeologists working in and around Prehispanic central Mexico. The documents vary considerably in form and purpose, and the rationale behind their creation is necessarily a major consideration when evaluating their accuracy. Many Mesoamerican groups preserved their histories, myths, and calendrical systems before the arrival of the Spanish in the form of pictorial codices, inscribed monuments, and oral traditions. Unfortunately, the surviving corpus of pre-conquest texts is relatively small because the vast majority of Prehispanic documents were destroyed after the conquest (Muñoz Camargo 1982-88; Sahagún 1950-82, Bk. 7). The eradication of pre-conquest written histories, idols, and temples, was strategic on the part of the Spanish as it paved the way for colonial revisionist histories and ushered in a new religion. However, the mass destruction of texts and icons was not a first for the indigenous inhabitants of central Mexico. Ethnohistorical documents indicate that during the fifteenth-century the Aztec empire mandated the destruction of historical documents and idols that did not correspond to Mexica narratives (Sahagún 1950-82 Bk. 10, Ch. 29). Thus, erasures of history took place well before the Spanish arrived, and the Aztecs were aware of the significance of controlling history (see also, Gillespie 1989).

Immediately after the consolidation of the Aztec empire in approximately A.D. 1430 the fourth king of Tenochtitlan, Itzcóatl, ordered that the ancient codices containing

historical accounts be burned. In doing so, he initiated the erasure of divergent and superfluous histories, in which the Mexicas might have played a secondary role. This action paved the way for the construction of an official Mexica history that bolstered the Aztec empire and state-sponsored ideologies. The burning of earlier records According to the *Códice Matritense de la Real Academia* (Sahagún 1558-1585:VIII, fol. 192v), shortly after the consolidation of the Aztec Triple Alliance, pictorial texts that documented the individual belief systems and unique histories of polities throughout the Basin of Mexico were identified as a threat to the realm:

They preserved their history.
But it was burned
At the time that Itzcóatl reigned in Mexico.
The Aztec lords decided it,
saying:
'It is not wise that all the people
should know the paintings.
The common people would be driven to ruin
and there would be trouble,
because these paintings contain many lies,
for many in the pictures have been hailed as gods.'

Thus, Aztec leadership believed that the preservation of earlier histories would confuse “common people” and would detract from the histories and myths promoted by the state. The destruction of pictorial codices, along with some icons and temples, facilitated the rewriting of history. These new documents were generated at the hands of Aztec scribes, and presumably glorified the deeds of the Mexica and codified legends of the founding of Tenochtitlan and Aztec religious practices (Bierhorst 1992; Leon-Portilla 1963).

The fifteenth-century destruction of texts is significant because it indicates that written and oral histories from earlier periods were suppressed and ostensibly forgotten, even before the arrival of the Spanish. Thus, the written documents and oral traditions that colonial historians drew upon during the sixteenth and seventeenth-centuries were already revisionist histories, which privileged the feats and cosmologies of the Aztecs over those of earlier societies. Although the “Aztec biases” in colonial period texts may be too entwined to ever completely untangle, archaeological research does provide a useful avenue for corroborating or disproving some recorded events.

Just as Prehispanic documents and indigenous informants were biased in various ways, colonial historians were influenced by their own political and religious beliefs. Probably the most common critique of colonial texts is the tendency to Europeanize the beliefs, histories, political systems, and religions of indigenous peoples. Colonial chroniclers often fixated on systems and practices that had common themes with those found in Europe. In some cases, these common threads in behaviors and beliefs might have been used to demonstrate a capacity for conversion to Catholicism and indoctrination into European ways of life. However, by placing great emphasis on the most relatable practices or beliefs of indigenous groups, those practices and histories that were not easily rectified with European ways of life were often ignored in colonial written histories (Lee and Brokaw 2016; Burkhart 1989; Lee 2008; Lesbre 2010).

In some cases, the work of colonial period historians may have also been influenced by personal aspirations. Colonial historians with indigenous blood often wrote extensively about their own places of origin, and in sometimes referenced their particular

family ancestry. In these instances, historians may have been motivated to prove their noble heritage, or to demonstrate a longstanding alliance between their ancestors and the Spanish, in the hopes of receive some form of remuneration or recognition from the Crown.

The tone and content of colonial accounts were shaped by a number of factors, and although they serve as excellent resources they should continue to be scrutinized by archaeologists and historians (see also, Schmidt and Patterson 1995; Stahl 1993). In this chapter I examine three historical documents that contain information especially pertinent to studies of Xaltocan. Through these examinations, I problematize the implicit biases in these texts and to demonstrate the implications of these documents for archaeological research. My critiques differ somewhat from traditional readings of these texts. Typically, sixteenth- and seventeenth-century texts are criticized for their Spanish biases and for the personal motivations that drove these biases, but very little attention has been given to their “Aztec biases”. Considering many of these texts include historical events, political systems, and religious practices that date back hundreds of years before the conquest, I question their accuracy—especially in case of cities outside of the Aztec center, which were most likely to contain histories that contradicted the state-sanctioned Aztec narrative. Furthermore, I question how well colonial-period historians and their informants—many of whom were descendants of the nobility from major Aztec cities such as Tenochtitlan, Tlaltelolco, and Texcoco—would have understood the community dynamics, cultural practices and local histories of towns at the margins of the Aztec empire. Thus, in this chapter I also call into question the authority of indigenous authors

and informants to speak about historical events and political structures that existed long before the formation of the Aztec empire and at the periphery of the state's core.

Colonial Texts and Xaltocan

Anthropologists Pedro Carrasco (1950) and Frederic Hicks (1994; 2005) have conducted the most extensive studies of ethnohistorical documents relevant to Xaltocan, and information gleaned from their work has greatly influenced archaeological research in the northern Basin of Mexico. In this chapter I address and briefly analyze the three documents that most heavily influenced their work. First, I discuss *Obras históricas*, which is a compilation of the works published by the prolific colonial historian Fernando de Alva Cortés Ixtlilxóchitl during the early seventeenth-century. The works of Alva Cortés Ixtlilxóchitl are among the more widely circulated colonial period texts, but have also undergone a fair amount of scrutiny for areas of probable bias, especially in the pursuit of aggrandizing the history of Texcoco—the place of his own indigenous ancestry. Second, I address the *Anales de Cuauhtitlan*, a colonial text composed during the sixteenth-century by an anonymous author. The *Anales de Cuauhtitlan*, which were part of a larger volume, known as the *Codice Chimalpopoca*, chronicle the mythohistorical events that impacted the people in the central Mexican town of Cuauhtitlan. The author of the *Anales de Cuauhtitlan* had capabilities in both Náhuatl and Spanish and recorded information gleaned from native informants. Both *Obras históricas* and the *Anales de Cuauhtitlan* are widely utilized by historians and archaeologists working in the Basin of Mexico. The third and final document I analyze is a letter written

by Pablo Nazareo de Xaltocan to the King of Spain in 1566. In his letter, Nazareo ties his ancestry to the rulers of Xaltocan, and includes a list of Xaltocan's rulers dating back to the pre-Imperial period. Nazareo's letter makes direct claims about the succession of political leaders at Xaltocan prior to the Aztec conquest, and suggests that pre-Imperial rulers were part of a regional elite class that inter-married with elites from other prominent polities. Together, these texts have contributed a great deal to what we believe about Xaltocan's Prehispanic history, though deeper look at these documents raises some interesting questions, which are explored in more detail in this chapter and in Chapter 7. At the very least, implicit biases in these texts support the need for increased archaeological research to corroborate or disprove certain details.

Fernando de Alva Cortés Ixtlilxóchitl and *Obras históricas*

The historical accounts of Fernando de Alva Cortés Ixtlilxóchitl have had important implications for archaeological research in the Basin of Mexico, but his work has also been highly scrutinized. Alva Cortés Ixtlilxóchitl, like many of his contemporaries, was guilty of privileging European worldviews. He adapted Prehispanic narratives to fit European structures, compared both pre-conquest and post-conquest indigenous events and deities to biblical stories and figures, and converted indigenous calendrical dates to the Gregorian calendar (Lee and Brokaw 2016). Despite these obvious flaws, his work is especially important for archaeologists working outside of the Aztec capital because it has provided considerable information about major cities and towns throughout the Basin of Mexico. His accounts pushed beyond tribute lists, and

included details about indigenous religious systems, historical events and political systems in numerous major cities and towns outside of the Aztec capital.

Alva Cortés Ixtlilxóchitl was born in San Juan Teotihuacán to a noble family. His father was Spanish, and his mother was of mixed ancestry and a descendant of an elite indigenous family. Alva Cortés Ixtlilxóchitl attended the Colegio de Santa Cruz de Tlatelolco, a school founded for the descendants of indigenous nobility, and focused his studies on the city of Texcoco—the place of his indigenous ancestry. It was not uncommon for historians to focus their efforts on their own ancestry because the Spanish granted political rights to Prehispanic nobility, and compensated indigenous allies for their contributions to the conquest. This, if one could prove ties to indigenous noble families, especially those that were helpful or compliant during the Spanish conquest, one may have been entitled to special benefits. To capitalize on these remunerations descendants had to document their lineage and the provide evidence that they or their ancestors had given aid to the Spaniards. These personal motivations, while not uncommon in colonial texts, are worth mentioning because they certainly colored the tone of Alva Cortés Ixtlilxóchitl's work and may have impacted how he recorded some events.

It is fairly evident that Alva Cortés Ixtlilxóchitl consistently aggrandized the city of Texcoco, especially in comparison to the Aztec capital of Tenochtitlan. In the process he also minimized many historical events that were important for other cities. The degree to which this regionalist perspective, which might be better understood as a well-planned

political project, dictated the actual content of Alva Cortés Ixtlilxóchitl's work is unclear. At the very least, he privileged the prouder moments in Texcocan history.

With specific regard to Xaltocan, Alva Cortés Ixtlilxóchitl writes primarily about how the polity existed within the greater region. He notes that Xaltocan was founded by Otomí speaking peoples, that it controlled a substantial domain, including tribute fields, and that it eventually served as the capital of the Otomí city-state (Alva Ixtlilxóchitl 1975-77 I:295, II:42). *Obras históricas* also documents some of the rulers of Xaltocan, though only as they pertain to great historical events (Alva Ixtlilxóchitl 1975-77 I:268 ,283, II:42, 79). Many of the kings and queens specifically mentioned by Alva Cortés Ixtlilxóchitl do not correspond to those documented in other colonial period texts. Most of the detailed descriptions of Xaltocan pertain to warfare and minor political skirmishes (Alva Ixtlilxóchitl 1975-77 II:77, 151). Details about the intra-polity political and social makeup of Xaltocan are absent, but the fact that Xaltocan's leaders are routinely mentioned among the regional nobility suggests that their role was similar to that of other Basin of Mexico leaders.

Outside of the events listed above, *Obras históricas* does not include great detail about the polity of Xaltocan specifically. Xaltocan is mentioned primarily in the context of how it interacted with other polities. In this way, *Obras históricas* frames Xaltocan as one of the many polities vying for power during the contentious decades before the rise of the Aztec Triple Alliance. In one sense, by casually grouping Xaltocan with other Postclassic polities, Alva Cortés Ixtlilxóchitl implicitly equates Xaltocan to its counterparts; in another sense however, Xaltocan was differentiated from other central

Mexican polities on the basis of ethnicity. Alva Cortés Ixtlilxóchitl mentions Xaltocan's role as the capital of the Otomí city-state a number of times, and although it is unclear how Xaltocan's ethnic identity translated into other aspects of social life, it is possible that the internal political structure and Xaltocan was different from other Basin of Mexico centers.

Ultimately, and despite any regional biases, the work of Alva Cortés Ixtlilxóchitl is extremely informative and does provide some guidance for archaeologists working in the region. Despite the fact that *Obras históricas* still leaves a great deal to the imagination, one might easily conclude that prior to its conquest Xaltocan was a prominent polity in the Basin of Mexico. Although its leaders were involved in regional politics, including a number of violent conflicts, as the Otomí capital Xaltocan remained ethnically distinct from many other central Mexican polities. Other ethnohistorical documents authored during the colonial period corroborate these assertions and expand on Xaltocan's regional interactions.

Anales de Cuauhtitlan and the Codice Chimalpopoca

The *Anales de Cuauhtitlan*, authored by an anonymous *Cuauhtitlancalqui*, or native of Cuauhtitlan, is the first section of a volume known as the *Codice Chimalpopoca*. The *Codice Chimalpopoca* is a compilation of three distinct texts, but only the *Anales de Cuauhtitlan*, which is primarily historical, is relevant to this study. Cuauhtitlan was a city at the edge of the Aztec core, located north of Tenochtitlan, and was one of the most prominent cities of the Aztec empire (Motolinía 1971:259). It was

also among the first central Mexican cities to be missionized. The histories, myths, and stories recorded in the *Anales de Cuauhtitlan* were gleaned from oral histories and interviews with native informants during the sixteenth-century (Bierhorst 1992). While the identity of the historian responsible for the *Anales de Cuauhtitlan* is unclear, the detailed and critical descriptions in the text suggest that the author was motivated to understand and record the deep histories and worldviews of indigenous people.

The *Anales de Cuauhtitlan* is one of the most important colonial period documents because it describes historical events dating back several centuries, and like *Obras históricas*, includes information about numerous central Mexican polities. Although it focuses primarily on the history of Cuauhtitlan, it also includes detailed accounts involving Texcoco, Cuitlahuac, and Colhuacan. The text includes mundane records such as genealogies and tribute lists, as well as more extraordinary legends and origin myths. The account dates back to A.D. 635, and Bierhorst (1992:5) has argued that the oldest events, which are clearly intertwined with myths and include stories about deities, are less reliable, but that the most recent accounts, including those dating to the fourteenth- and fifteenth-centuries, can be taken more literally.

Although the *Anales de Cuauhtitlan* dates back considerably further, the events most pertinent to the study of Xaltocan begin around the thirteenth-century, and reference incidents that occurred before and during the 100-year long skirmish (A.D. 1297-1395) between Xaltocan and Cuauhtitlan. According to the text, this period of conflict ultimately resulted in victory and significant territorial gains for Cuauhtitlan. Other historical documents corroborate Cuauhtitlan's triumph (Alva Ixtlilxochitl 1975-77

II:36). Soon thereafter, around A.D. 1428, Xaltocan was incorporated into the Aztec Triple Alliance and repopulated by tribute-paying Mexicas (*Anales de Cuauhtitlan* 1992:104).

Both historical and archaeological data indicate Xaltocan was eventually incorporated into the Aztec empire, and the timeline outlined in the *Anales de Cuauhtitlan* fits. However material evidence for prolonged violent strife between Xaltocan and Cuauhtitlan is lacking and the nature of the interaction between these two polities remains unclear. The *Anales de Cuauhtitlan* characterizes Xaltocamecas as “always dressed for war” (Bierhorst 1992:65) and suggests that they were in constant conflict with the *Cuauhtitlancalqui* and with all of their Chichimec neighbors. Thus far, however, archaeological evidence does not provide evidence that Xaltocan was engaged in sustained violent interactions with any of their neighbors. This lack of evidence does not necessarily challenge historical accounts, but at least calls into question some of the more hyperbolic statements about Xaltocan, and urges greater scrutiny of colonial period texts. Given the origin of the author and presumably the indigenous informants, it is quite likely that the accounts featured in the *Anales de Cuauhtitlan* highlight the strengths and successes of Cuauhtitlan, and diminish the more favorable qualities of other polities. This may be especially true in the case of a Xaltocan, a long-standing rival. Other *Cuauhtitlancalqui* biases are found scattered throughout the text. One example is the recurring reference to the steadfast alliance between Cuauhtitlan and the Mexica. This may be a vestige of reinvented, or revised history from the Aztec period as it would have

been advantageous for Cuauhtitlan to ally itself with the new seat of political authority and the Prehispanic victors in the struggle for political power.

The *Anales de Cuauhtitlan* demonstrates some of the most common problems with colonial period texts. Often, the motivations of the author are unclear, and the specific historical context in which they were written shapes their tone, and possibly their content. Although many of the events documented in the *Anales de Cuauhtitlan* might have actually occurred, the biases of the historian might have contributed to the addition or omission of certain details. Colonial period accounts that provide considerable information about Xaltocan are limited, so the specific details about the history and sustained conflict between Xaltocan and Cuauhtitlan are difficult to verify. Thus far there is no archaeological evidence suggesting that warfare was a significant aspect of daily life at Xaltocan, but the frequency with which it is mentioned in historical documents, both in the *Anales of Cuauhtitlan* and elsewhere, makes it difficult to dismiss altogether. Based on archaeological and historical data, I accept the claim that Cuauhtitlan conquered Xaltocan, but approach violent and war-hungry characterizations of Xaltocamecas with considerably skepticism. Both the *Anales of Cuauhtitlan* and *Obras históricas* make only passing mention of Xaltocan in the context of greater regional events, but more detailed and site-specific accounts of Xaltocan are also subject to biases and inaccuracies.

Don Pablo Nazareo de Xaltocan

One of the most detailed records of Xaltocan's Prehispanic history comes from a letter written by Pablo Nazareo de Xaltocan to King Phillip II of Spain in 1566. Pablo Nazareo was a descendent of the Xaltocan's royal lineage, and in addition to providing details of his own genealogy and the land holdings of Xaltocan the letter provides his personal insights into the impacts of the conquest on Mexico's indigenous populations. The life experiences of Pablo Nazareo de Xaltocan, which are partially dictated in his letter to King Phillip II, but are also referenced by the prolific sixteenth-century judge and writer Alonso de Zorita, illustrate the complicated and shifting identities of indigenous nobility after the conquest.

By his own account, Nazareo was a direct descendant of the ruling lineage of Xaltocan. Although it is difficult to concretely corroborate his social position at the time of the conquest, his education does suggest that he was among the indigenous nobility. According to Alonso de Zorita, who knew him personally, Nazareo was raised by the Franciscans who arrived in 1524 and taught by the missionaries who came in 1529 (Zorita 1909:9). If these accounts are accurate, then Nazareo was among the first natives of New Spain to receive a Christian and European education. It is unclear if he was educated at the prestigious Colegio de Santa Cruz de Tlatelolco, but in adulthood he worked there as a professor of grammar and possibly served as rector during the 1550's (Normand 1991:386). Nazareo de Xaltocan was trilingual and was renowned for his skill in Latin, philosophy, and rhetoric. Much of his work was in the translation of Latin texts,

especially liturgical texts, which accounts for his extensive knowledge of Old Testament stories, some of which are referenced in his letter to King Phillip II.

Pablo Nazareo de Xaltocan's letter to the King of Spain is the only surviving historical document by his hand, though he penned at least one other historical account, *Relacion y Memoriales*, which Zorita used to write his *Historia de la Nueva España* (Normand 1991:387; Zorita 1909:41). "Letters of request"—letters entreating land, money, or status, such as the letter written by Pablo Nazareo—were not especially rare during the sixteenth-century. Native inhabitants of New Spain sent countless letters to Spanish officials asking for remuneration on the basis of their loyalty or pre-conquest status. However, Nazareo's letter was unique for several reasons. First, it was addressed directly to the king of Spain, and therefore bypassed local officials. It is unclear why Nazareo chose to implore King Phillip II himself. Perhaps he had not had luck with similar requests to local officials. The letter also stands apart from its counterparts because although Nazareo was very capable in Spanish, he chose to write his letter to King Phillip II in Latin. Although Nazareo could have written the letter in Spanish, Latin was the language associated with the most ancient and sacred texts. Use of Latin was probably a strategic choice by Nazareo. It would have helped highlight the importance of the subject matter and demonstrate Nazareo's refinement and education. Latin was a language that even Spanish clergymen routinely struggled with (Motolinía 1971, III, 12:207-208), and his mastery of such a language as an indigenous person would give greater credence to his claim of noble heritage.

The pretense of the letter aside, its content masterfully combined a biographical sketch of the author and his family, with classical and biblical quotations, and extensive praise for the king and his growing kingdom. Don Pablo Nazareo de Xaltocan depicted himself as among King Phillip's most loyal and humble servants, and often conflated the glory of King Phillip with the glory of the Catholic Church. He repeatedly voiced his loyalty to the crown, and used a substantial portion of the 21-page letter to reiterate the greatness of King Phillip II:

Siendo, oh invictisimo rey, particular distintivo de reyes y príncipes, como consecuencia de su poder divino, iluminar a los demás mortales, a la manera que el Sol lo hace con el mundo entero, cuyos resplandores en esta región de la Nueva España extiende la grandeza mas que sublime de tu majestad, ocurre que si hubiere en nosotros algo de luz, lejos de brillar se oscurecería, y nuestro tierno espíritu, deslumbrado hasta lo mas profundo per el regio brillo de tanta luz, no seria capaz de soportarla. (Del Paso y Troncoso 1940:109)

Obsequious digressions, reaffirming the greatness of the King, underpin the entirety of the letter, which is ultimately aimed at confirming the noble ties of Nazareo and his family, with the hope of receiving recognition and restitution from the King.

While the language and sophisticated rhetoric of the letter may speak to Nazareo's training and abilities, he also used the letter to emphasize the direness of his situation. Despite his noble heritage, after the conquest he became nearly destitute as he was deprived of the land, money, and dignity that he believed he was owed. To prove his heritage, and justify the remunerations he was requesting, the letter traces Nazareo's genealogy back to the nobility of pre-Aztec Xaltocan and traces his wife's ancestry to the

noble line of Moctecuzuma. It is through these genealogical outlines, which are specific and detailed, that we have obtained considerable information about Xaltocan's pre-Conquest rulers and their domain. Unfortunately, as Nazareo's account is the only source of this information it remains difficult to verify.

Pablo Nazareo traces his ancestry back to at least the early fourteenth-century and he lists the names of the successive rulers of Xaltocan. The list also contains the names of the rulers' wives, and their wives' places of origin (Brumfiel 2005b:Fig. 1.2; Del Paso y Troncoso 1940:124-125). These marriages were significant because they proved Xaltocan's alliances with other prominent pre-conquest cities, and provided further evidence that Xaltocan was once a great capital, and that Xaltocan's leaders were recognized among the regional elite class. The letter also details the extent of Xaltocan's pre-Imperial land holdings. This was probably among the most important details for the author. For Don Pablo, the restitution of the land patrimony of his family was arguably the principal aim of his letter. He provided four lists of parcels, which he considers to be his personal domain. These four partially overlapping lists included a total of 36 different plots on the outskirts of Xaltocan. Owning land was not only a material or economic desire for Nazareo, the need was also linked to his social aspirations. The nobility of New Spain, indigenous or Spanish, had to own land. Owning land would be evidence that Pablo Nazareo was equal to a Spanish landowner. He would regain his pre-Hispanic privileges, and become part of the new elite of New Spain.

In addition to his request for land, Nazareo requested an increase in his annual allowance of one hundred pesos, paid to him by the Crown. Nazareo explained that the

sum was simply too small to support his family of six, including his wife, his two small children and his parents. Nazareo seemed especially concerned for the well-being of his children, who he suggests have been reduced to starvation. Finally, Nazareo requested symbolic privileges that he believed were owed to him. These included the right to own a Spanish weapon (a sword) and the right to own and ride a horse. The symbolic privileges requested by Nazareo had been granted to other members of the indigenous nobility.

Don Pablo Nazareo de Xaltocan's letter demonstrates the complicated identities of indigenous peoples during the early Colonial period. Although Nazareo grew up around Spanish clergymen, and was very educated relative to the vast majority of the indigenous population, he still felt that he had been denied privileges given his noble ancestry. His letter demonstrates a keen understanding of European norms, religion, literature, history and language, but also a detailed knowledge of his particular indigenous heritage. The letter reflects the confluence of these two aspects of his identity, but also sheds light on how Nazareo's personal identity and motivations may have influenced the way he wrote about his family history.

Conclusions

This brief analysis of three ethnohistorical texts provides some background about the motivations and biases that may have impacted colonial historians. These critiques do not suggest that Colonial period ethnohistorical accounts should be dismissed wholly, but only that they should be used with caution and in tandem with archaeological research. Written during the sixteenth- and seventeenth-centuries, and definitely influenced by new

power dynamics and Euro-centric worldviews, colonial accounts favored stories and characters that corresponded well with Christian narratives. The authors often had a diverse set of personal motivations, some more noble than others, that influenced the tone of their work and how they chose to emphasize or omit various aspects of past. These minor adjustments potentially have impacted how historical events and regional relationships are understood today.

It was not only colonial period historians that had the potential to shape the written record. The oral histories and pictorial codices produced by indigenous people, even in the century before the conquest, contain biases based on individual experiences and political motivations. The Aztecs, like the Spanish, understood the significance of controlling history, and propagated revised histories, which championed the accomplishments of Aztecs and their origin story at the expense of alternative historical narratives. The historical events and legends from places like Xaltocan, that were established well before the Aztec empire, and probably contained narratives that contradicted those of the Aztecs, were probably among the first to be systematically erased by the Aztec empire. Thus, towns at the margin of the Aztec empire, like Xaltocan, are mostly referenced in the context of greater regional dynamics and it appears that the town's individual histories have been largely forgotten or erased.

The erasure of histories may also be attributed to the fact that the majority of sixteenth- and seventeenth-century informants probably did not have personal ties to Xaltocan or other periphery towns, and largely tied their ancestry to major Aztec cities. In their tales, their places of origin (Texcoco, Tlatelolco, Cuauhtitlan, etc.) were

championed, and the roles of other polities were deemphasized. The letter written by Pablo Nazareo is one major exception to this rule, as Nazareo was from Xaltocan. Nazareo's detailed accounts of Xaltocan's pre-conquest significance and ruling lineage are enlightening, and indicate the significant role Xaltocan had in Basin of Mexico prior to, but also after, the formation of the Aztec Triple Alliance. Unfortunately, the letter also clearly has obvious biases, fueled by the author's personal aspirations. Striving for personal gain, it is very possible that Nazareo adapted some historical details for his own benefit.

Together these documents contribute to a greater understanding of what life was like in central Mexico before and after the Spanish conquest. Taking implicit biases and other possible errors into consideration, I contextualize the information from these written documents with archaeological data from Xaltocan to demonstrate how Xaltocan's intra-community socio-political structure appears to have functioned during the Early Postclassic and how it may have changed over time in response to new regional dynamics.

CHAPTER 4

CONTEXTUALIZING THE ARTIFACT DATA FROM CERRITO CENTRAL

This chapter summarizes the data gleaned from artifacts recovered through excavations at Cerrito Central and uses comparative data from elsewhere at Xaltocan for context. In particular, a test-pitting project conducted by Brumfiel in the early 90's and subsequent research projects led by Brumfiel and her students and colleagues (included in Brumfiel 2005b) have provided a large corpus of site-specific data through which patterns in relative quantities and qualities of different artifact types are observed. In this chapter, site-wide artifact data is compared to the artifact data from Cerrito Central, facilitating interpretations about the ways in which the inhabitants of Cerrito Central were similar and dissimilar to the wider community.

This chapter only addresses three kinds of artifacts recovered at Cerrito Central: ceramics, lithics, and stucco fragments. These artifact types were recovered at a relatively high frequency at Cerrito Central and have been deemed especially useful for interpreting the function and significance of Cerrito Central over time and in comparison to the wider community. A more detailed account of artifact data, which includes notes on excavation methods, analysis procedures, typologies, and raw data can be found in the Appendix of this dissertation.

Addressing Site-Wide Artifact Distributions

In many respects the types and quantities of materials recovered at Xaltocan are similar to the types and quantities of materials recovered at sites throughout the Basin of Mexico. Xaltocan's Postclassic inhabitants, like their contemporaries elsewhere in the region, engaged in market trade and capitalized on the natural lake resources by hunting water fowl, fishing, collecting lake algae, harvesting salt, and *chinampa* farming. Despite many broad similarities in practices and resources across the region, archaeological research at Xaltocan, and at other Postclassic sites in the region, has demonstrated that some distributions of artifact types and quantities are quite diverse and site-specific. This is particularly true of ceramics. Increasingly, archaeological evidence has indicated that local ceramic chronologies do not support a single chronology for the entire Basin of Mexico. Thus, ceramic chronologies are more site-specific than once believed, and should be revised for individual sites using a combination of seriation techniques with absolute dating (Hodge 1998; Nichols and Charlton 1996; Overholtzer 2012). In light of these relatively recent revelations, archaeologists working at Xaltocan have created a unique site chronology that has been fine-tuned over the years as new data emerges (see below and Table 1.3).

The considerable corpus of artifact data from Xaltocan, as well as the recently refined site chronology, facilitates intra-site comparisons of datasets. Observing patterns in data and how they compare may be useful for understanding community dynamics and social inequality. Data presented in this chapter mainly address the patterns in artifact distributions observed at Xaltocan, though in some cases regional data is also cited.

Ceramic Data

Previous Studies: Developing a Ceramic Chronology at Xaltocan

Considerable research concerning the distribution and chronology of ceramics dating to the Postclassic has been conducted in the Basin of Mexico. In particular, the Basin of Mexico settlement survey (Parsons 1966; Blanton and Parsons 1971; Sanders et al. 1979; Whalen and Parsons 1982) was used to create a regional ceramic chronology that has been a useful jumping off point for many site-specific studies, including at Xaltocan.

Elizabeth Brumfiel (2005a) developed a more refined chronology for Xaltocan, which drew on data collected through excavation of 24 test pits. While Brumfiel demonstrated general patterns in frequencies of different pottery types—including polychrome (Aztec polychrome and Chalco polychrome), and Redwares (Plain Red, Black-on-Red, Black-and-White-on-Red)—as well as the frequency of different forms over time—including plain bowls, jars, and comals—she used Aztec Black-on-Orange pottery as the principal type for distinguishing time periods. Aztec Black-on-Orange pottery is divided into four main types: Aztec I, Aztec II, Aztec III, and Aztec IV, with numerous variants for each type (for a detailed description of the types and their variants see Appendix). Using multidimensional scaling of ceramic variants and radiocarbon dates, Brumfiel proposed four occupation phases at the site:

Phase 1 was marked by pure deposits of Aztec I Black-on-Orange pottery (Fig. 4.1), and was temporally situated via four calibrated radiocarbon dates of A.D. 880, 960, 970, and 990. The presence of Aztec I pottery alone marks the earliest phase of

occupation at Xaltocan, dating to the Early Postclassic period (A.D. 900-1100).



Figure 4.1. Aztec I ceramic fragment

Phase 2 was defined based on the presence of both Aztec I and II pottery (for Aztec II pottery, see Fig. 4.2), representing the shift from Aztec I to Aztec II pottery (originally suggested by Whalen and Parsons 1982). In association with mixed Aztec I and II Black-on-Orange pottery, Brumfiel's test-pit program yielded two calibrated radiocarbon dates of A.D. 1235 and 1300, indicating that Phase 2 represents occupation during the height of Xaltocan's power during the Middle Postclassic (A.D. A.D. 1100-1300).



Figure 4.2. Aztec II ceramic fragment

Phase 3 was associated with pure deposits of Aztec II Black-on-Orange pottery, and was associated with two calibrated radiocarbon dates of A.D. 1395 and 1425. Brumfiel's Phase 3 represents occupation during Xaltocan's conquest by and subordination to Cuauhtitlan and Azcapotzalco at the beginning of the Late Postclassic (A.D. 1300-1430).

Phase 4 was associated with a mix of Aztec III and IV Black-on-Orange pottery (Figs. 4.3 and 4.4). It had one calibrated radiocarbon date of A.D. 1421, but that sample was associated with a colonial-style figurine, suggesting that this phase represents occupation during imperial Aztec rule in the Late Postclassic and extended into the Early Colonial period (A.D. 1400-1700).



Figure 4.3. Aztec III ceramic fragment



Figure 4.4. Aztec IV ceramic fragment

Years after Brumfiel's initial chronology was published, excavations of domestic structures at the site (Brumfiel 2009; De Lucia 2011)—which date to Xaltocan's earliest occupation phases—suggested that some edits to the initial chronology were in order. These excavations gleaned 21 radiocarbon dates, which were largely associated with pure Aztec I contexts. These dates revealed that Aztec I pottery was used for a very long time at the site, probably until at least the thirteenth-century. Moreover, excavations also revealed stratified levels wherein Aztec I deposits were overlain with pure Aztec II deposits. Radiocarbon dates from these deposits suggest that Aztec I ceramics dated to between A.D. 1010 and A.D. 1250, whereas Aztec II deposits dated to between A.D. 1190 and A.D. 1355. Together, these observed stratigraphic relationships and radiocarbon data indicate that there is an abrupt transition from Aztec I to Aztec II pottery sometime during the early thirteenth-century. While there may be a period of overlap, it is much shorter than once thought, and mixed contexts should be interpreted as transitional, as opposed to comprising a singular occupation phase. This assertion was also supported by Lisa Overholtzer (2012:107) who found no evidence that Aztec I pottery and Aztec II pottery were used at the same time.

Lisa Overholtzer built on Brumfiel's chronological work as a part of her research at Xaltocan. Overholtzer focused primarily on the Middle to Late Postclassic periods—Brumfiel's Phases 3 and 4. Overholtzer excavated two house mounds on the eastern edge of the site. Those mounds appear to have dated only to Xaltocan's later Phases, as no substantial evidence for deposits dating to periods earlier than the Middle Postclassic (Brumfiel's Phase 3, associated with pure Aztec II pottery deposits) were recovered.

Overholtzer also found evidence for continuous occupation at the house mounds between Phase 3 and 4. While not especially significant for the ceramic chronology, evidence for continuous occupation was significant because it showed that not all of Xaltocan's inhabitants fled after Cuauhtitlan and Azcapotzalco conquered the island.

Overholtzer's excavations revealed sealed middens that contained mostly Aztec II, Aztec III, and Aztec III and IV ceramics. Overholtzer has argued that based on evidence from middens, three ceramic phases are represented at the house mounds. Based on two datasets—stratigraphy and radiocarbon data from her own and Brumfiel's earlier work (2005a; 2009)—Overholtzer created a Bayesian chronological model for the site. This model has resulted in a new ceramic chronology for Xaltocan (see Table 1.3). Her chronology is based on a large number of radiocarbon determinations and is presumably the most accurate existing chronology for Xaltocan. Overholtzer's ceramic chronology was used as a reference for the seriation of ceramics recovered at Cerrito Central. While there are some instances in which ceramic data at Cerrito Central does not completely align with Overholtzer's chronology—specifically, the longevity of Aztec I ceramics, and the period of overlap between Aztec I and Aztec II types—the chronology is extremely useful and new radiocarbon data from Cerrito Central support the basic timeline.

The ceramic chronology developed by Overholtzer and used in this dissertation is briefly outlined in Chapter 1. To reiterate, Overholtzer's model resulted in date ranges for four ceramic phases: The *Dehe* Phase dates from roughly A.D. 920 to 1240, is characterized by Aztec I ceramics and corresponds to the Early Postclassic period at Xaltocan. The *Hai* Phase dates from roughly A.D. 1240 to 1350, is characterized by

Aztec II ceramics and corresponds to the Middle Postclassic period at Xaltocan. The *Tlalli* Phase dates from roughly A.D. 1350 to 1521, is characterized by Aztec III ceramics and corresponds to the Late Postclassic period at Xaltocan. The *Isla* Phase dates from roughly A.D. 1521 to 1680, is characterized by Aztec III and IV ceramics, and corresponds to the (Early) Colonial period at Xaltocan. While Overholtzer named her ceramic Phases to differentiate them from Brumfiel's Phases (1, 2, 3 and 4), she also used her chronology to refine and redefine the time periods at Xaltocan (Early, Middle and Late Postclassic). In this dissertation I have opted to use time periods (as opposed to Overholtzer's Phase names) to temporally frame materials recovered at Cerrito Central. I have chosen this method because although Overholtzer's time periods are Xaltocan-specific and slightly refined from earlier studies, they largely correspond to the time periods used to temporally frame previous research at Xaltocan. Although not necessary, consistent terminology does facilitate simpler comparisons across the site.

Ceramic Data at Xaltocan

The following section outlines some basic patterns observed in ceramic assemblages at Xaltocan and draws primarily from data collected by Elizabeth Brumfiel (2005a). The bulk of Brumfiel's artifact data were gleaned from test pit excavations conducted in 1990 and 1991. These data have been adapted to fit the chronology used in this dissertation. Thus although Brumfiel used Phases (1-4) to describe her data, I have adapted her data to fit the refined time periods outlined above (Early, Middle and Late Postclassic). The process of adapting Brumfiel's data to fit this slightly different chronology required some inferences and slight adjustments to time periods. These minor

amendments did not change the overall patterns of artifact distributions, only the date ranges during which they occurred.

In this section I address only a handful of ceramic types and forms. These include Aztec Black-on-Orange pottery types (I-IV), Redwares (Plain Red, Black-on-Red, Black-and-White-on-Red) and utilitarian wares (including comals, cooking jars, and plain bowls). Please note that although it is not always explicitly stated, the following ceramic summary is based only on rim sherd frequencies and distributions. Body sherds were analyzed but these data are not included in this chapter. To access all ceramic data see the Appendix.

Early Postclassic

Dating to the Early Postclassic (Brumfiel's Phase 1), Brumfiel's test pits revealed nearly pure Aztec I deposits, with Aztec II and Aztec III ceramics observed at very low frequencies. Aztec I ceramics made up 24% of all Early Postclassic ceramics. Redwares accounted for only a small percentage (about 3%) of the materials. Relative to other Redwares, Black-and-White-on-Red fragments were recovered at a far higher rate than other Redwares (n=32 of 37 total Redware fragments). Plain utilitarian wares accounted for about 53% of the rims in Early Postclassic ceramic assemblages. Jars and comals had fairly equitable distribution during the Early Postclassic, with jars rims accounting for roughly 17% of all ceramic fragments included in the multidimensional analysis, and comals accounting for 15%. Plain bowls were found at a slightly higher frequency, comprising about 21% of ceramic assemblages. See Table 4.1 for a summary of the Early Postclassic ceramic data from Brumfiel's test pitting program.

Table 4.1 Early Postclassic Ceramic Data (Adapted from Brumfiel 2005a: Table 4.1)

Type	Number (n)	Percentage
Black-on-Orange	236	24%
Aztec I	231	24%
Aztec II	4	<1%
Aztec III	1	<1%
Aztec IV	0	0
Redwares	37	3%
Plain Red	3	<1%
Black-on-Red	2	<1%
Black-and-White-on-Red	32	3%
Utilitarian Vessels	513	53%
Comals	141	15%
Jars	167	17%
Plain Bowls	205	21%
Total Rims	965	

Middle Postclassic

During the Middle Postclassic (which in this case includes data from Brumfiel's Phase 2 and Phase 3), Aztec I and Aztec II ceramics are represented at similar frequencies. It is worth noting that although distributions are equitable when Brumfiel's Phases 2 and 3 are combined, each Phase contained lopsided distributions (see Table 4.1 in Brumfiel 2005a:107). Brumfiel's Phase 2 was defined based on the presence of primarily Aztec I ceramics, with evidence for the introduction of Aztec II ceramics. Brumfiel's Phase 3 is characterized by Aztec II ceramics, with frequency of Aztec I ceramics dropping to about 1%. Again, combining Brumfiel's Phases 2 and 3, following Overholtzer's (2012) chronology, the distributions of Aztec I and II ceramics become more equitable with each type accounting for about 4% of total ceramics. It is also

noteworthy that the frequency of Aztec Black-on-Orange ceramics, relative to other ceramics included in these analyses, dropped dramatically between the Early and Middle Postclassic periods (24% to 9%). The Middle Postclassic also marks the emergence of Aztec III ceramics, though they make up only a small percentage of the total ceramic corpus (<1%).

While the frequency of Aztec Black-on-Orange pottery decreased between the Early and Middle Postclassic periods, the frequency of Redwares increased. Redwares made up approximately 15% of ceramic assemblages during the Middle Postclassic, a substantial uptick from the Early Postclassic when Redwares only made up <3% of ceramic assemblages. The vast majority of Middle Postclassic Redwares were Black-and-White on Red (12%), with Black-on-Red and Plain Red comprising 2.5% and 1% of ceramic assemblages, respectively.

There was also a significant rise in the relative frequency of utilitarian wares during the Middle Postclassic. During the Early Postclassic the numbers of jar rims and comal rims were fairly equitable, but by the Middle Postclassic there is greater discrepancy in the relative frequencies of the forms. The relative frequency of jar rims decreased modestly and ultimately made up approximately 15% (n=564) of total ceramics. Relative frequency of comals, on the other hand, skyrocketed to account for about 29% (n=1,069) of analyzed ceramics, outnumbering jars at a rate of nearly 2 to 1. Plain bowls dropped in frequency from the Early Postclassic, comprising only about 10% (n=386) of ceramic assemblages. See Table 4.2 for a summary of the Middle Postclassic ceramic data from Brumfiel's test pitting program.

Table 4.2 Middle Postclassic Ceramic Data (Adapted from Brumfiel 2005a: Table 4.1)

Type	Number (n)	Percentage
Black-on-Orange	326	9%
Aztec I	156	4%
Aztec II	150	4%
Aztec III	19	<1%
Aztec IV	1	<1%
Redwares	578	15%
Plain Red	43	1%
Black-on-Red	94	3%
Black-and-White-on-Red	441	12%
Utilitarian Vessels	2019	54%
Comals	1069	29%
Jars	564	15%
Plain Bowls	386	10%
Total Rims	3740	

Late Postclassic/Early Colonial

Brumfiel's Phase 4 includes both Aztec III and Aztec IV ceramics. This phase of definition differs from the current chronology, which includes the Late Postclassic (characterized by only Aztec III ceramics) and the Early Colonial period, which contains both Aztec III and IV ceramics. The nature of the Brumfiel's data summaries, which clump areas containing Aztec III (only) and Aztec III and IV ceramics, preclude distinguishing the areas that may have been strictly Late Postclassic in age from areas that may have been Colonial. Thus, patterns in data discussed in this section might reflect changes associated with the Late Postclassic, the Colonial period, or both. Therefore, in referring to Brumfiel's site-wide data, this time period will be named: Late Postclassic/Early Colonial.

There is a modest increase in the relative frequency of Aztec Black-on-Orange ceramics during the Late Postclassic/Early Colonial period (from about 9% to 11%). Please note, that during Brumfiel's Phase 3 (characterized by only Aztec II ceramics and possibly reflecting the later Middle Postclassic) Aztec Black-on-Orange made up only about 7% of total ceramics). Aztec I and II ceramics were recovered during this late period, but in modest numbers, comprising only 1% and 2% of Late Postclassic/Early Colonial ceramic assemblages. Aztec III ceramics were the most common Black-on-Orange type recovered during this period, making up about 6% of Late Postclassic/Early Colonial ceramic assemblages. Aztec IV ceramics were also recovered for the first time during this period and made up only about 2% of analyzed ceramics. Aztec IV ceramics are now understood to have emerged after Spanish contact, thus the presence of Aztec IV ceramics confirms that Brumfiel's Phase 4 is best understood as the Late Postclassic/Early Colonial period.

Redwares dropped slightly in relative frequency during the Late Postclassic/Early Colonial period to about 14%. Redware types however, maintained similar relative distributions to those that were observed during the Middle Postclassic, with Black-and-White-on-Red making up 10% of analyzed ceramics, Black-on-Red making up 2%, and Plain Red also making up 2%.

Comparing the frequencies and distributions of utilitarian wares, the discrepancy between jars and comals increases even more between the Middle and Late Postclassic/Early Colonial period. Jars drop in frequency to only about 8% of total ceramics, and comals increase insignificantly to comprise about 30% of all ceramics.

Thus, by the Late Postclassic/Early Colonial period, comals outnumbered jars at a rate of more than three to one. Like comals, plain bowls also skyrocketed in frequency during the Late Postclassic/Early Colonial period to comprise about 20% of ceramic assemblages across the site. This relative frequency is essentially the same as it was during the Early Postclassic before the substantial Middle Postclassic dip. See Table 4.3 for a summary of the Late Postclassic/Early Colonial ceramic data from Brumfiel’s test pitting program.

Table 4.3 Late Postclassic/Early Colonial Ceramic Data (Adapted from Brumfiel 2005a: Table 4.1)

Type	Number (n)	Percentage
Black-on-Orange	252	11%
Aztec I	12	<1%
Aztec II	49	2%
Aztec III	138	6%
Aztec IV	53	2%
Redwares	316	14%
Plain Red	46	2%
Black-on-Red	47	2%
Black-and-White-on-Red	221	10%
Utilitarian Vessels	1322	58%
Comals	681	30%
Jars	185	8%
Plain Bowls	456	20%
Total Rims	2298	

Summary

Together, Brumfiel’s ceramic data demonstrate a number of notable changes in ceramic distributions over time. First, the relative frequency of Aztec Black-on-Orange pottery decreased dramatically between the Early and Middle Postclassic periods, and then increased insignificantly between the Middle and Late Postclassic periods. Redware

frequency increased between the Early and Middle Postclassic periods, and decreased only very slightly between the Middle and Late Postclassic/Early Colonial period. Finally, the frequency of comals increased steadily over time, again with the most dramatic shift between the Early and Middle Postclassic periods, and with only a slight increase into the Late Postclassic/Early Colonial period. Jars, on the other hand, decrease in frequency over time, with the most dramatic decrease between the Middle and Late Postclassic/Early Colonial period.

Ceramic Data at Cerrito Central

A total of 112,421 ceramic fragments were analyzed from Cerrito Central, actually making up a much larger corpus of data than in Brumfiel's study. All ceramics from Cerrito Central, however, came from a very specific place at Xaltocan, not necessarily reflecting a range of activity spaces. Also, because the expanse of Cerrito Central was not fully revealed through excavations, ceramics recovered at Cerrito Central do not even reflect the entire ceramic assemblage from the site, and may be biased by the areas that were encountered through archaeological excavations. This section will present the patterns and major shifts observed in the ceramic data recovered from Cerrito Central and compare these patterns and shifts to those observed in Brumfiel's site-wide data.

Early Postclassic

During the Early Postclassic, Black-on-Orange ceramics made up about 13% of the ceramic assemblage from Cerrito Central. This is a substantially lower relative frequency of Black-on-Orange ceramics than observed in Brumfiel's data, wherein Black-on-Orange ceramics made up about 25% of Early Postclassic ceramic

assemblages. Most Black-on-Orange ceramics recovered at Cerrito Central were Aztec I types (93%), which is consistent with site-wide data.

At Cerrito Central, Redwares made up about 5% of Early Postclassic ceramics. Redware types were fairly evenly distributed, with each making up about 2% of total ceramics. This is only a slightly higher frequency of total Redwares than observed in Brumfiel's data. The distributions observed in data from Cerrito Central are far more uniform than what was observed in site-wide data. Whereas site-wide data revealed greater quantities of Black-and-White-on-Red ceramics, Cerrito Central data revealed more even distributions across Redware types, though arithmetically Black-on-Red ceramics were the most numerous by a small margin.

During the Early Postclassic, sherds from comals and jars were recovered at Cerrito Central at a somewhat higher rate than what was observed in Brumfiel's site-wide data. Comals made up about 22% of the ceramic assemblage and jars comprised about 20%. This distribution is somewhat different than what is observed in Brumfiel's data, in which jars were actually recovered at a marginally higher frequency than comals, but like Brumfiel's data jars and comals were found at similar frequencies. Plain bowls were recovered at a slightly lower frequency than comals and jars at Cerrito Central, comprising about 17% of the ceramic assemblage. Again, this frequency differs somewhat from Brumfiel's data wherein bowls were actually found at the highest frequency among utilitarian wares. In general, utilitarian wares made up 59% of the total ceramic assemblage from Cerrito Central, slightly higher than the 53% that was observed

in the site-wide data. See Table 4.4 for a summary of the Early Postclassic ceramic data from Cerrito Central.

Table 4.4 Early Postclassic Ceramic Data from Cerrito Central

Type	Number (n)	Percentage
Black-on-Orange	458	13%
Aztec I	428	12%
Aztec II	30	<1%
Aztec III	0	0
Aztec IV	0	0
Redwares	196	5%
Plain Red	67	<2%
Black-on-Red	71	<2%
Black-and-White-on-Red	58	<2%
Utilitarian Vessels	2136	59%
Comals	785	22%
Jars	734	20%
Plain Bowls	617	17%
Total Rims	3629	

Middle Postclassic

By the Middle Postclassic Aztec Black-on-Orange ceramics increased moderately in relative frequency to make up about 15% of ceramic fragments. This was not a drastic change from the prior period, but does represent a significant difference from Brumfiel's data, in which Aztec Black-on-Orange made up only about 9% of Middle Postclassic ceramics. Whereas Brumfiel's site-wide data reflect a significant decline in Black-on-Orange ceramics between the Early and Middle Postclassic periods, data from Cerrito Central indicate that Black-on-Orange ceramics maintained a steady frequency, even increasing slightly.

Redwares at Middle Postclassic Cerrito Central accounted for about 17% of total ceramics. While during the Early Postclassic Redwares were evenly distributed

among types, by the Middle Postclassic frequencies of Black-and-White-on-Red ceramics rose significantly relative to other Redwares. Similar frequencies, although slightly more extreme, were observed in Brumfiel's data. Brumfiel's data also indicate that Redwares were recovered across the site at approximately the same rate as at Cerrito Central.

In the Middle Postclassic there were some drastic shifts in utilitarian wares at Cerrito Central. First, overall the frequency of utilitarian wares dropped dramatically during the Middle Postclassic (from 59% to 50%). Comals dropped in frequency (down 5%), and jars rose slightly in frequency (up 3%), ultimately resulting in jars outnumbering comals (jars n=736, comals n=549). These data are very different from what is observed in Brumfiel's data, in which comals were recovered about twice as frequently as jars. This area of divergence in the ceramic data from Cerrito Central and Brumfiel's site-wide data is significant and is explored in greater detail in the following section. Plain bowls dropped in frequency between the Early and Middle Postclassic periods. A similar, though more substantial drop was also observed in Brumfiel's site-wide data. In both datasets plain bowls made up 10% of the total ceramic assemblages. See Table 4.5 for a summary of the Middle Postclassic ceramic data from Cerrito Central.

Table 4.5 Middle Postclassic Ceramic Data from Cerrito Central

Type	Number (n)	Percentage
Black-on-Orange	483	15%
Aztec I	102	3%
Aztec II	342	11%
Aztec III	39	1%
Aztec IV	0	0
Redwares	547	17%
Plain Red	159	5%
Black-on-Red	109	3%
Black-and-White-on-Red	278	9%
Utilitarian Vessels	1605	50%
Comals	549	17%
Jars	736	23%
Plain Bowls	320	10%
Totals	3181	

Late Postclassic

Transitioning from the Middle to Late Postclassic periods, Aztec Black-on-Orange ceramics increased by only a small margin (from 15% to 16%), however distributions of Aztec types changed considerably. Although Aztec I and II types were still present, Aztec III ceramics increased dramatically in relative frequency, making up the majority of Black-on-Orange ceramics. The continued presence of Aztec I ceramics, though at a relatively low frequency, indicates that either Aztec I ceramics were utilized for a longer period of time than previously thought or that previous discards were re-deposited in fill. Brumfiel's data reflect that during the Late Postclassic there was a slight uptick in the frequency of Black-on-Orange ceramics, consistent with what is observed in the data from Cerrito Central. Still, the frequency of Aztec Black-on-Orange ceramics observed in Brumfiel's data remains somewhat lower than what is observed in the data from Cerrito Central.

Redware frequency at Cerrito Central remains virtually the same from the Middle to Late Postclassic transition, and Redware types also maintain virtually the same relative distributions. Again, Redware frequency at Cerrito Central is very similar to what is observed in Brumfiel's data, though making up a slightly smaller percentage of all ceramics (17% compared to 14%). The proportions of Redware types observed at Cerrito Central are also virtually the same as those observed in Brumfiel's data, with higher quantities of Black-and-White-on-Red types.

By the Late Postclassic, utilitarian wares made up only about 48% of the total ceramic assemblage at Cerrito Central. This is only a slight drop from the Middle Postclassic period. All utilitarian wares were recovered at similar rates during the Late Postclassic. Comals dropped insignificantly, from 17% to 16% of the ceramic assemblage, jars dropped more significantly, from 23% to 17%, and plain bowls rose substantially from 10% to 15% of the ceramic assemblage. These frequencies and distributions are quite different than what was observed in the site-wide data. Utilitarian wares made up a significantly larger portion of the site-wide ceramic assemblages and comals were the most frequent by a considerable margin (30%), followed by plain bowls (20%), and jars (8%). Again, the significance of these substantial differences will be explored in more detail in the following section. See Table 4.6 for a summary of the Late Postclassic ceramic data from Cerrito Central.

Table 4.6 Late Postclassic Ceramic Data from Cerrito Central

Type	Number (n)	Percentage
Black-on-Orange	868	16%
Aztec I	107	2%
Aztec II	140	3%
Aztec III	607	11%
Aztec IV	14	<1%
Redwares	890	17%
Plain Red	237	4%
Black-on-Red	157	3%
Black-and-White-on-Red	492	9%
Utilitarian Vessels	2580	48%
Comals	851	16%
Jars	896	17%
Plain Bowls	833	15%
Totals	5393	

Summary

Ceramic data gleaned from Cerrito Central reveal some interesting areas convergence and divergence when compared to Brumfiel’s site-wide ceramic data. First, the overall frequency of Black-on-Orange pottery increased steadily over time, though never by a large margin. This is very different from the site-wide data, wherein Black-on-Orange pottery was initially recovered at a high rate during the Early Postclassic, and then dropped dramatically by the Middle Postclassic.

Redware frequency at Cerrito Central increases considerably between the Early and Middle Postclassic, and sees an especially significant uptick in Black-and-White-on-Red types. The relative frequency of Redwares holds steady into the Late Postclassic. Redwares were consistently recovered at marginally higher rates at Cerrito Central than

elsewhere at the site, but the difference is not substantial. Otherwise Redware data from Cerrito Central and elsewhere at the site is remarkably similar.

Finally, the frequency of utilitarian wares at Cerrito Central changed quite a bit over time, and sometimes in unexpected ways. Whereas the site-wide data indicated that comal frequency increased steadily over time, at Cerrito Central comal frequency steadily decreased. Jar frequency at Cerrito Central initially increased over time, which again diverged from site wide data. By the Late Postclassic jar frequency decreased significantly and was found at similar frequencies as the other utilitarian wares. Plain bowls frequencies over time were inversely correlated with jar frequencies, initially decreasing significantly and then increasing. All utilitarian data at Cerrito Central were quite different than what was observed elsewhere at the site.

Comparisons of the ceramic data from Cerrito Central with ceramic data from Brumfiel's test pits reveal some interesting points of convergence and divergence. The similarities and differences between these two datasets ostensibly reveal differences in practices, trade networks, and prestige goods between Xaltocan's leaders and the wider community. The significance of these similarities and differences and their possible implications will be explored below.

Table 4.7. Summary of site-wide ceramic data from Xaltocan (Brumfiel 2005a) and Cerrito Central ceramic data. Note that more detailed data summaries may be found in the Appendix.

Time Period/Ceramic Types	Xaltocan (site-wide) Data	Cerrito Central Data
Early Postclassic		
Aztec Black-on-Orange	236 (24%)	458 (13%)
Redwares	37 (3%)	196 (5%)
Utilitarian wares	513 (53%)	2136 (59%)
Middle Postclassic		
Aztec Black-on-Orange	326 (9%)	483 (15%)
Redwares	578 (15%)	547 (17%)
Utilitarian wares	2019 (54%)	1605 (50%)
Late Postclassic*		
Aztec Black-on-Orange	252 (11%)	868 (16%)
Redwares	316 (14%)	890 (17%)
Utilitarian wares	1322 (58%)	2580 (48%)

*Note that for Xaltocan (site-wide) Data this time period is Late Postclassic/Early Colonial.

Discussion

The data outlined above indicate how ceramic consumption at Cerrito Central compared to ceramic consumption across the site (Table 4.7). In both cases, these datasets are incomplete. The Cerrito Central dataset, while arithmetically larger than Brumfiel's, was gleaned from what was only a small excavation grid that did not cover the entire expanse of the mound. These ceramic data, then, might be biased based on the kinds of activity spaces that were encountered during excavations. With these biases in mind, observed similarities and differences in ceramic distributions and frequencies might still be helpful in understanding the relationship between Xaltocan's leaders and commoners. It may also shed light on intra-site dynamics and how shifting trade networks, aesthetic preferences, and access to materials differentially affected people living at Xaltocan.

Beginning in the Early Postclassic, one of the most interesting differences between the ceramic data from Cerrito Central and from elsewhere at the site is the overall frequency of Aztec Black-on-Orange ceramics. In general, the expectation is that spaces associated with leadership would contain greater volumes of decorated pottery. This is especially true of Aztec Black-on-Orange pottery, which Brumfiel (2007; 2011) has argued may have had symbolic significance related to the solar cycles and the divinatory 260-day calendar. Contrary to expectations however, Black-on-Orange pottery was recovered at a significantly lower frequency at Cerrito Central than elsewhere at the site (compare, 13% to 24%), suggesting that Xaltocan's leaders were not accruing more Aztec Black-on-Orange style pottery than commoners. In fact, commoners seem to have been accessing and using Aztec Black-on-Orange pottery at higher frequencies than Xaltocan's leaders (based on analysis of rim sherds). There is no doubt that by the Early Postclassic the inhabitants of Cerrito Central were among the most prominent inhabitants of the island, constructing large, high quality architecture relative to commoners (see Chapter 5). So if the ceramic frequencies observed in excavated materials are accurate, it begs the question of why Aztec Black-on-Orange ceramics seem so much more prevalent in commoner contexts during Xaltocan's earliest occupation phase. Perhaps, contrary to assumptions, Aztec Black-on-Orange pottery was not especially valuable relative to utilitarian pottery. Perhaps, wealth was not accrued by Xaltocan's leaders in the form of ceramic vessels. At this point, any interpretations of the meaning of this difference would be highly speculative. Because the full expanse of Cerrito Central was not revealed through excavations, it is plausible that the observed frequency of Aztec Black-on-

Orange ceramics is biased. Distributions of Black-on-Orange types (I-IV) were consistent between the two datasets, with Aztec I ceramics comprising essentially the entire corpus of Black-on-Orange ceramics. This suggests that Xaltocan's leaders and commoners were accessing the same kinds of Black-on-Orange ceramics, even if at different frequencies.

Another noteworthy aspect of the Early Postclassic Cerrito Central data is the relatively high frequency of utilitarian wares compared to the site-wide data. Again, this discovery is contrary to the expectation that Xaltocan's leaders would have consumed greater quantities of decorated pottery relative to utilitarian wares. The higher than expected relative frequency of utilitarian wares might suggest that food preparation, possibly for feasting or other large-scale events, was an important production activity at Cerrito Central. Although there has not been evidence for feasting at Cerrito Central, Aztec period *tecpans* were multi-purpose structures that served as the residences of leaders but also functioned as government buildings and religious centers (Evans 1998, 2004, 2006). Evidence from Cerrito Central is too incomplete to confirm if the structures functioned like *tecpans*, or if they housed large public events that may have included feasting, but if they did, it might explain the high volume of utilitarian ceramics.

By the Middle Postclassic, distributions of Aztec Black-on-Orange pottery shifted considerably. While relative frequency of Aztec Black-on-Orange ceramics at Cerrito Central increased only modestly (13% to 15%), the relative frequency of Aztec Black-on-Orange elsewhere at Xaltocan dropped dramatically from 24% to 9%. By the Middle Postclassic the percentage of Black-on-Orange ceramics at Cerrito Central was higher than elsewhere at the site—aligning more with expectations. Based on historical

documents and archaeological evidence (outlined in Chapters 1 and 3) during the Middle Postclassic Xaltocan was the autonomous capital of the Otomí city-state. It is interesting that during this period of presumed prosperity at Xaltocan, there is a decline in decorated Black-on-Orange Pottery among commoners. This might suggest that while the leaders of Xaltocan experienced an increase in prestige items, commoners did not necessarily benefit in the same way. I should note that the site-wide data reflects the combined “Phase II” and “Phase III” data from Brumfiel (2005a). While both of these categories of data reflect a decrease from Phase I, the most drastic drop off is observed during Phase III. If Brumfiel’s Phase II and Phase III are chronologically distinct (even if they both date to the Middle Postclassic period), then the drop off observed in the site-wide data might be related to an escalation in regional conflicts. These conflicts, particularly with Cuauhtitlan, may have restricted Xaltocan’s exchange networks, disproportionately impacting commoners.

During the Middle Postclassic there was a substantial increase in Redwares observed in both datasets. As in the Early Postclassic, there was a slightly higher frequency of Redwares recovered at Cerrito Central than elsewhere at the site, but the difference seems negligible (17% vs. 15%). There was a substantial uptick in Black-and-White-on-Red ceramics, which comprised the majority of Redwares in both datasets. Although the relative frequencies of Redwares changed over time, they change at approximately the same rate in both datasets. Redware frequencies were always slightly higher at Cerrito Central, indicating that Xaltocan’s leaders were accessing Redwares at a marginally higher rate than commoners. The difference in relative frequencies between

datasets is too low to make any inferences about differential access to materials.

However, the drastic increase in Redwares across the site between the Early and Middle Postclassic periods does suggest that access to or preference for Redwares generally increased during the Middle Postclassic—especially, Black-and-White-on-Red types.

There is a trend downward in utilitarian wares at Cerrito Central between the Early and Middle Postclassic (59% to 50%) and a minimal uptick in utilitarian wares across the site (53 to 54%). By the Middle Postclassic, the relative frequencies of utilitarian wares in both datasets are more in line with expectations, with commoners using utilitarian wares at a higher rate (though not substantially higher) than the leaders living at Cerrito Central. The biggest difference between datasets is not in the overall frequency of utilitarian wares, but the distribution of different forms. Comal sherds were recovered at a substantially higher frequency in the site-wide data, whereas jar sherds were recovered at a substantially higher frequency at Cerrito Central. This suggests that Xaltocan's leaders were using jars for meal prep and food storage at higher rates than commoners, but they were using comals significantly less. Comals could be used for a variety of food preparation tasks, not only making tortillas. At Xaltocan in particular, archaeologists have long suspected that comals were used for cooking fish. It is unclear if the disparity in utilitarian wares was linked to differences in diet, or if it simply indicates that Xaltocan's leaders were engaging in food preparation in different ways, or at different rates, than their constituents.

During the Late Postclassic, the distributions and frequencies of all ceramic types were largely similar to those observed during the Middle Postclassic. At both Cerrito

Central and elsewhere at the site Aztec Black-on-Orange frequencies increased only marginally and the difference between the two datasets was similar to what was observed during the Middle Postclassic. The relative frequency of Redwares at Cerrito Central did not change at all between the Middle and Late Postclassic, and only drops by one percentage point across the rest of the site. The distribution of Redwares at Cerrito Central was slightly higher than in the site-wide data. Again, this difference is insignificant. The most marked difference in ceramic frequencies, when comparing Cerrito Central data and site-wide data was observed in utilitarian wares. The relative frequency of utilitarian wares is decidedly higher in the site-wide data than at Cerrito Central. The increase of utilitarian wares across the site may be linked to increased tax demands that occurred when Xaltocan was incorporated into the Aztec empire. Relatively fewer utilitarian wares at Cerrito Central may suggest that Xaltocan's Late Postclassic leaders, who were emissaries of the Aztec empire, were not producing food at the same rate as their predecessors.

The consistency in ceramic data between these two periods, especially among decorated wares, is significant because during the Late Postclassic Xaltocan was conquered by Cuauhtitlan and incorporated in the Aztec Triple Alliance. The island of Xaltocan was largely abandoned by its original population and repopulated by tax paying populations. It appears that as one population left Xaltocan and another ethnically, linguistically, culturally, and politically distinct population moved in, they continued to acquire and use decorated ceramics at essentially the same rate as their predecessors. This

might suggest that regional exchange networks and access to certain kinds of resources were consistent over time, even as the Aztec empire rose to power.

Lithic Data

Previous Studies

In many respects, lithic data recovered from Cerrito Central was consistent with lithic data recovered from previous studies at Xaltocan (Brumfiel 1991a; Brumfiel and Hodge 1996; Millhauser 2005). These studies, which have drawn largely from survey collections, reveal a number of patterns in lithic data across the site. First, during the Postclassic the vast majority of lithics were made out of obsidian (between 90-95%). Non-obsidian lithics were comparatively rare, but were typically made of cryptocrystalline stones, such as chert and quartz. Second, previous studies at Xaltocan revealed that the bulk of obsidian objects were made of green obsidian from the Pachuca source (Cerro de Navajas) in Hidalgo. After Pachuca green, the most common lithic material was gray obsidian, which probably came from Otumba in the State of Mexico. Other variants included black and brown obsidian, which were frequently lumped in with gray obsidian during analysis (Millhauser 2005:269).

The amount of Pachuca green obsidian (relative to other kinds of obsidian) increased over the course of the Postclassic, with the most abrupt shift between the Early and Middle Postclassic periods (Brumfiel's Phase 1 and Phase 3). During the Early Postclassic, John Millhauser (2005: 271) found that across the site of Xaltocan about two-thirds (67%) of obsidian lithics were green, and about one-third (33%) of obsidian lithics

were gray. By the Middle Postclassic green obsidian comprised nearly 90% of all obsidian lithics, and gray obsidian made up less than 10% of obsidian lithics. Similar ratios of green to gray obsidian were observed during the Late Postclassic. Third and finally, the total quantity of obsidian increased steadily at Xaltocan between the Early and Middle Postclassic periods, with a sharp drop off occurring during the Late Postclassic. Using this site-wide lithic data as a baseline against which lithic data gleaned from Cerrito Central may be compared, areas of continuity and divergence are highlighted and their importance is discussed.

Lithic Diversity at Cerrito Central

Lithic data gleaned from excavations at Cerrito Central reflected similar, though slightly elevated proportions of obsidian. Throughout the Postclassic obsidian accounted for about 98% of all lithic material recovered at Cerrito Central (Fig. 4.5). The high percentage of obsidian relative to other lithic materials was also observed elsewhere at Xaltocan, though to a lesser extent, and might reflect the availability of stone resources at regional markets. The low diversity of lithic materials at Xaltocan might indicate that chert and other cryptocrystalline materials were not easily accessible in local markets, which would have impacted the entire community, regardless of status. However, the particularly low diversity of lithic materials recovered from Cerrito Central could also indicate that other factors, such as preference, contributed to what kinds of lithic materials were acquired and used at Postclassic Xaltocan.

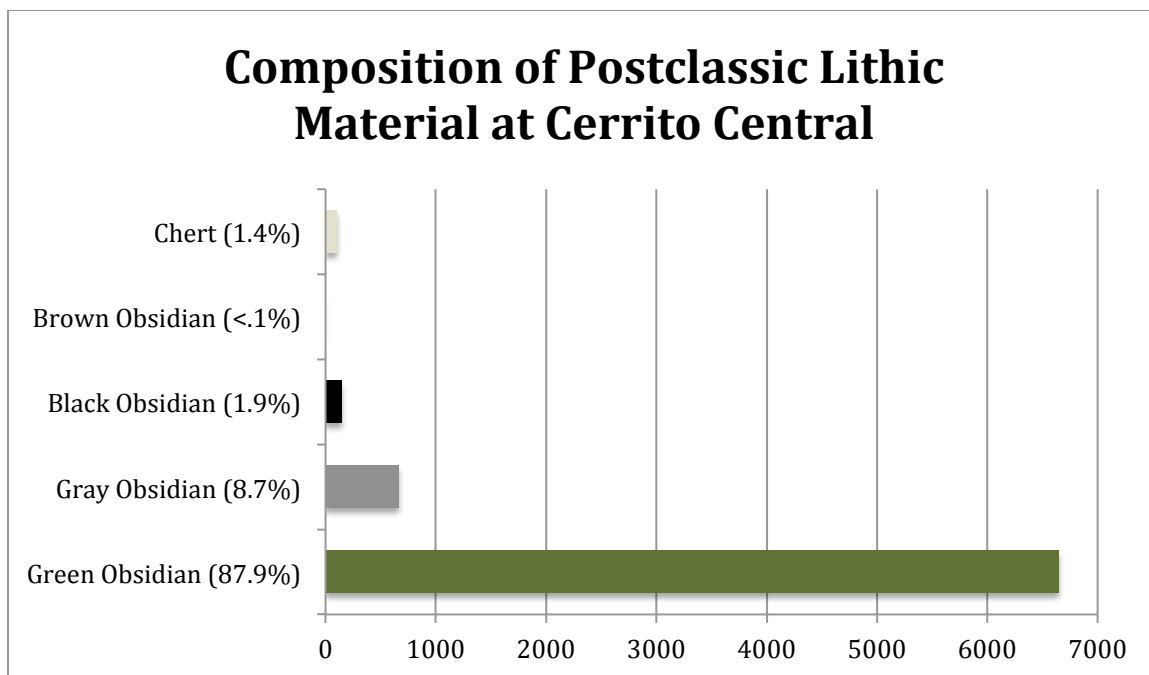


Figure 4.5. Bar chart illustrating quantities of lithic materials during the Postclassic

In theory, Xaltocan’s leaders would have had access to a greater diversity of lithic materials than commoners because their connections with other regional leaders would have facilitated different exchange networks. Of course, Xaltocan’s leaders would have also had access to the same materials as commoners through local markets, and may have even received lithic materials through taxes. Thus, it is unlikely that Xaltocan’s leaders would have been unable to acquire cryptocrystalline or other non-obsidian lithic materials had they wanted to. Therefore, the low diversity of lithic materials at Cerrito Central relative to the rest of Xaltocan suggests that Xaltocan’s leaders *chose* obsidian over other lithic materials. The low variation in lithic materials at Cerrito Central might be attributable to preference as opposed to access. If preference, as opposed to availability, drove lithic selection among Xaltocan’s leaders it may have also been the driving force for commoners, resulting in a site-wide decrease in lithic diversity over time.

Another explanation for the especially low diversity in lithic materials recovered from Cerrito Central could be linked to production practices. If Xaltocan's leaders were not engaging in the same production activities as commoners—which they likely were not—then it may not have been necessary for them to maintain as diverse a toolkit. For example, if Xaltocan's leaders were obtaining food through taxation, then owning utilitarian tools associated with agricultural production would not have been necessary. Of course, this explanation does not account for the fact that diversity in commoner contexts is also very low and decreases over time.

In general, lithic diversity at Xaltocan is very low, with obsidian outnumbering other lithic materials by a ratio of 9:1. At Cerrito Central lithic diversity is even lower, which might support the argument that preference, not access, motivated the acquisition of obsidian at higher rates than other lithic materials. Differences in daily practices among Xaltocan's leaders and commoners may have also necessitated different kinds of toolkits. Thus, different production practices may have also motivated the differential acquisition of lithic materials. Ultimately, while small differences between the lithic materials recovered at Cerrito Central and those recovered from across Xaltocan might reflect social differences they are not substantial enough to indicate major differences in lifestyle or access to resources.

Obsidian Diversity at Cerrito Central

Across the site of Xaltocan, obsidian diversity was also extremely low, with Pachuca green obsidian comprising the vast majority of all obsidian materials (Brumfiel 1991a; Brumfiel and Hodge 1996; Millhauser 2005). To reiterate what has already been

summarized above, site-wide data from Xaltocan indicates that during the Early Postclassic Pachuca green obsidian made up about two-thirds of all obsidian, and by the Middle and Late Postclassic periods Pachuca green obsidian made up about nine-tenths of all obsidian.

Similar frequencies in obsidian data were observed at Cerrito Central, but Pachuca green obsidian became dominant much earlier. During the Early Postclassic, green obsidian comprised about 85% of all obsidian at Cerrito Central (compared to 67% elsewhere at Xaltocan). This is dramatically higher than what was observed in the site-wide data and provides evidence that the uptick in green obsidian occurred among Xaltocan's leaders first. Millhauser (2005) has suggested that a general decline in diversity of obsidian materials might be evidence for a more restricted market. Although it was once thought that the restriction of the market and increase in Pachuca green obsidian may have been linked to the rise of the Aztec empire, it is now clear that the greatest increase in Pachuca green obsidian occurred well before the formation of the Aztec Triple Alliance, and in fact there was little change in the relative use of Pachuca green obsidian between the Middle and Late Postclassic periods.

Given that Pachuca green obsidian was recovered at higher frequencies much earlier at Cerrito Central than elsewhere at Xaltocan it is possible that preference, not restriction of the market, was the driving force. It has long been argued that Pachuca green obsidian, with its rich color and gold flecks would have been a more coveted and symbolically significant material for central Mexicans (Levine and Carballo 2014). The fact that Xaltocan's leaders obtained it in higher quantities early on, at a time when there

was still substantial access to gray obsidian (as evidenced through site-wide data at Xaltocan) suggests that Xaltocan's leaders *selected* green obsidian over gray.

By the Middle Postclassic the relative quantity of Pachuca green obsidian increased slightly to make up about 90% of obsidian materials recovered at Cerrito Central. Obsidian distributions held steady at this rate into the Late Postclassic. These frequencies mostly align with site-wide lithic data, suggesting that by the Middle Postclassic preference for and access to Pachuca green obsidian was roughly the same across the site and regardless of social status. The uptick in Pachuca green obsidian frequency across the site of Xaltocan occurred during the Middle Postclassic, after Xaltocan's leaders had already begun acquiring Pachuca green obsidian at much higher rates. This might suggest that as markets and availability of resources shifted over time, they benefitted the leaders first.

It is worth noting that although analysis of site-wide lithic data from Xaltocan indicates that the greatest increase in Pachuca green obsidian occurred between the Early and Middle Postclassic, studies in the surrounding region have actually revealed that the most dramatic change in obsidian diversity occurred between the Epiclassic and Early Postclassic periods. During the Epiclassic, equitable distributions of green and gray obsidian have been recovered at many northern Basin of Mexico sites, and by the Early Postclassic distributions there was a marked increase in the relative frequency of Pachuca green obsidian. While Xaltocan was not occupied during the Epiclassic, the nearby site of Michpilco was occupied during the Classic and Epiclassic periods and revealed even distributions of green and gray obsidian, with each comprising roughly 45% of all lithics

(Millhauser 2005: 273, 310). This indicates that across the region, relative use of Pachuca green obsidian spiked dramatically by the Early Postclassic period. This early shift in the frequency of Pachuca green obsidian, which was more dramatic than any of the changes observed during the Postclassic period, provides further evidence that preference for Pachuca green obsidian long pre-dated the rise of Aztec empire in the Basin of Mexico. Furthermore, under the political control of the Aztec, which occurred during the early part of the Late Postclassic at Xaltocan, appears to have essentially no impact on local acquisition of obsidian materials—neither among Xaltocan’s leaders, nor among commoners.

Lithic Quantities at Cerrito Central

Between the Early and Middle Postclassic periods lithic materials were recovered from Cerrito Central at somewhat different quantities than elsewhere at the site. The total amount of lithic material recovered at Cerrito Central increased by about 25% between the Early and Middle Postclassic periods (from 135 g/100 rim sherd to 169 g/100 rim sherd). This is different from site-wide data, which reflect relative stability in lithic quantities between the Early and Middle Postclassic periods (196 g/100 rim sherd to 192 g/100 rim sherd). The reason for the increase in lithic quantities at Cerrito Central between the Early and Middle Postclassic periods is unclear. The Middle Postclassic was the period during which Xaltocan reached its peak as an autonomous center in the Basin of Mexico, so an increase in the acquisition and accumulation of goods among Xaltocan’s leaders might be expected. Interestingly, during the Early and Middle Postclassic there are substantially fewer lithic remains at Cerrito Central than elsewhere at the site. This

could be related to a number of factors, but the most obvious reason may be that Xaltocan's leaders were not using lithic tools at the same rate as commoners. Commoners, who were likely using obsidian tools for a range of production activities, necessarily acquired obsidian at a higher rate than leaders.

Transitioning from the Middle to Late Postclassic periods, there is a drastic decline in lithic material at Cerrito Central of about 35%. Similar, even more dramatic, declines were observed elsewhere at Xaltocan (Millhauser 2005) and have been linked to the rise of the Aztec Triple Alliance. As the Triple Alliance took control of Xaltocan, tax demands may have made acquisition of lithics more difficult, both in terms of cost and supply. As massive quantities of obsidian were funneled into the Aztec capital, less may have been available for people living at the margins of the Aztec empire.

Not only did the raw amount of lithic material decrease at Cerrito Central between the Middle and Late Postclassic periods, but the average weight of individual lithic objects also declined by about 21%, from 1.9g to 1.5g. A reduction in the overall size of lithic objects may serve as further evidence that the obsidian supply was limited. Smaller-sized lithic objects might also indicate that when new lithic materials were not available, people living at Xaltocan were reworking and reusing broken or dull tools. More intensive studies of lithic materials at Cerrito Central, which would include analysis of retouching, would be necessary to bolster this argument.

Discussion

Lithic data gleaned through excavations at Cerrito Central reveal the rates at which Xaltocan's leaders were acquiring lithic materials and what kinds of materials they

were acquiring. Comparing lithic datasets from Cerrito Central with site-wide data reveal that Xaltocan's leaders were generally using greater quantities of obsidian than commoners, and particularly Pachuca green obsidian. This is most evident when comparing Early Postclassic datasets. At Cerrito Central nearly 85% of total lithics were made of green obsidian, whereas green obsidian made up only about 67% of lithics elsewhere at Xaltocan.

While Xaltocan's leaders were acquiring obsidian at higher rates than commoners, lithic quantities at Cerrito Central were generally lower than elsewhere at the site. During the Late Postclassic, contemporaneous with the rise of the Aztec empire, lithic materials at Cerrito Central and across the site drop significantly in quantity. This Late Postclassic decline in lithic quantity suggests that the Aztec conquest had a substantial impact on lithic supplies in the Basin of Mexico. Late Postclassic lithic data from Xaltocan suggests that commoners may have disproportionately experienced the negative impacts of conquest.

Stucco Data

Stucco Remains at Cerrito Central

Stucco was recovered in conspicuously high quantities at Cerrito Central. Whereas stucco made up a significant proportion of the artifacts collected at Cerrito Central (nearly one-third of all artifacts), stucco fragments were rarely recovered in other contexts at Xaltocan. Stucco represents an area of major divergence between material remains at Cerrito Central and elsewhere at the site.

In this dissertation, stucco refers to a mixture of lime, water, and aggregate that was often used on the façade of architecture in central Mexico and throughout Mesoamerica. Evidence from Cerrito Central suggests that stucco was faced—or smoothed and flattened—and sometimes painted red. Stucco is different from plaster, which was used on the surfaces of floors. Although the two materials are made of the same components—lime, water, and aggregate—at Cerrito Central the two substances were significantly different in appearance and texture. This was probably because stucco needed to be thicker, pliable, and easily shaped, as it was adhered to the sides of buildings. Plaster, in paste form, was a thinner substance that was probably poured over a bed of *tezontle* stone and smoothed. Whereas stucco was a robust material, quite hard and durable, and bright white in color, plaster was delicate, crumbly, brittle and yellow-white in color. The reason for these differences is probably largely attributable to differences in aggregate (both type and amount) though no analyses of stucco or plaster aggregate were performed. Plaster was largely found *in situ*, with only a handful of small pieces recovered in the screens. Plaster was too crumbly for even superficial analysis. Stucco on the other hand, was recovered in large volumes, mostly in the screens. Stucco fragments were far more durable than plaster and were collected and analyzed. Stucco remains will be the exclusive focus of this section moving forward.

Only basic stucco analysis was performed. Stucco fragments were counted and weighed. In some instances thickness of stucco was measured, but because stucco fragments were often broken along the edges where they would have attached to structures (typically with their faced edges largely intact) thickness measurements did not

provide a lot of meaningful information. At best they may provide an idea of maximum thickness (about 13 cm). Some stucco was painted red, and in one case contained painted designs (Fig. 4.6). While the stucco with red designs dated to the Late Postclassic, red painted stucco was found in all contexts at Cerrito Central. In fact, a large stone that was probably used for grinding pigment and that still contained remnants of red pigment on the surface was recovered in Early Postclassic context (Fig. 4.7). Red-painted stucco fragments made up a relatively small proportion of the total material corpus, but were counted and weighed separately.



Fig 4.6 Red-painted stucco with designs



Figure 4.7 Ground stone with red pigment still on the surface next to original location

There were a total of 9,702 stucco fragments recovered from Cerrito Central dating to the Postclassic. Together, these stucco fragments weighed in at a total of 297 kg. The average piece of stucco weighed about 30.6 g and was about 36 cm³, but stucco fragments varied significantly in weight and size. Because stucco was so variable, and because different numbers of areas were excavated in different time periods, the best way to assess change over time was to compare the number of plain stucco fragments to the number of areas excavated from that time period, and to find the average. The same was done for the weights of stucco fragments, to arrive at the average weight of stucco per excavated area containing stucco. These data are summarized below in Table 4.8.

While these data do not provide a great deal of information, they do demonstrate an increase in the amount of stucco/area between the Early and Middle Postclassic. This

increase is reasonable given that Xaltocan reached its peak as an autonomous center during the Middle Postclassic. Transitioning from the Middle to Late Postclassic, there is an increase in the number of stucco fragments recovered at Cerrito Central, but a decrease in the weight per area. Both the increase in count and decrease in weight were significant, but were not as dramatic as the increase observed between the Early and Middle Postclassic. The inverse patterns in Late Postclassic data suggests that the pieces of stucco recovered during the Late Postclassic were smaller than the pieces recovered from the Middle Postclassic. This might indicate that the stucco used during the Late Postclassic was more flimsy and crumbly than stucco used during the Middle Postclassic.

The degradation in stucco quality came at the same time as foreign leaders came to rule the island in the wake of the Aztec conquest. Less familiar with local materials, Xaltocan's new leaders and the island's new inhabitants may have not been as adept at correctly mixing aggregates as the island's previous inhabitants had been. Another possibility, though highly speculative, is that the people enlisted to construct the Late Postclassic structure atop Cerrito Central may have used poorer quality stucco as an act of resistance. Under the Aztec empire Xaltocan's inhabitants were placed under new tax pressures and archaeological evidence has already demonstrated how certain resources were more strained during this period. Building lower quality would have been a small, but meaningful act of resistance to new leadership and harsh demands that came along with it. Another possible explanation, in a similar vein, was that as new leadership took power at Xaltocan they needed to establish a physical presence at Xaltocan quickly. Perhaps laborers were pushed to work more quickly than usual, and as a result the quality

of constructed materials, such as stucco, suffered. Together these data indicate dramatic shifts in stucco use at Cerrito Central, first in overall quantity, and later in stucco quality. Although stucco was rarely found elsewhere at Xaltocan, examining when and where it was recovered provides insights into the relationship between architecture and social status.

Table 4.8. Stucco count and weight averages at Cerrito Central

Time Period	Average Number of Plain Stucco Fragments Per Area	Average Weight of Stucco Fragments Per Area
Early Postclassic	20.2	398.5 g
Middle Postclassic	25.2	871.6 g
Late Postclassic	26.9	783.1 g

Comparative Data at Xaltocan

Previous studies at Xaltocan recovered comparatively little evidence for the use of stucco on building façades. The only notable exceptions were recovered Structure 1 excavated by Kristin De Lucia (2011) on Mound 129 not far from the center of modern day Xaltocan. De Lucia found fragments of painted stucco murals (called plaster by De Lucia) dating to the Middle Postclassic. De Lucia also found other evidence for substantial architectural investment in the form of plaster floors, and associated material remains suggest that the inhabitants of the house she excavated had greater access to prestige goods than the average commoner at Xaltocan. These data suggest that the residents of De Lucia’s house were probably higher status individuals, and while they probably did not enjoy the same prestige as the inhabitants of Cerrito Central—as evidenced through the scale of architectural remains—they did engage in some similar construction techniques.

In her excavations, De Lucia (2011:135) also recovered a stone block that was integrated into an adobe wall. The block was faced along one edge with plaster, and De Lucia has argued that it was probably taken from damaged or demolished monumental architecture elsewhere at Xaltocan. Lockhart (1992: 69) has argued that the re-use of building materials may have been a means of taking advantage of materials that required high labor investment or that may have been difficult to acquire or create new. Given the scarcity of stone materials at Xaltocan during the pre-Aztec period, this is certainly a possibility. De Lucia has argued that the integration of the stone into the house wall might be interpreted as an act of defiance or resistance. She specifically cites the re-use of sacred objects by commoners in the Maya region as acts of subversion to the standing political structures (for reference, Joyce et al. 2001). However, De Lucia also raises the possibility that the appropriation of stone may have been an expression of devotion. Re-use of building materials tied to Xaltocan's leaders may have had significant social value, and may have tied community members physically to the site center. I argue that devotion, rather than resistance, motivated the inhabitants of De Lucia's house given architectural and material similarities with Cerrito Central.

Architectural investment and access to resources suggests that the occupants of Structure 1 were among the highest ranking members of society. They mimicked the building techniques found at Cerrito Central, including the use of stucco murals and plaster floors. De Lucia also recovered numerous rare, high quality objects, especially in ritual contexts (De Lucia 2011, 2014). These objects are similar to objects that were recovered at Cerrito Central in the Middle Postclassic ritual deposit (see Chapter 6),

indicating that the inhabitants of Structure 1 had access to similar goods as Xaltocan's leaders. Together, these similarities indicate that the occupants of Structure 1 were probably not acting in resistance to Xaltocan's leaders, but were trying to ally themselves with them. The stone then, may be understood as a symbol of the bond between the inhabitants of Structure 1 and Xaltocan's leaders. Its incorporation into the wall of the house, which was both a physically and socially significant locale, suggests the centrality of this relationship in the daily lives of Structure 1's occupants. So much of this dissertation will focus on the means by which Xaltocan's leaders worked to maintain authority and extend community solidarity, but the stone block at Structure 1 provides some indication that the work of solidarity was reciprocal and also hinged on the actions of the larger community.

Discussion

The large quantities of stucco fragments recovered at Cerrito Central indicate that the leaders of Xaltocan were expressing their authority and social difference using high-quality architecture. Although the architectural features found at Cerrito Central (and discussed in greater detail in chapter 5) already provide evidence for the considerable labor investment that Xaltocan's leaders committed to architecture, the stucco makes the degree to which Cerrito Central differed from the rest of Xaltocan more tangible. This is especially true when contextualized with the artifact data at large. Stucco is the only artifact type that is found in substantially greater quantities at Cerrito Central than anywhere else at the site. For the most part, other artifact types—even those not outlined in this chapter—were found in similar quantities and of similar quality to those found at

even the most common households at Xaltocan. This indicates that accruing large quantities of portable objects, including prestige objects, may not have been a significant factor in maintaining authority or asserting power at Xaltocan.

Conclusions

Excavations at Cerrito Central only revealed portions of the original Postclassic structures and their surrounding spaces, and therefore only provide a glimpse into the lives of Xaltocan's leaders. The artifact data should not be understood to be complete, as the artifact assemblages from Cerrito Central only provide evidence for practices linked to excavated spaces and are not necessarily representative of the range of activities that once took place at Cerrito Central. With this important caveat in mind, there are some observable patterns in artifact data that facilitate general inferences about the lives of Xaltocan's leaders over time. These data become even more revealing when compared against data recovered from elsewhere at Xaltocan.

As a whole, the artifact data outlined in this chapter suggest that Xaltocan's leaders did not have dramatically different access to resources than commoners. Lithic and ceramic data do not provide evidence that Xaltocan's leaders accrued large quantities of rare objects. Although historical documents suggest that for much of the Postclassic, especially in the periods prior to the rise of the Aztec Triple Alliance, Xaltocan was receiving taxes from a fairly large domain of nearby towns and agricultural fields, the material remains from Cerrito Central do not support this assertion. There are a number of possibilities for why this may be. First, it is wholly possible that the leaders of

Xaltocan were using taxation to accrue large quantities of prestige goods and other objects, but the evidence simply was not recovered within the very limited excavation grid at Cerrito Central. Second, taxed objects may have been accrued and then used to fund labor for architectural programs or military ventures. Historical documents indicate that the Early and Middle Postclassic periods at Xaltocan were periods of heightened regional violence and funding a military force may have been necessary to ensure Xaltocan's safety and station within the region. Furthermore, architecture at Cerrito Central was quite large and of a relatively high quality (as evidenced through the large quantities of stucco recovered during excavation) compared to other architecture at Xaltocan. Thus, it is plausible that some goods accrued through taxation funded large-scale construction projects. It is also possible that the historical documents are inaccurate and although Xaltocan was a prominent polity in the centuries prior to the rise of the Aztec empire, it was not receiving taxes from subsidiary towns and villages (see Chapter 7).

Material remains at Cerrito Central, while largely similar to those elsewhere at the site, do reveal some areas of divergence. Among lithic data, the early favoring of Pachuca green obsidian by Xaltocan's leaders, suggest that preference, as opposed to access, may have led to the low diversity of lithic materials observed in the site-wide data by the Middle Postclassic. Comparing Cerrito Central's ceramic data with site-wide data indicate that Xaltocan's leaders were generally not using decorated ceramics at higher rates than elsewhere at the site. In fact, during the Early Postclassic Cerrito Central contained less evidence for decorated pottery than was recovered from elsewhere at the

site. In general ceramic data at Xaltocan suggest that leaders were using similar ceramics as commoners, and in similar quantities, though it also suggests that when access to resources was more strained (for example, during the ascendance of the Triple Alliance) commoners were disproportionately impacted. While areas of divergence in ceramic and lithic data do not support previously held assumptions that the leaders of Xaltocan lived dramatically different lives from commoners, they do support that people living at Cerrito Central lived more stable lives and were privileged within the community.

While lithic and ceramic data may not support differences in prestige between the inhabitants of Cerrito Central and the rest of the site, large quantities of stucco fragments indicate that Xaltocan's leaders may have expressed their authority and identity through architecture. It is possible that large-scale architecture was a special privilege of Xaltocan's leaders. Thus, the inhabitants of Cerrito Central lived in more substantial accommodations, which probably included more large living quarters but also spaces for government work and ritual practice, similar to Aztec-period *tecpans*. Stucco fragments make up a significant a proportion of the total artifact assemblage at Cerrito Central, and stand out when compared with data from elsewhere at the site. Although the use of architecture at Cerrito Central is explored in detail in Chapter 5, the quantity of stucco at Cerrito Central, and the presence of stucco at one other high-ranking house at Xaltocan (Structure 1), suggests that architecture, rather than the acquisition or display of portable elite goods, was the main mode for expressing prestige.

CHAPTER 5

MONUMENTAL ARCHITECTURE AND COMMUNITY IDENTITY

Architectural places are tangible manifestations on the physical and social landscape. Unlike small, portable objects that may be discarded or forever hidden, they are not so easily erased by the natural and human-induced destructive processes that occur over time. Even as they crumble into ruin, the memory of structures can often long outlive the structures themselves, sometimes taking on very different meanings. Cerrito Central is a testament to this. Today it is a large mound near the center of a modest, yet buzzing town, but for many it still serves as a marker of Xaltocan's former glory. Although local interpretations were conflicted, archaeological excavations have now provided extensive evidence that Cerrito Central was probably where Xaltocan's leaders lived.

Recognizing the persistence and significance of architecture within the physical and social landscape, this chapter examines how local leaders at Xaltocan used buildings and architectural features as venues for identity production and expression, and discusses how reproduction of certain forms and practices may reflect aspects of local or personal identity that retained importance through time. Archaeological investigations at Cerrito Central provide evidence of change and continuity in architectural forms during the Postclassic, and when compared with the residences of commoners at Xaltocan and other regional leaders, these data offer insights into the complex social relationships that existed at different levels of society. Thus, this chapter also addresses how the persistence

of certain elements, in concert with the changes in building techniques, spatial layout, and associated artifacts contribute to our understanding of how places may have been remembered and reconstructed over time.

Xaltocan was one of many regional centers to thrive during the Early Postclassic period, before the Aztec Triple Alliance was founded and eventually conquered much of the Basin of Mexico. To maintain authority across the centuries, Xaltocan's leaders presumably made efforts to appease local constituents and assert power and autonomy at the regional level, and therefore juggled multiple public personas. First, they necessarily projected the symbolic and cultural trappings of the quintessential *Xaltocameca*. To accomplish this, they likely participated in shared rituals and public performances that united the community and reflected a distinctive, local identity (discussed in greater detail in Chapter 6). These activities probably served a wide variety of functions, ranging from the highly symbolic to the more practical, and were motivated by a desire to retain social status and to legitimize themselves locally.

Xaltocan's leaders also probably asserted themselves and their power within the region. Archaeological evidence indicates that Xaltocan was involved in regional trade networks (see Chapter 4), and historical evidence suggests that Xaltocan was a major capital, exacting tribute from surrounding towns between the eleventh and fourteenth centuries (*Anales de Cuauhtitlan* 1992; Nazareo de Xaltocan 1940). As figureheads and human embodiments of Xaltocan's power and identity, leaders possibly participated in "pan-elite" practices and trade of prestige goods (see Schortman et al. 2001) that facilitated their interactions with regional allies. Although Chapter 4 addresses the fact

that material evidence of “pan-elite” cultural exchange (as significantly different from exchange networks already present among commoners) was not found among the material remains at Cerrito Central, in that chapter I compare architectural remains from Cerrito Central with residences of leaders elsewhere in central Mexico and discuss continuities in architectural forms. To analyze the relationship between architecture and meaning at Cerrito Central, I draw from two related theoretical frameworks: space and place, and social memory.

Place-making, Social Memory, and Identity

Architectural constructions have an objective presence in our world. As material objects they occupy space, impact human movement and interactions within the landscape, and influence how people experience their physical and social worlds. This relationship between the social and physical makes constructed places—that is, places that are purposefully built or adapted to meet specific needs—important foci of analysis because they contribute to our understanding of larger social processes. Rodman (1992:641) outlines the varied significance of places declaring them to be simultaneously “politicized, culturally relative, historically specific, [and] local”. Similarly, Pauketat and Alt (2005:214) define physical constructions as reflections of cultural systems that “involve people forming and experiencing identities, making and inscribing memories, and re-interpreting practices and traditions.” That is to say, places are relative. They reflect both shared experiences and memories but also an infinite, and constantly shifting variety of meanings. Although they are almost always built with intention, how they are

ultimately made meaningful is dependent on individual and group subjectivities. Thus even the most influential members of society cannot control how exactly places will be interpreted or made meaningful to others.

The subjective and contextual conception of place is significant because I argue that architectural programs at Cerrito Central - and in particular the Middle Postclassic construction program - intentionally spoke to different audiences and projected multiple meanings. Possibly, Xaltocan's leaders recognized, and took advantage of, the fundamental notion that places serve as anchors for meaning and memory. The conflation of physical places and meaning (or memory) is important because "spatialization [of memories] transforms them into something more tangible, localizing a memory in time" (Meskell 2003: 39). Materially manifesting ideologies, histories, symbolism, and stories affords them the same permanence as the physical form. Thus architecture, as well as other natural features that have significant longevity, may have served as enduring testaments to beliefs or values that might otherwise be fleeting and more easily subject to change.

Constructed places differ somewhat from natural features because, as noted earlier, at least some intentionality is implicit in their design, placement, and scale. The homes of leaders are particularly useful foci because they are physical manifestations of the *negotiation* of identity and social status in the community. This perspective takes into account that the practices and physical implements of leaders may not always have been intended to project power, but may also have contributed to social solidarity and community cohesion. I argue that maintaining these dual identities was absolutely

essential for Xaltocan's leaders, and that to gain and retain influence they necessarily worked to legitimize themselves as the embodiment of the local community, while simultaneously demonstrating their preeminence and distinctiveness within it.

Just as leaders had control over how they projected intended meanings and identities through the physicality of their architectural programs, the meanings associated with the places they inhabited were shaped by shared and constantly changing cultural systems. In other words, "the links in these chains of experienced places are forged of culture *and* history" (Rodman 1992: 643, emphasis added). The meanings perpetuated by or projected onto Cerrito Central and the architecture associated with it probably changed through time with different constructions but also with different socio-political climates.

Architecture at Cerrito Central

Early Postclassic

Archaeological evidence indicates that Cerrito Central was probably occupied by Xaltocan's leaders as early as the late eleventh century, and possibly even earlier. A radiocarbon date taken from the earliest construction phase yielded a 2-sigma calibrated date range of A.D.1017-1155 (determined by the University of Arizona Accelerator Mass Spectrometry Laboratory, AA106208, Lab # X28988). Only fragmentary architecture was recovered dating to this early period, and thus describing the function of these spaces and features remains highly speculative. Despite these limitations, the architectural remains that do exist provide sufficient evidence to infer that the original structure was substantially different from other buildings at Xaltocan. Specifically, it was constructed

of high quality materials, including plaster floors and large clay foundations (Figures 5.1 and 5.2), and a considerable amount of stucco (red-painted and plain) was found in the fill surrounding these features. Using monumental architecture, Xaltocan's earliest leaders projected authority, substantiated their role in the community, and marked Cerrito Central as a place of political significance.

Xaltocan's earliest leaders also appear to have created (or conformed to) the town's layout, orienting this early structure about 5° east of north. Spatial studies in Mesoamerica have often referenced the significance of architectural layout and community layout (Ashmore 1991, 1992; Ashmore and Sabloff 2002; Benson 1981; Sugiyama 1993), especially in relation to cosmological beliefs (Aimers and Rice 2006; Aveni 2003; Brady 1997; Matthews and Garber 2004). Specifically, in central Mexico an orientation slightly east of north is common and the possible astronomical motives for this will be explored in greater detail below (Aveni and Gibbs 1976). Despite the fragmentary archaeological record from Cerrito Central's Early Postclassic structure, it firmly established Cerrito Central as the place of Xaltocan's leaders, and set standards for the relative monumentality and orientation of structures to come.



Figure 5.1. Photograph of Early Postclassic plaster floors and clay foundations. Photo is oriented facing roughly north. See Fig. 5.2 for reference.

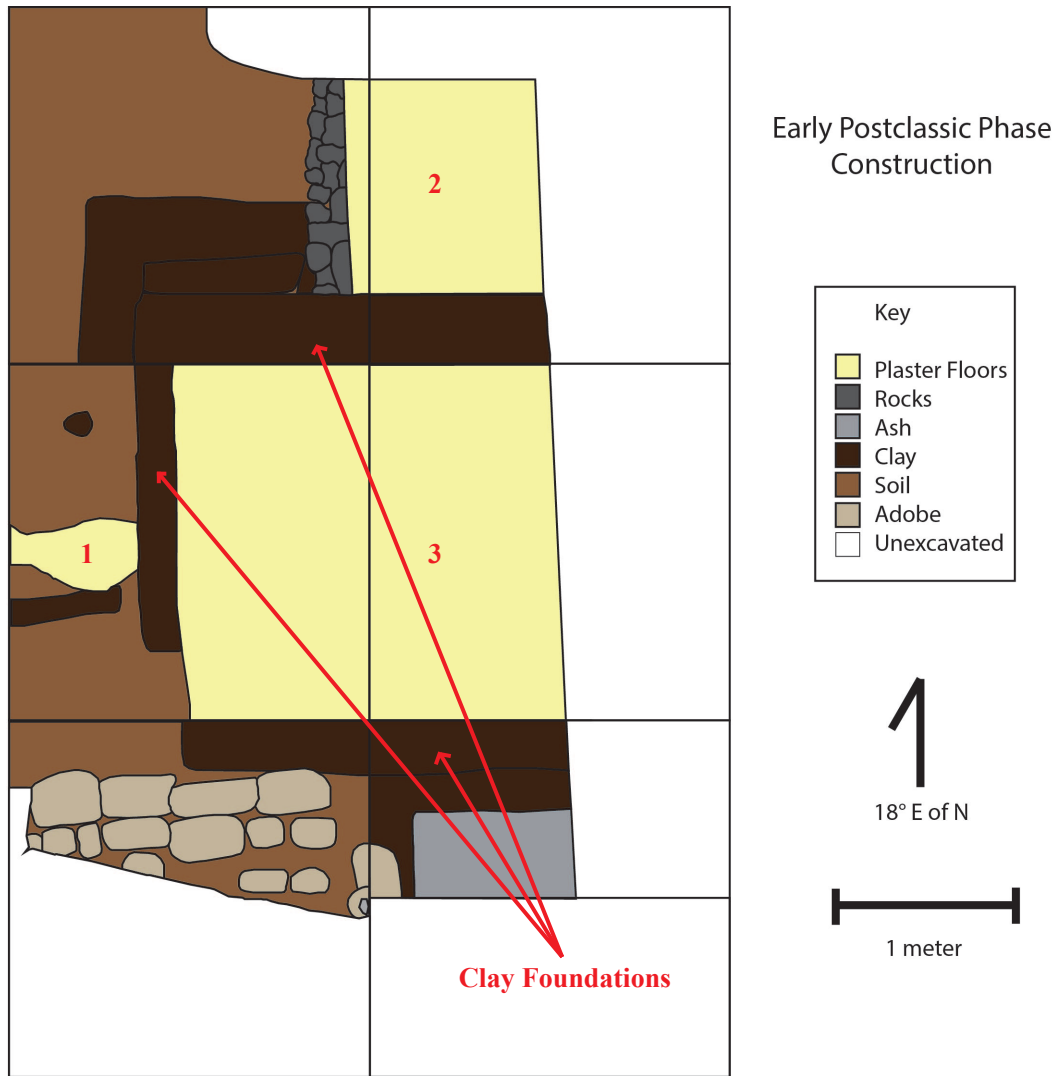


Figure 5.2. Plan map demonstrating Early Postclassic architectural features.

Middle Postclassic

Sometime around A.D. 1200 (radiocarbon sample yielded a 2-sigma calibrated date range of A.D. 1149 and 1254, determined by the University of Arizona Accelerator Mass Spectrometry Laboratory, AA106184, Lab # X28963, and recovered from a sealed context beneath a compacted dirt floor), the Early Postclassic structure was dismantled and buried under a thick layer of materially rich fill. This fill consisted of large quantities of various artifacts, but in particular contained significant quantities of stucco, both plain and red-painted. These stucco fragments may have come from walls and floors that were destroyed during the construction process. Stucco fragments have not been recovered in this density elsewhere at Xaltocan, and this is a clear indicator of the relative quality of architectural features at Cerrito Central compared to other buildings in the community.

In the process of demolishing the early structure and filling the space it left behind, Cerrito Central rose nearly one meter in height. Then, as part of the same construction program, the fill was capped by a large adobe platform (Figure 5.3). The adobe platform likely served multiple purposes including raising and leveling the surface of the mound as well as creating a larger and more aesthetically pleasing base for subsequent structures. Adobe is an uncommon medium for a platform, particularly of this scale. Postclassic platforms were typically made of stone, especially when they were foundations for structures affiliated with local and regional leaders (Ávila Lopez 2006; Elson 1999; Evans 2004, 2006), and sometimes clay, when setting the foundation for smaller houses (Espejel 2005). This distinctive construction choice may be attributed to a number of practical or symbolic motivations. First, large quantities of stone were not

naturally available on the island of Xaltocan and had to be imported from the lakeshore via boat or causeway. Although stone was used for architectural features atop Cerrito Central and elsewhere on the island, the quantity necessary for the platform may have been excessive. Xaltocan's leaders simply may not have had the ability to demand that such large quantities of stone be transported on their behalf. Time may also have been a factor. Adobe was a more efficient alternative to stone. It was easy to manufacture on the island and would have been a quicker material to build with. If Xaltocan's leaders sought to rebuild their residence quickly adobe may have been a more sensible option. While it is possible that adobe was simply the most practical choice for building material, the symbolic implications of adobe present an alternative hypothesis worth exploring.

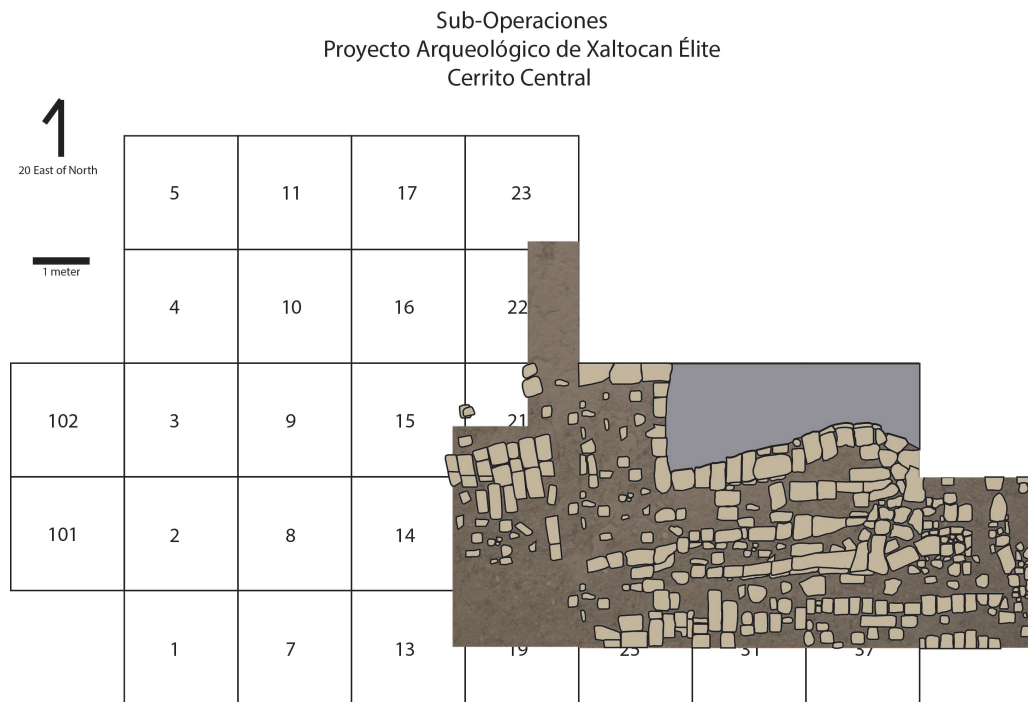


Figure 5.3. Plan Map of Adobe Platform



Figure 5.4. South-facing profile of the adobe platform.

If we reject the assumption that stone was an objectively better or more desirable building material, we may begin to entertain the possibility that adobe was a locally preferred aesthetic. Adobe was a widely used construction medium at Xaltocan (Brumfiel 2005b; De Lucia 2010; Overholtzer 2012). It was created locally, and probably familiar to *Xaltocamecas* at every level of society. Even the houses of Xaltocan's most ordinary residents were constructed from adobe bricks and daub mortar (Espejel 2005; Overholtzer 2012). Thus, by incorporating adobe in such a fundamental way Cerrito Central was not only a symbol of power (due to its relative size and location) but also of unity and shared community pride. Like the island of Xaltocan itself, the platform on Cerrito Central was a symbol of local ingenuity, resourcefulness and unified effort.

Beyond its symbolic implications, the adobe platform ultimately served as base for culturally rich and locally meaningful architectural elements linked to notions of leadership and unity. The platform substantially elevated the height of the Cerrito Central and leveled off the surface, potentially creating more space for architecture and performance. Architecture associated with the adobe platform dates to the Middle Postclassic period, and differs significantly in form from earlier structures. Middle Postclassic wall foundations are all fairly uniform, measuring approximately 30 cm in width and between 30-40 cm in height. They are composed of small (10-15 cm diameter) stones. This is a departure from clay wall foundations of the Early Postclassic structure. Excavations revealed only fragments of the architecture, so the full expanse of the structure that once sat atop Cerrito Central is unclear. However, we do have some indications that the structure had multiple small rooms (approximately 3x3 m), which would be consistent with some other prominent residences from the Postclassic (Ávila Lopez 2006; Elson 1999). Although spaces surrounding the structure were possibly used for public performances and gatherings, these spaces are no longer evident archaeologically. These public displays would have been integral to place-making and to creating shared meaning.

The Middle Postclassic at Xaltocan marked its height as an autonomous polity, and was only short-lived. With Xaltocan's presumed abandonment (which probably did not include everyone living at Xaltocan, but almost certainly did include Xaltocan's leaders), Cerrito Central likely fell into disuse. Ethnohistorical records indicate that conquerors destroyed many homes and buildings at Xaltocan (*Anales de Cuauhtitlan*

1992: 104), and the conspicuous and locally meaningful structures atop Cerrito Central were probably among them. Burning is not evident among architectural remains recovered through excavations, but missing sections of walls may be indicative of destruction. Stone from walls may have been collected for later constructions.

Late Postclassic

One major construction phase occurred during the Late Postclassic. Composed mainly of large-stone wall foundations (one meter wide), the Late Postclassic structure was larger in magnitude and constructed in a considerably different style than previous structures. This, I believe, indicates that Cerrito Central's Late Postclassic inhabitants had greater access to, or preference for, stone resources, which may be related to Xaltocan's new political position under Aztec authority. Cerrito Central's Late Postclassic inhabitants also appear to have had different ideas about spatial organization and representations of power through architectural forms. What remains of the Late Postclassic structure is incomplete and has been badly damaged by numerous colonial and modern processes. Despite this damage, the size and alignment of the wall foundation running north to south appears to have been an exterior wall, and there is evidence for at least one internal wall, jutting west.

Late Postclassic rooms were significantly larger than rooms in previous structures (approximately 8 x 8 m), and the structure as a whole was situated slightly east of earlier features (though at the same orientation) (Figure 5.5). In fact, given the size of the rooms and the wall foundations, in association with artifacts (which were largely recovered in disturbed contexts), it is possible that this Late Postclassic structure was not used

exclusively as a residence, but possibly functioned as a *tecpan*, housing both government and ritual functions in addition to serving as a physical home for Xaltocan's leaders. Unfortunately the mixed and fragmented quality of archaeological remains from this period make it difficult to define the structure's function with much certainty.



Figure 5.5 Photograph Late Postclassic wall foundations at Cerrito Central

I argue that these drastic breaks in architectural style, again, are related to Xaltocan's new political position, and in particular the fact that leaders in charge of Xaltocan were likely of a different ethnicity (Mexica) than Xaltocan's original inhabitants (Otomí), and conceptualized their role in the community very differently. They functioned as wards of the Aztec Triple Alliance, rather than as independent leaders. Furthermore, given that Mexica strategies of imperialism and domination were perpetuated through harsh tribute demands and state-sanctioned violence (Berdan 1994; Smith and Berdan 1996), architecture linked to Xaltocan's new leaders was not necessarily intended to evoke feelings of unity or solidarity, but rather subjugation, and perhaps fear.

Over time, meanings associated with architecture were probably pliable, and shifted in response to new circumstances and new populations. However, certain aspects of the architecture associated with Cerrito Central persisted through time. These architectural characteristics, particularly relative monumentality and orientation, may suggest that at least some beliefs were deliberately maintained even as political regimes changed dramatically. The consistency in relative monumentality of structures at Cerrito Central probably reflects the fact that regardless of political structure, Xaltocan's leaders consistently inhabited Cerrito Central, and, at least through architectural scale, differentiated themselves from the wider community. Orientation on the other hand, probably mirrors a larger site plan that permeated the civic center of Xaltocan, and may

have reflected widely shared cosmological beliefs. These themes are explored in more detail below.

Continuities at Cerrito Central: Monumentality and Orientation

Monumentality

In terms of architecture, monumentality may be defined as something of great importance, made visible through greater extent, size, and unusually high quality, that is subjectively and necessarily measured in comparison to contemporaneous architecture in the surrounding region or community. In comparison to commoner houses, the Postclassic structures built atop Cerrito Central were unquestionably monumental. To date, nothing of this scale or quality has been recovered elsewhere at Xaltocan. The mound of Cerrito Central alone towers over the rest of Xaltocan, and from the top you can easily look over most of the town. Through time wall foundations and other architectural features were of significantly larger size or higher quality than contemporaneous structures. Houses dating to the Early and Middle Postclassic typically had adobe or clay wall foundations (Espejel 2005), but were not as robust as the clay foundations found at Cerrito Central, nor were they typically associated with large and high-quality plaster floors. None of the other structures excavated at Xaltocan were associated with large platforms, indicative of labor mobilization, as is seen in the Middle Postclassic phase at Cerrito Central. Perhaps the most glaring difference in scale, however, dates to the Late Postclassic. The meter-wide stone wall foundations found at Cerrito Central are not present anywhere else at Xaltocan, but do mimic structural

foundations elsewhere in the Basin of Mexico (Avila Lopez 2006; Elson 1999; Garcia et al. 1998). This is noteworthy, of course, because Xaltocan's Late Postclassic leaders were probably not native, and were probably more familiar with the large stone architecture found at the Tenochtitlan and other civic centers in the Basin of Mexico. It is also worth noting that, throughout the entire Postclassic period, fill associated with Cerrito Central contained significant quantities of stucco fragments (plain and red-painted), probably from walls and floors that were dismantled during the construction process.

The monumentality of the successively constructed buildings emphasizes the importance of the Cerrito Central as a symbolic place in the landscape. Persistence of monumentality over time indicates that Cerrito Central continued to hold great importance for the leaders of Xaltocan and the wider community as an emblem of local authority. As numerous political and social structures changed over time, the prominence of Cerrito Central endured. As architectural forms evolved and production activities changed, and even the roles of leaders in the local government were altered (as occurred in the Late Postclassic), Cerrito Central remained a locus of local leadership. The residences of leaders were more than just "homes," they materialized "part of a strategy for negotiating and contesting sociosacred relationships and defining identities and categories of persons in the process" (Gillespie 2008: 132). Thus, the residences of Xaltocan's leaders along with other structures that probably once stood in the site's center, including administrative buildings and religious temples, were loci of social reproduction. These structures in concert with the activities associated with them were

part of the process that created high status structures at Xaltocan and imbued them with historical and cosmological meanings.

Orientation

Across Mesoamerican communities, the strategic organization of space is well documented archaeologically. In many cases, buildings, towns, and centers were oriented to mirror ideological landscapes and through this process Mesoamerican centers became physical manifestations of the cosmological order, allowing rulers to build their structures in symbolically significant locations. Thus, constructed landscapes represented the negotiation of personal and group identity within a referential framework structured by cosmological and social principles. Consequently, the continuities and breaks in spatial patterns might have important implications about social, political or ideological transformations and stabilities.

Although modern buildings obscure the ancient landscape of Xaltocan, excavations did reveal certain patterns that persisted over the centuries of occupation at Cerrito Central. In particular, basic structural orientation at Cerrito Central endured for the entirety of the Postclassic (Figures 5.6, 5.7, 5.8). Although there is slight variation between building phases, structures were consistently oriented east of north (ranging between approximately 8° and 18° east of north). Nearby modern structures also roughly adhere to the same orientation patterns. The significance of a slightly east of north orientation in central Mexico has been explored by previous researchers (Aveni 1975; Aveni and Gibbs 1976) and may be related to the orientation of Teotihuacan—roughly 15° east of north—and almost certainly had astronomical significance.

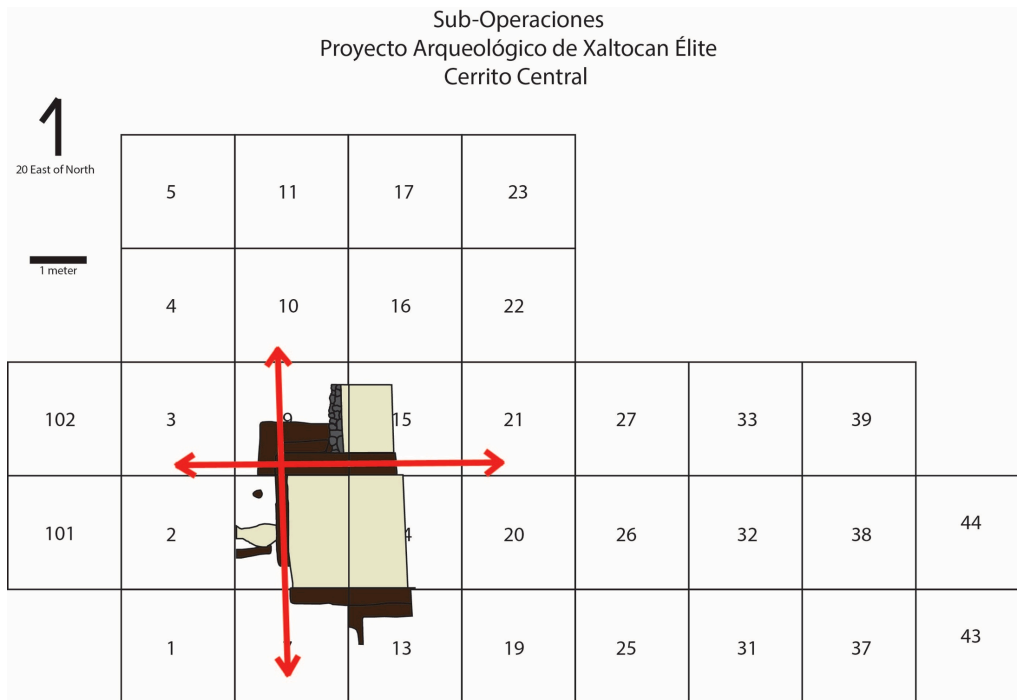


Figure 5.6. Plan Map of Early Postclassic structural remains at Cerrito Central and orientation

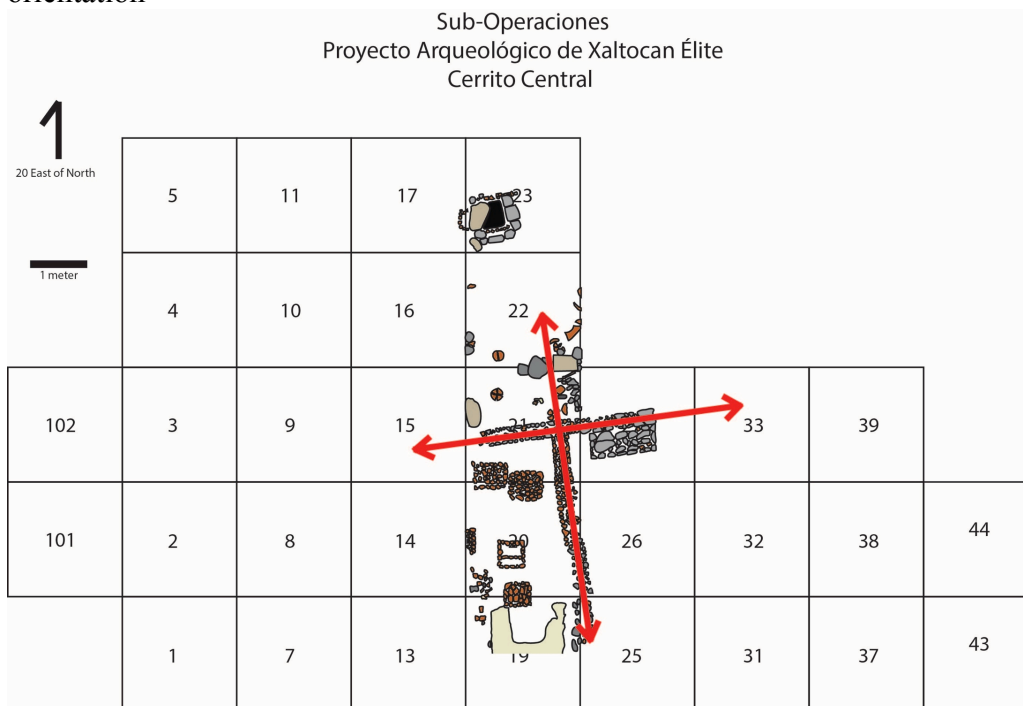


Figure 5.7. Plan Map of Middle Postclassic structural remains at Cerrito Central and orientation

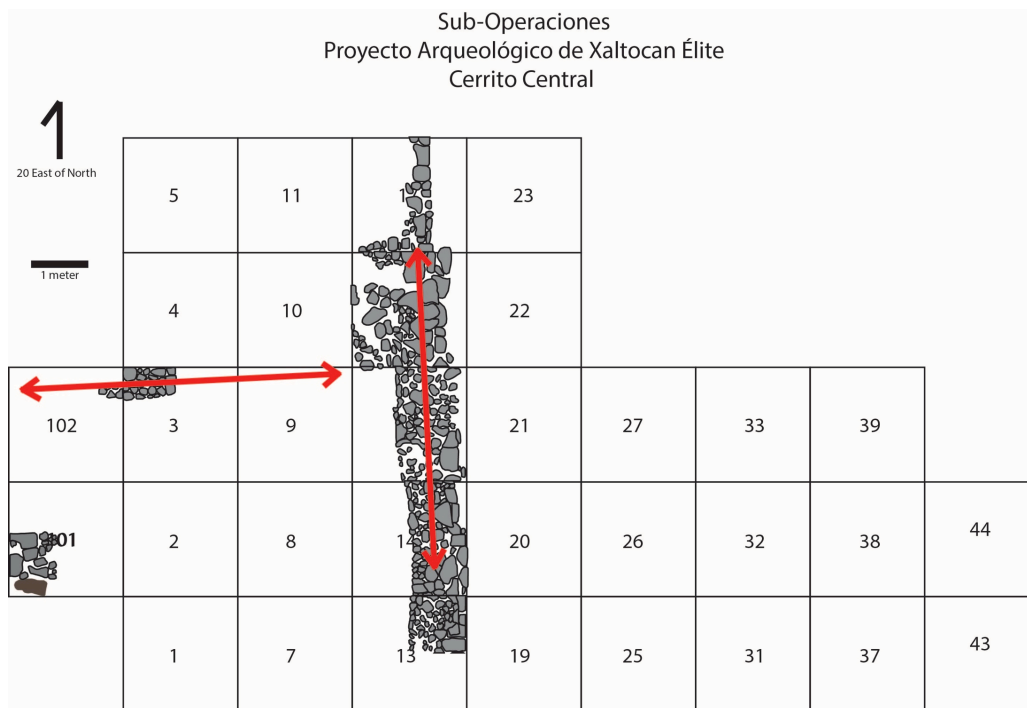


Figure 5.8. Plan Map of Late Postclassic structural remains at Cerrito Central and orientation

There is some evidence suggesting that other structures at Xaltocan, especially the buildings close to Xaltocan’s center, may have adhered to a similar orientation. A series of contiguous houses, occupied between the Early to Middle Postclassic and located on Mound 129 near the center of modern day Xaltocan (see Fig. 5.9 for approximate location), were similarly oriented just slightly east of north (De Lucia 2011: 210-217). The high quality of architecture and associated artifacts recovered at Mound 129 suggest that more affluent members of the community occupied the mound. Thus, adhering to orientation standards perpetuated by Xaltocan’s leaders might be expected. However, even more modest houses on the periphery of the site appear to have adhered to this orientation as well. Structure 124 dates to the Middle and Late Postclassic periods and was located along the eastern edge of the site (see also, Fig. 5.9), but was also oriented

slightly east of north (Overholtzer 2012: 214). Although structure 124 was clearly constructed centuries after the founding of Xaltocan, its inhabitants followed the established site layout. The consistency in the orientation of structures throughout Xaltocan and over the course of many centuries suggests that despite dramatic political shifts, certain broad ideologies continued to be honored through time.

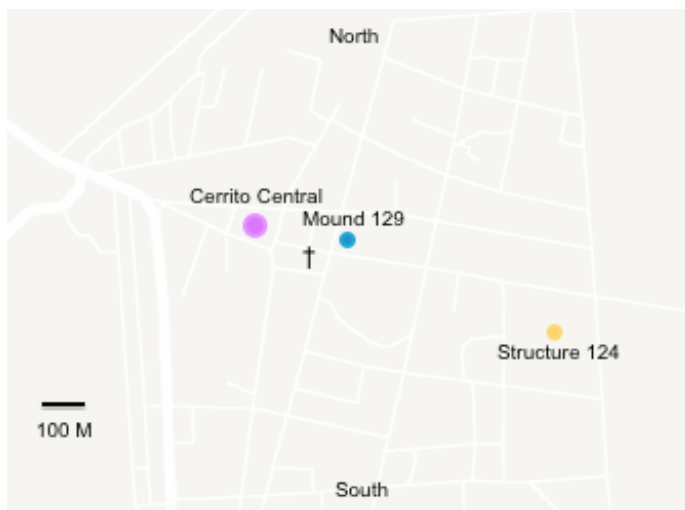


Figure 5.9 Map of modern Xaltocan with approximate locations of Cerrito Central, Mound 129 and Structure 124. Sixteenth-century church is marked with † denoting the modern town center.

The repetition of the same building orientation over time was not a passive act of remembering. Rebuilding new structures was an active job and even as certain social structures changed over time, rules of orientation were consistently followed, which speaks to the persistence of certain ideologies at Xaltocan even in the midst of shifting political regimes. These patterns of action “become involved in social life as loci of historical intentionality” (Parmentier 1987:12). As such, they become part of a kind of dialogue, both adhering to social and ideological guidelines, while simultaneously creating physical models that may be replicated by future generations.

Conclusions

Architectural analyses of the structures successively constructed on top of Cerrito Central provide important insights into the relationships between Xaltocan's leaders and members of the local community. The location, design, scale, and composition of these structures demonstrate numerous points of similarity and divergence, which might be indicative of social or political organization. Specifically, the large scale and high quality of Cerrito Central's structures differentiated them from houses found elsewhere at the site, indicating that Xaltocan's leaders did distinguish themselves from the community at large. On the other hand, the Middle Postclassic adobe platform made use of a common and widely used construction material, which may have been a gesture of unity. The marriage of these contrasting elements suggests that Xaltocan's leaders used built places to reflect authority but also shared local values.

Throughout the entirety of the Postclassic period Cerrito Central was an important place. Even as the form, scale, and design of the structures atop it changed to reflect new leadership or political ideals. Although the nature or means of obtaining authority at Xaltocan remains unclear, archaeological evidence indicates that Xaltocan's leadership consistently occupied this socially significant locale. As dramatic shifts in local and regional political organization occurred, Cerrito Central may have actually been used as a tool to establish the legitimacy of emerging leaders. As new leaders came to inhabit Cerrito Central, the symbolic significance of the place might have bolstered their claim to power. It served as their literal seat of authority and was already integrated into extant socio-spatial and possibly ideological frameworks.

CHAPTER 6

RITUAL PRACTICE AT MIDDLE POSTCLASSIC CERRITO CENTRAL

This chapter examines ritual practice within and around Cerrito Central during the Middle Postclassic occupation. During this time, ritual practice appears to have been concentrated in a single part of the house – and primarily a single room that was probably dedicated exclusively to domestic ritual. The features and artifacts recovered in this room, including the walls that retained the ceremonial space, were very distinctive in form and material and were probably linked to practices and symbols that were known only by Xaltocan’s leaders. Over time, Xaltocan’s leaders appear to have relocated these rituals into a more public outdoor space, culminating in a New Fire ceremony. This chapter provides a detailed account of the archaeological findings associated with these ritual practices and offers interpretations of what these rituals, both private and public, reveal about social dynamics and identity.

Private domestic practices are useful as foci of archaeological analyses because they provide insight into the private lives of their practitioners. At Xaltocan, personally meaningful practices, that were not intended to direct public opinion or project a public image, help demonstrate how leaders and other household members identified themselves. Although these domestic rituals were clearly concealed from the public, they were likely shared among family members and were probably useful tools for imparting socially meaningful practices to children. Patricia Plunket (2002:1) aptly notes that domestic rituals are fundamental sources for social identity because they “contain

evidence of lineage ideology and liminal space where household members create and express relationships”. Thus, private domestic ritual serves as a useful lens through which to explore in greater detail the private identity-making practices of not only the leaders themselves, but also their family members and other cohabitants.

Public ritual practice, and in particular a probable New Fire ceremony that took place near the end of the thirteenth century, will also be explored in some detail in this chapter. This public ritual appears to mark a significant shift in how Xaltocan’s leaders envisioned their role within the community and may have broader social implications given that this ceremony took place at a time when political tensions were mounting within the region. Much different from private rituals, which were used to instill and replicate personal and familial identities or traditions, public rituals were useful for promoting solidarity at the community level and projecting the power and legitimacy of the principal practitioners, presumably Xaltocan’s political or religious leaders. The similarities and differences between private and public rituals elucidate the negotiation of identity and power that took place between the leaders of Xaltocan and the wider community.

Ritual in Postclassic Central Mexico

Although archaeological remains evidencing ritual practice have been recovered throughout central Mexico, including at sites like Xaltocan established well before the formation of the Aztec Triple Alliance, central Mexican ritual is still essentially interpreted through the lens of Mexica ideologies and practices. This is largely attributed

to the fact that a disproportionate amount of research has focused on Mexica culture and religion, ignoring the beliefs and practices that existed prior to the formation of the empire (A.D. 1428-1521). Beyond archaeological research, one of the richest sources for information about central Mexican ritual comes from ethnohistoric texts and painted manuscripts. However, these documents were produced during the colonial period and probably reflect European biases and preconceptions (Hassig 2001: 165). Archaeological research at houses and government buildings of regional leaders, particularly during the pre-imperial Postclassic, provide insights into how public and private rituals functioned to perpetuated cosmologies not yet influenced by the Aztec empire. Comparative analyses of these practices may help elucidate fundamental differences in political and social structure at these early polities.

Aztec empire ideology and ritual often focused on sacrifice and warfare, and probably served as a form of political propaganda aimed at legitimizing widespread conquest and violence (Hassig 2001; Umberger 1996). Mexica leaders used fear to legitimize their power and which also helped to ensure interdependence among commoners and leaders (Hicks 1996). In particular, New Fire ceremonies were well-documented bloody affairs, often involving removal of the sacrificial victim's heart. There has been some evidence of warfare and sacrifice in the area surrounding Xaltocan before the emergence of the Aztec empire. Most notably a large deposit of decapitated skulls was recovered in the *chinampa* land surrounding Xaltocan (McClung de Tapia et al. 2012), but this deposit dates to the Epiclassic (A.D. 700-900), well before the formation of Xaltocan. After the founding of Xaltocan, very little material evidence for

violence or sacrifice is found, and in general, public rituals in pre-imperial central Mexico (even New Fire ceremonies) do not appear to have been associated with significant human sacrifice (De Lucia 2014; Elson and Smith 2001; Smith 2002).

Investigations of pre-imperial commoner households suggest that in the domestic setting, ritual “served as a medium of social negotiation among household and community members and worked to foster solidarity, social continuity and collective memory among commoners” (De Lucia 2014: 380). Thus, commoner household rituals were concerned with safeguarding the household and maintaining cosmological balance (also see Brumfiel 2004, 2007; from De Lucia 2014). Arguably then, rather than perpetuating state-sanctioned religious ideals, domestic rituals at Xaltocan seem to be concerned with reverence in return for wellbeing. I argue that Xaltocan’s leaders used ritual to similar ends. Archaeological evidence indicates that Xaltocan’s leaders practiced secretive rituals that did not mirror those found elsewhere in the community. These practices may have also been aimed at protecting the household and possibly at maintaining their status within the community. Public rituals were also used by Xaltocan’s leaders, though they appear to be aimed at social solidarity and local unity, rather than asserting dominance through fear. Examining, in detail, the physical and symbolic implements associated with these rituals, and juxtaposing private practices with public practices, enables a clearer understanding of how Xaltocan and other pre-imperial polities may have used ritual to shape their identity and create solidarity rather than to assert dominance.

Private Ritual Practice at Cerrito Central

While the presence of large, looming, and labor-intensive architecture certainly sent a public message that was integral to the socio-political and physical landscape of Xaltocan, not all commemorative practices, even those controlled and perpetuated by the most powerful members of society, were intended for the public. Some activities reflected more narrow histories that belonged to households exclusively, and perhaps lasted for only a very brief period of time. These cloistered practices, which reflected the distinctive ideologies and traditions of their practitioners, were part of a greater “narrative of inclusions and exclusions” (Chapman 2000), and may have been important in the process of self-definition.

Evidence for such private ritual was found among the Middle Postclassic structural remains at Cerrito Central. Architectural features associated with these private rituals included a series of wall foundations, measuring a uniform 30 cm in width and composed of mostly small stones (approximately 15 cm in diameter). These foundations were visibly well built, but were incomplete and damaged in many areas due to intrusive pits and subsequent building programs. One area where wall foundations remained fairly intact revealed a portion of a moderate-sized (estimated to have been approximately 3x4 m) room, nicknamed the “Altar Room” (Figure 6.1).

The foundations surrounding this room were particularly intriguing because they were partially lined along the top with ceramic fragments (Figure 6.2). This construction technique is unique and has not been found in association with archaeological remains elsewhere in the Basin of Mexico. Although the tops of the wall foundations mimic the

appearance of mosaic floors, they probably did not serve an aesthetic purpose in the past. They would have probably been completely hidden from view under adobe brick and daub mortar walls that were characteristic of Middle Postclassic construction at Xaltocan (Espejel 2005).

Although they were probably not readily visible, it is possible that these ceramic fragments served some practical purpose. For example, in conjunction with a thin layer of sand, these ceramic fragments may have served as an effective barrier to moisture from standing water at the base of walls. Were it not for this barrier it is possible that rainwater would wick up the side of the wall, slowly damaging the adobe bricks above. There is evidence of layering of clay and sand in Middle Postclassic house walls elsewhere at Xaltocan (Espejel 2005: 259), and this construction technique may follow similar principles. However, it begs the question, if use of ceramic fragments was a practical choice then why don't we see this building technique elsewhere at Xaltocan or in the Basin of Mexico?

Ceramic fragments would have been readily available to everyone at Xaltocan regardless of socio-economic status and are found in middens associated with even the most humble of houses. Yet nowhere else, neither at Xaltocan nor anywhere else in the Basin of Mexico, seems to have made use of this technique. It seems unlikely that if this were a practical construction technique that it was discovered and exclusively employed by Xaltocan's Middle Postclassic leaders.

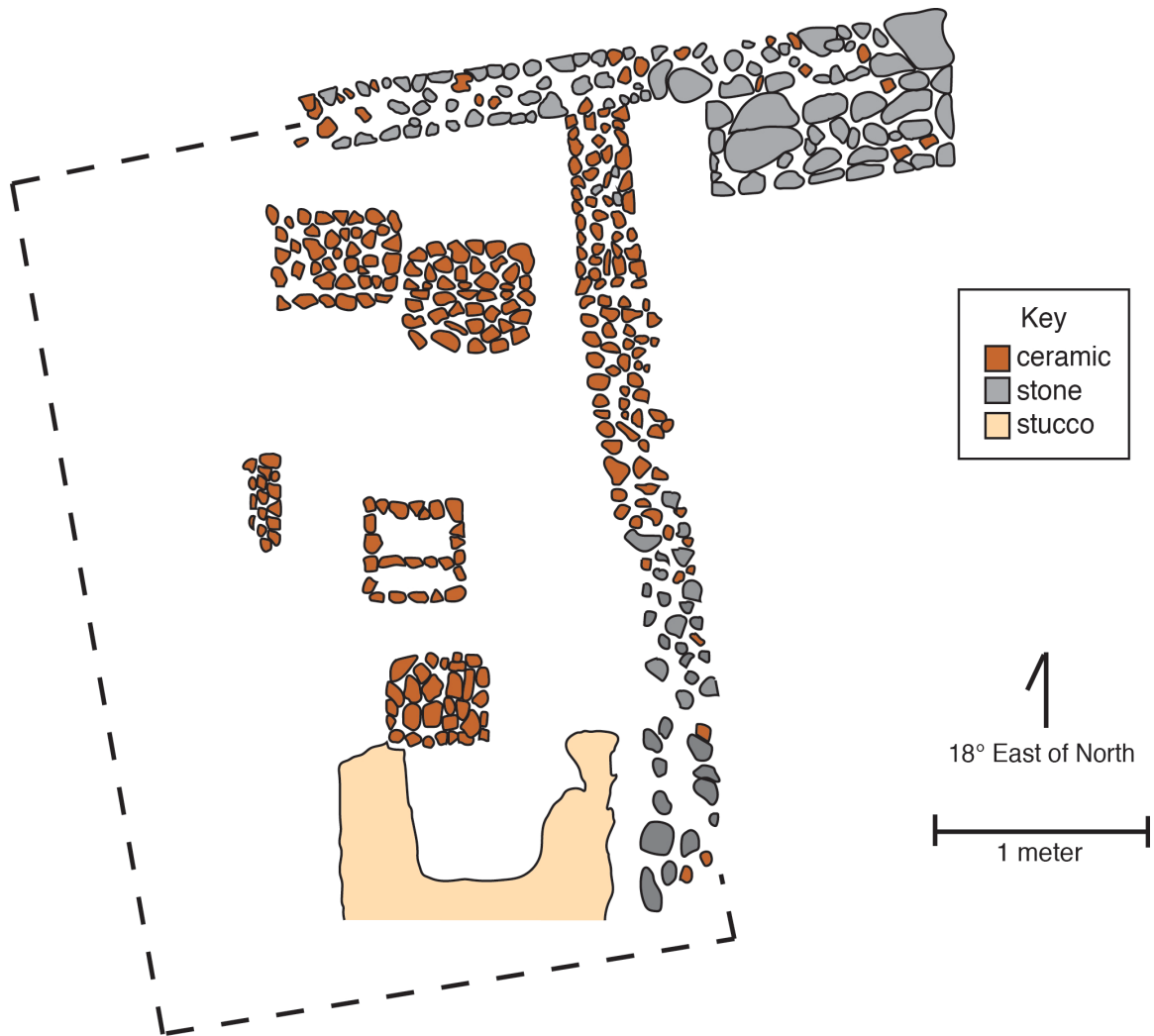


Figure 6.1. Plan view of the room containing altar surfaces



Figure 6.2. Ceramic-lining of wall foundation.

I believe that a more plausible explanation is that when deliberately arranged these ceramic fragments held symbolic significance. Traditionally, ceramic fragments or *tapahcatl*, are culturally grouped with a more broad Nahuatl term: *tlazolli*. *Tlazolli* refers to something used up, out of order or that has lost its original structure. Such items might include “bodily secretions, bits of hair, dust, and ceramic [fragments]”.

(Burkhart 1989: 87–88). Although *tlazolli* is typically interpreted as filth, trash, or impurity, it is not an intrinsically tainted category and only becomes that way when excessive or out of order (Burkhart 1989: 89; Hamann 2008; Hutson and Stanton 2007: 137). In fact, it has been argued that when properly harnessed *tlazolli* could also be a source of great power (cf. Klein 1993), and could be actively manipulated by central

Mexicans to have "positive functions in establishing desired ritual states" (Burkhart 1989: 97). Therefore, the act of neatly reusing and reordering ceramic fragments, otherwise understood to be useless or used up, potentially symbolically reenergizes them and instills the spaces they enclose with a cosmic significance (see also, Hutson and Stanton 2007). Based on this interpretation, I argue that the Middle Postclassic inhabitants of Cerrito Central may have incorporated these ceramic fragments into their wall foundations in order to outline a powerful space for ritual practice.



Figure 6.3. Altar surface built onto plaster floor.

Additional evidence hinting at the ritual significance of this space is found in the interior of the room. Once again, the reordering of ceramic fragments was used to define ritual space, this time in the form of low-lying, square-shaped features—which I refer to as altar surfaces (justified below). Composed of ceramic fragments and measuring approximately 50 cm along each edge, these altar surfaces were constructed directly on top of compacted soil floors. In at least one case an altar was built into a plaster floor (Figure 6.3). Similar to the wall foundations, the ceramic fragments used to create these surfaces were primarily broken pieces of common cooking jars, but through the reordering process they were inscribed with symbolic importance, harnessing the power of *tlazolli*.

In total, there were six altar surfaces, five of which were contained within the Altar Room. None of the altar surfaces were contemporaneous, however they do appear to have been constructed within rapid succession of one another, probably corresponding to floor resurfacing events. It is also noteworthy that new altar surfaces were not built directly above old altar surfaces. Instead as floors were resurfaced, the location of the altar surfaces within the room was adjusted slightly. Many of the altar surfaces contained ash, suggesting that one or many burning events occurred there. This hypothesis is strengthened by the fact that numerous censer fragments were recovered in the Middle Postclassic context (Figure 6.4). Censers were frequently used in domestic rituals throughout Mesoamerica, especially for the burning of copal incense, which attracted the attention of the gods (Olivier 2002; Carballo 2007, 2009). The vast majority of censer fragments found at Cerrito Central were long-handled with shallow bowls, sometimes

containing small circular details around the rim, referred to as the “Texcoco molded/filleted” type, and other times with red details on the bottom or along the rim (Figure 6.5). The ends of many of the handles were molded into serpent heads (Figure 6.6), which was widespread in the Basin of Mexico and is depicted in the Codex Magliabechiano (Figure 6.7). Long-handled censers are found in great abundance in central Mexico (Charlton et al. 1991; Parsons 1966; Séjourné 1983; Smith 2002), but were probably produced locally in neighbouring communities. Evidence for their manufacture, in the form of punctate molds, has been found in large quantities at nearby Otumba, for example (Charlton et al. 1991). Regardless of how these censers were obtained, they were certainly used by Xaltocan’s leaders during domestic rituals.



Figure 6.4. Censer found in Middle Postclassic context at Xaltocan



Figure 6.5. Photograph of reconstructed censer bowl with red-painted bottom.



Figure 6.6. Photograph of serpent-handle censer fragment.



Figure 6.7. Image from the Codex Magliabechiano of serpent-handled censers. (1983: Folio 87)

Domestic ritual has a long history in the Basin of Mexico and throughout Mesoamerica. In central Mexico altars varied widely in form and style. At Xaltocan altars made of square-cut stones (De Lucia 2011, 2014) and flat clay surfaces covered in plaster (Brumfiel 2010) have been recovered. Altars that have been recovered from commoner contexts at Xaltocan were primarily found in large, open patios shared by multiple households. Based on their location, these altars were probably associated with inclusive rites that welcomed the participation or observation of entire families and possibly non-kin as well. Domestic rituals were performed to ensure the wellbeing of household

members and to perpetuate the cosmic equilibrium (De Lucia 2014: 380; see also, Brumfiel 2004, 2007). While not public *per se*, these rites were witnessed and experienced by many. As communal practices they probably served to unite practitioners and maintain household and community-wide traditions for generations.

In stark contrast to these communal altars, ceremonial features found at Cerrito Central were comparatively private. The majority of the ceramic-lined altar surfaces were contained in the Altar Room that probably only allowed for a small group of people (6-10) to congregate at any given time. Walls surrounding the space would have made it impossible for outsiders or onlookers to observe the secret rituals. The private nature of these activities may explain why this altar form is unique and does not appear to have permeated stylistically through the community. It is possible that the burning rituals associated with these altar surfaces were similar in motivation and practice to those performed in commoner contexts, but given the isolated nature and distinctive style of these altar surfaces, I argue that they were probably linked to more specialized rites, specific to Xaltocan's leaders and perhaps concerned with well-being of their household and in maintaining their political station.

A Shift to Public Ritual

The sixth ceramic-lined altar marked a dramatic shift in ritual space at Cerrito Central. It was constructed north of the Altar Room in an outdoor space that may have been a patio. As outlined earlier, this is more similar in location to the majority of commoner altars that were also typically placed in outdoor patios. The reason for this

shift is unclear, but may reflect a demand for more inclusive ritual by the household members or the community. It is unclear how public this space was, and if it was accessible to a large congregation of community members, or if only a small huddled group of 30-40 individuals could observe the rites. Either way, this shift toward more public displays might also reflect a changing socio-political climate and new pressures.

Sometime after the construction of the sixth altar, a high-quality hearth (*tlequil*) was built directly on top of it, overlapping it slightly (Figure 6.8). The hearth was composed of aligned stones and adobe bricks, and like the altar surfaces and wall foundations that preceded it, was lined along the northern and southern edges with ceramic fragments. This detail may reference a symbolic link between the hearth and the altar surfaces, marking it as sacred ritual space in the same vein as the altar surfaces. The hearth's location, in an area that might have been a central patio, is noteworthy. Hearths are more commonly found in covered (or partially covered) cooking areas, protected from rain and wind. This more public location may indicate that the hearth was utilized for ritual purposes. Further evidence of the hearth's ritual significance is its close proximity to a large ritual deposit to the south (Figure 6.9).



Figure 6.8. Remnants of ritual surface to the East, overlapped by ritual hearth.

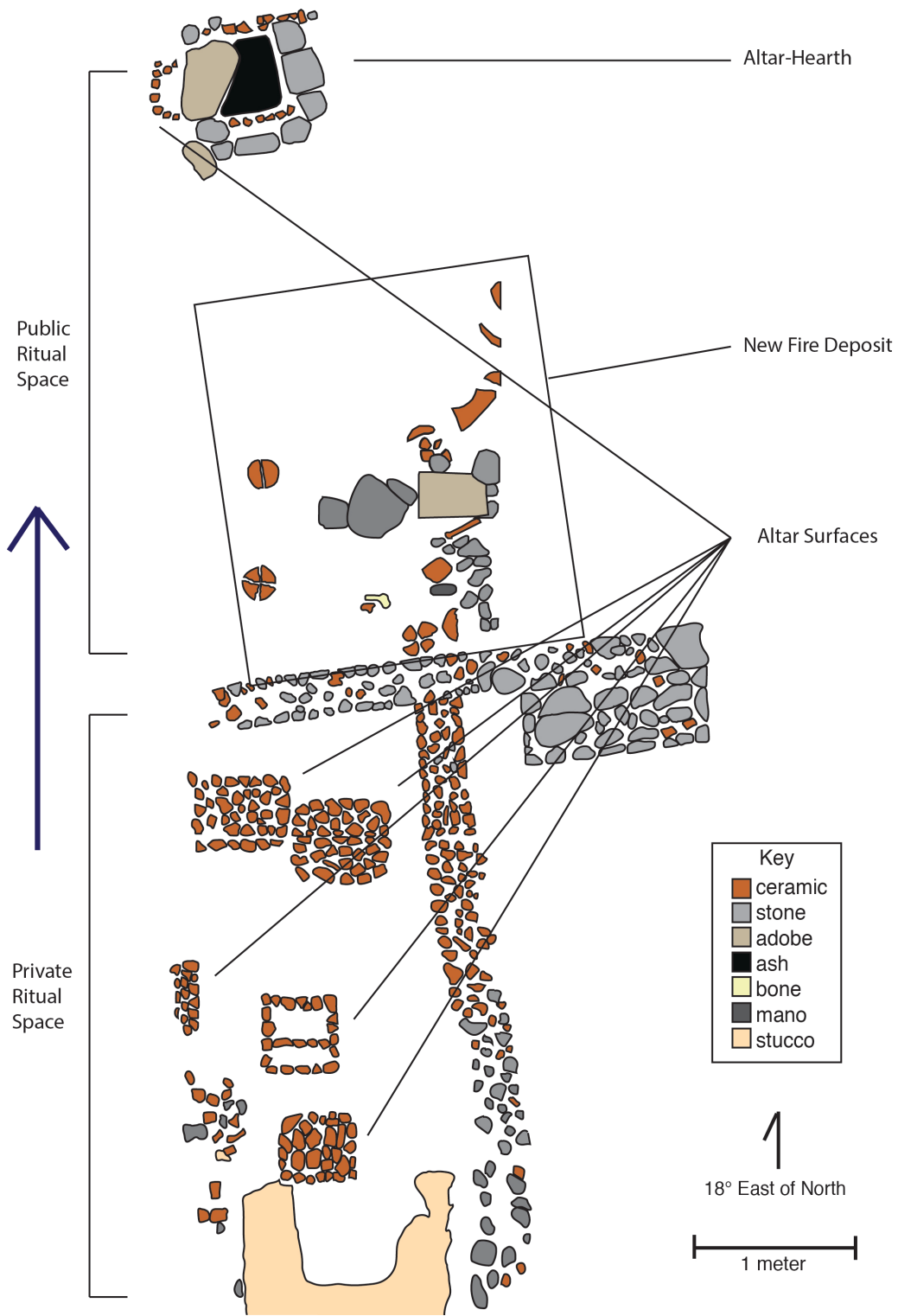


Figure 6.9. Map of altar surfaces indicating shift of ritual center

The deposit was located along the outer northern edge of the altar room and just south of the hearth (refer to Figure 6.9). It contained a comparatively high number of decorated pottery fragments, many of which can be reconstructed, suggesting that they were complete at the time of deposition and possibly broken as part of the ritual. Among the deposited objects were two complete Aztec II type Black-on-Orange plates, a Black-and-White-on-Red cup (*copa*), a grinding stone, a broken bone rasp (*omichicahuatzli*), a partial figurine, a broken censer with serpent handle, and a number of broken but large pieces of jars and decorated grinding bowls (*molcajetes*) (Figure 6.10 and 6.11). Multiple large stones were mixed in with the deposit and might have served to cap and mark the offering as a way to memorialize the event. This deposit also contained a high percentage of Black-on-Orange pottery, which both Brumfiel (2007, 2011) and De Lucia (2014) have linked to solar cycles and the divinatory 260-day calendar (*tonalpohualli*), which supports the interpretation that this deposit was produced during a New Fire ceremony.

The New Fire ceremony was a rite of renewal and regeneration conducted every 52 years when the 365-day solar calendar and the 260-day divinatory calendar simultaneously reached completion. Historical accounts tell us that as part of the ceremony fires were put out everywhere, hearths were destroyed and houses were completely cleaned out. An image from the Codex Tudela (1980, folio 83v) indicates that household items including cooking pots were broken and thrown away during the New Fire ceremony. Following the ritual destruction a New Fire was kindled, which may have been shared by the entire community. The Codex Borbonicus (1974: 32) illustrates a

procession of priests lighting torches in the New Fire (Figure 6.12), presumably to carry them back to their respective sanctuaries (Anders et al. 1991: 224).



Figure 6.10. Ritual deposit

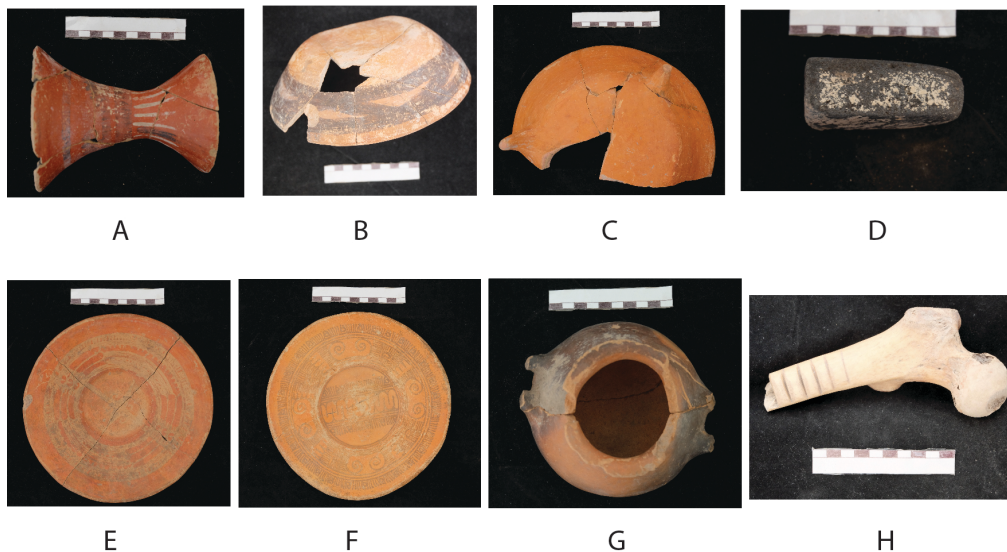


Figure 6.11. Photograph of objects from ritual deposit. (A. Black-and-White-on-Red type *copa*, B. Black-and-White-on-Red bowl, C. Aztec II *molcajete*, view from bottom, D. grinding stone with remnants of white plaster, E. Aztec II Black-on-Orange plate, F. Aztec II Black-on-Orange plate, G. *ollita* (small cooking pot), H. bone rasp from human femur, *omichicahuatzli*)

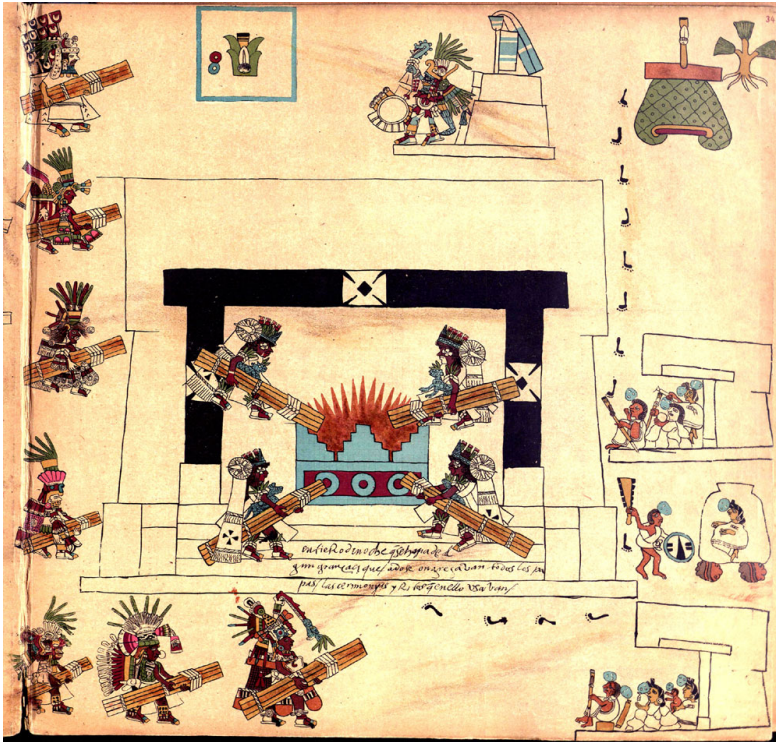


Figure 6.12. New Fire ceremony depicted in the Codex Borbonicus (1974: 32)

I argue that the inhabitants of Cerrito Central may have kindled their New Fire in the ritual hearth. In this way, the hearth functioned dually as an altar and as a container for the New Fire, encompassing both the ritual and practical requirements for a New Fire ceremony. Although ethnohistoric accounts refer to a sacrificial victim in association with the New Fire, other New Fire deposits, both at Xaltocan (De Lucia 2014) and elsewhere in the Basin of Mexico (Elson and Smith 2001) did not contain evidence for human or animal sacrifice, and this may have been a practice that became more widespread during the Late Postclassic corresponding to the expansion of the Aztec empire. It is reasonable to suggest that the hearth, which combines a form that is inherently linked to fire with ritually symbolic elements found on altar surfaces at Cerrito Central, would have been the ideal location for such a rite. A radiocarbon date taken from

the hearth yielded a 2-sigma calibrated date range of A.D. 1264-1388 (radiocarbon measurements determined by University of Arizona Accelerator Mass Spectrometry Laboratory). However, if we consider the Aztec II period (A.D. 1240-1350) artifacts associated with the hearth, perhaps the date range can be slightly narrowed to A.D. 1264-1350. Within this date range, if the hearth and deposit were associated with a “New Fire” ceremony, then they might correspond to the 52-year cycle ending in A.D. 1298 (Hassig 2001: 40).

Conclusions

Middle Postclassic architectural and artifact remains suggest that Xaltocan’s leaders participated in exclusionary, domestic rituals. The Altar Room and altar surfaces associated with these practices differed markedly from those found elsewhere in the community. The small room contained walls on all four sides, limiting access and visibility. Whereas domestic rituals at commoners’ houses at Xaltocan appear to have largely practiced rituals in shared, outdoor spaces, such as patios, these rituals were not wholly public, but were not secretive, and were probably linked to widespread beliefs that were common throughout the community. Although some variation exists, and individual households may have had slightly different traditions, ritual practices were probably fairly uniform across the community – excepting, of course, Cerrito Central.

While incomplete archaeological remains make it impossible to conclude that the inhabitants of Cerrito Central lacked other ritual spaces, perhaps more akin to those found at commoner houses, the existence of private ritual space does indicate that some rituals

were especially secretive. The exact practice and meaning of these rituals may have only been known to a select few, as the Altar Room was only accessible to a very small group at any given time. Esoteric, private rituals might plausibly have been linked to the inauguration rites of leaders, penitential rites petitioning good favor (Smith 2002: 96), or possibly reverential rites celebrating the same events as commoners.

Beyond being especially private, the Altar Room was also distinctive because of the consistent use of ceramic fragments to outline ritual spaces. Ceramic sherds were used both in the wall foundations surrounding the Altar Room and on the altar surfaces themselves. Barring some unknown practical purpose, the ceramic fragments probably held symbolic significance, and I argue that they might reflect an attempt to harness the power of *tlazolli*. This practice does not appear to have spread throughout the community, suggesting that the tradition was uniquely known and utilized by Xaltocan's leaders. The associated symbolism may not have been socially meaningful at the community level.

Although many things were distinctive about these ritual spaces, ritual implements were similar to those found in other contexts. Specifically long-handled censers indicative of burning practices were found in abundance at Cerrito Central. These censers are associated with ritual practice throughout the Basin of Mexico, and use of censers for burning rites appears to have been very common at Xaltocan (De Lucia 2014). Thus, although Xaltocan's leaders living at Cerrito Central appear to have distinguished themselves and their rituals in some ways, they still invoked the attention of the gods through the same means as everyone else in the community.

Finally, I would like to briefly address the physical shift that took place on Cerrito Central in preparation for, what I argue, was a public (or semi-public) New Fire ceremony. Relocating the ritual focus to the north and outside of the Altar Room may reflect a shifting socio-political climate and new demands being placed on Xaltocan leaders. We know from written histories that the Middle Postclassic was a politically tumultuous period throughout the Basin of Mexico, and social solidarity at the local level would have been absolutely essential to maintaining autonomy and any degree of power as the region became increasingly hostile. This move to publicize ritual practice might have served to create new, shared memories and to reignite feelings of community identity, much like the earlier reconstruction project may have done.

In conclusion, the unique ritual practices at Cerrito Central reflect the ways in which Xaltocan's leaders did subtly, even secretly, distinguish themselves from the larger community. The private rituals outlined in this chapter may have been especially significant in the process of identity formation. It is possible that these unique implements and their associated practices reflect attempts made by the leaders at Xaltocan to petition the gods for protection, both of status and safety, as political conflict escalated. The shift to public ritual, and specifically a New Fire ceremony, indicates that Xaltocan's leaders also became involved in rituals that concerned the entire community and that reflected widely shared ideologies, extending across the entire Basin of Mexico. Combined, archaeological data suggests strongly that Xaltocan's leaders were strategic in their use of ritual both in private and public contexts.

CHAPTER 7

REVISITING THE WRITTEN AND UNWRITTEN HISTORIES OF XALTOCAN

Archaeological excavations at Cerrito Central have provided new data relevant to understanding the lives of Xaltocan's Postclassic leaders. Chapters 4, 5, and 6 of this dissertation have presented some interpretations of the social and political dynamics that structured and were structured by their practices over time. In some cases, these new data and interpretations have contradicted or added nuance to previous suppositions about Xaltocan's leaders. As stated in Chapter 3, written accounts of Prehispanic central Mexico have long provided important context for archaeologists working in the Basin of Mexico. The majority of these documents were written during the sixteenth and seventeenth centuries, following the Spanish conquest, and chronicled a wide variety of topics including everyday life practices, dynastic lineages, political histories, religious beliefs and ritual activities. Most attention was typically given to the events and the political, social, and religious conventions that were prevalent in the century leading up to the arrival of the Spanish. This is partially attributable to recency bias but also to the fact that Aztec rulers took special measures to erase the historical records of other central Mexican groups, especially when they contradicted Mexica legends (Sahagún 1558-1585:VIII; Leon-Portilla 1963; Sahagún 1950-82, all discussed in greater detail in Chapter 3). Similar erasures also occurred after the arrival of the Spanish, and as Prehispanic histories were rewritten during the colonial period they were undoubtedly tinged by the European and Christian worldviews of their authors. Despite Aztec- and

Euro-centric biases, information from these documents has often been used as a framework for interpreting the archaeological remains of places and people that long predated the Aztec empire or the arrival of the Spanish.

This has certainly been the case for Xaltocan. Despite the fact that scholars have cautioned against the direct application of historical accounts to archaeological interpretations, ethnohistorical documents have provided much of the temporal framework for archaeologists working at Xaltocan. Brumfiel (1992) herself problematized the historical record, pointing out the tendency for authors to exaggerate the significance of their own group and to minimize the accomplishments of others. Even so, she found written texts were useful resources when conducting her research on the occupational history, spatial distribution and production and consumption patterns at Xaltocan (Brumfiel 1991a, 2005b). Thus, despite her acknowledgement of the problems implicit in using written histories to frame archaeological research, Brumfiel also recognized that ethnohistorical documents could serve as excellent starting points, particularly when there was little previous archaeological data to draw from. Such was certainly the case for when she began her research at Xaltocan in 1987 and ethnohistorical accounts provided valuable context that helped frame her earliest research questions and make sense of patterns in the archaeological record.

While the ethnohistorical record can sometimes be an effective tool for guiding and contextualizing archaeological research, one of the problems implicit with this methodology is that it creates a framework wherein historical narratives are (implicitly) considered true unless proven false. Thus, colonial period writing, with its clear biases

(many of which are outlined in Chapter 3), is privileged over the material record. The result of this inequity in value is that when archaeological materials align with ethnohistorical accounts they are considered corroborating or supporting evidence, providing greater credibility to the historical records that they seem to confirm. Implicitly, the corroboration of one aspect of the historical record, lends greater credibility to the historical record as a whole. For example, archaeological research at Xaltocan has revealed that during the early fifteenth-century *chinampa* farming was largely abandoned (Morehart 2010), household cloth production intensified (Brumfiel 1991b), and there was a general impoverishment of the population (Brumfiel 2005b, Chapter 4). All of these observed shifts in production and consumption patterns at Xaltocan have been attributed to the incorporation of Xaltocan into the Aztec empire, an event well documented in the ethnohistorical record. Consequently, the rest of the historical record, and particularly those details that are most closely intertwined with the narrative of Aztec incorporation, are initially and indirectly supported.

Sometimes history is effectively countered by material evidence. For instance, the historical assertion that Xaltocan was completely abandoned prior to becoming incorporated into the Aztec empire has not been supported archaeologically, and in fact there is evidence to the contrary (Chimonas 2005). However, because this aspect of Xaltocan's history is bound up with other histories that have been corroborated by archaeological research, the notion that Xaltocan was completely abandoned at the end of the fourteenth century continued to guide archaeological research at Xaltocan much longer than it should have or otherwise would have. Thus, when we frame archaeological

research using ethnohistorical accounts, there is an implicit bias toward corroborating or confirming them, as opposed to disproving them or drawing attention to areas of tension.

Recently, however, this privileging of the ethnohistorical record at Xaltocan has been called into question as one of the major tenets of Xaltocan's written history—the abandonment of the island at the end of the fourteenth-century—has been directly challenged. Referenced above, the veracity of this historical “fact” was initially called into question after surface survey (Chimonas 2005) at Xaltocan found evidence for only about a seven percent decrease in population between the fourteenth and fifteenth century. Still, this finding only “raised doubts” about Xaltocan's complete abandonment in the wake of conquest. Expanding on the work of Chimonas (2005), Overholtzer's (2012, 2013) excavations of a house occupied continuously between the Middle and Late Postclassic periods. Although Overholtzer's dataset was limited, it established at least that some Xaltocamecas remained at Xaltocan well after it fell to the Tepanecs and Cuauhtitlan. In light of Overholtzer's (2012, 2013) discovery, De Lucia and Overholtzer (2014) have suggested that perhaps only the elites of Xaltocan abandoned the site at the end of the fourteenth century. This hypothesis corresponds to the population decrease of seven percent, observed by Chimonas (2005), and is also supported by the archaeological evidence recovered by both De Lucia (2011) and Overholtzer (2012, 2013).

Overholtzer (2013) has elaborated on this particular incongruence between archaeological data and the ethnohistorical record, arguing that the longstanding narrative—that Xaltocan was completely abandoned in the late fourteenth century—may

be attributed to colonial authors actively rewriting Xaltocan's history during the sixteenth century.

[Colonial] authors were narrating commoner histories to advance their own elite agendas in the legal land grabs and power struggles of the early colonial period. The histories of the people who remained at Xaltocan and created continuity in the site's occupation were silenced in the historical record in favor of a version that highlighted site annihilation and reconstruction. (Overholtzer 2013:489).

Thus, Overholtzer suggests that the revision of Xaltocan's history was fueled by elites, from Xaltocan and elsewhere in the Basin of Mexico, motivated to construct a narrative that would benefit them the most during the sixteenth century.

Overholtzer's research has been especially important because it used archaeological data to call into questions the veracity of the documents that had been widely utilized to understand Xaltocan's Prehispanic past. While Overholtzer's argument does not discredit the entire corpus of historical data pertinent to Xaltocan, it compels archaeologists to critically examine areas of convergence and divergence among historical and archaeological records. In the spirit of such examinations, this chapter briefly revisits the dominant narrative of Xaltocan's Postclassic history, and in light of new archaeological materials, considers the specific components of Xaltocan's history that may have been misrepresented or misinterpreted.

While this chapter expands upon and adds new perspective to the work of Overholtzer (2013), it also diverges somewhat. While Overholtzer's analysis focused primarily on the ways in which erasures and subsequent rewritings of the past, both during the Aztec period and the colonial period, resulted in the silencing of commoner histories, I argue that these erasures also resulted in mischaracterizations of the nature of

leadership and social organization at Xaltocan. Using data from Cerrito Central, I argue that although the rewriting of the historical record may have disproportionately impacted the histories of commoners, the histories of Xaltocan's leaders were also erased or altered in ways that perpetuated Aztec-centric (and possibly Euro-centric) socio-political ideologies.

Problematizing Xaltocan's Historical Narrative

Within the historical narrative of Xaltocan, there are a few pieces of information that have been largely taken for granted by archaeologists, and have not been sufficiently explored using material evidence. These details of the ethnohistorical record are investigated more intensively in this chapter. First, this chapter explores the assertion that Xaltocan was a major regional capital with control over a large domain and *exacted tribute* from a large network of nearby villages. Second, this chapter addresses the numerous references to Xaltocan's 150-year-long "war" with the nearby polity Cuauhtitlan by exploring the different ways that central Mexicans defined and characterized warfare, and considering the types of archaeological materials that might be expected in association with prolonged violence. Third, and finally, this chapter considers the broad implication that Xaltocan's leaders were part of a pan-regional elite class that, among other things, provided political stability for local leaders.

Together, these three historical claims paint the picture of a ruling nobility, whose status was secure, and whose authority was probably backed by significant wealth in the form of accumulated goods acquired through taxation—including raw materials, prestige

goods, and labor. Ethnohistorical accounts also suggest that Xaltocan was at war with Cuauhtitlan for well over a century, and therefore Xaltocan's rulers must have been capable of marshaling a substantial military force. Finally, they indicate that as high-ranking members of a regional elite class, Xaltocan's leaders must have shared common practices and symbol systems with their elite peers in the Basin of Mexico. These practices presumably would have set them apart from commoners in such a way that would be apparent in the archaeological record. Using data collected from archaeological investigations conducted at Cerrito Central and elsewhere at Xaltocan, this chapter will examine and problematize each of the points outlined above, and offer alternative viewpoints.

Pre-Imperial Tax Exaction

The highly organized and hierarchical tax collection system that was employed by the Aztec Triple Alliance during the fifteenth and sixteen centuries has been the focus of numerous scholars over the decades (e.g. Barlow 1949; Berdan 1987; Berdan and Anawalt 1997; Brumfiel 1991a). Aztec taxation involved a wide network of administrators and stewards (*calpixque*) whose job it was to insure that tax quantities and qualities were being met (Calnek 1982; Hodge 1996). It is worth briefly noting that while Aztec taxes are often referred to as tribute in the literature, Smith (2014) has made compelling arguments for why the Aztec system for procuring goods from subsidiary provinces was a system of taxation as opposed to tribute collection. Among his many reasons, Smith cites the highly routinized schedule of payments—which were typically

made every eighty days, six months, or annually—to city-state heads and to the Triple Alliance directly. Tax items and quantities were predetermined by the state, and detailed tax quotas were recorded in the Prehispanic *Matricula de tributos* and later the Codex Mendoza. The Codex Mendoza indicates the wide variety of goods procured from different regions of the expansive Aztec empire, including foodstuffs (maize, beans, chia, amaranth, honey), cloth (which was by far the most common taxation demand), cacao, copper bells, deerskins, firewood, lime, seashells, and exotic goods, such as gold, turquoise, brightly colored feathers, and elaborate costumes. Tax rolls also included labor and services. Tlatelolco, for example, was responsible for the constant upkeep of the temple of Huitznahuac (Berdan and Anawalt 1997: 32), whereas the province of Tepeacac was responsible for obtaining war captives from the enemy territories of Tlaxcala, Cholula, and Huexotzinco (Berdan and Anawalt 1997: 98).

Material evidence for the kinds of tax payments outlined above has been recovered in various contexts, but particularly at the Aztec capital of Tenochtitlan. For example, at the main temple in Tenochtitlan, the Templo Mayor, archaeologists have recovered numerous deposits containing large accumulations of objects that were probably acquired through taxation. The contents of these deposits often included rare or difficult-to-acquire objects that sometimes came from the farthest reaches of the Aztec empire including richly colored feathers, greenstone beads, and exotic shells (López Luján 2005). Some of these objects are listed in the Codex Mendoza among the taxed objects acquired from different provinces, including the Xoconochco region in Southern Mexico nearly 500 km away (Berdan and Anawalt 1997: 116). Thus, deposits recovered

at the Templo Mayor provide archaeological evidence supporting the tax records observed in the Codex Mendoza. These stockpiles of rare objects, procured from distant lands, are testaments to the effectiveness and expansiveness of the Aztec tax system.

The success of the Aztec taxation system benefited greatly from taxation systems that were already in place well before the formation of the Triple Alliance. As the Aztec Triple Alliance rose to power and incorporated new lands from conquered polities, existing tax collection systems functioning at the city-state level were often left in place (Castañeda 1986; Guzmán 1960). This continuity is significant because it has allowed archaeologists and historians to make inferences about the nature of taxation and procurement among Basin of Mexico city-states prior to the rise of the Aztec empire. Although the assumption of consistency over the course of the Postclassic is problematic, and will be addressed below, if we accept that at least some of the methods of taxation observed under Aztec rule were also used by Basin of Mexico city-states prior to the formation of the Aztec empire, then we may begin to search for material manifestations of different taxation strategies.

Michael Smith (2014) has outlined eleven types of taxation used during the Aztec period, three of which were “imperial taxes” while the other eight were “city-state taxes”. City-state taxes, which were ostensibly administered by the city-states on behalf of the Aztec empire, included land tax, rent on royal estates, rotational labor, public works *corvée*, military *corvée*, market tax, military supply tax, and labor by youths. The extent to which these kinds of taxes were manifested at any one city-state is unclear, but given the diverse administrative techniques used by city-states, of which archaeologists are

increasingly aware, it is possible that any one city-state might have taken advantage of different combinations of the tax categories listed above, and did not necessary use all of them.

Although historical records suggest that Xaltocan was receiving taxes from subsidiary communities and tribute fields prior to the rise of the Aztec Triple Alliance (*Anales de Cuauhtitlan* 1992; Nazareo de Xaltocan 1940), the specific types and quantities of goods and services are unknown. Although in some instances Colonial tax rolls may offer clues about the nature of city-state taxation prior to the formation of the Aztec empire, the Codex Mendoza provides little guidance. Xaltocan is not listed among the standard tribute pages, and is referenced only on folio 17v along with ten other Lake Texcoco region towns. There are no specific details about the relationship of these towns to one another, nor any information about their taxes. Berdan and Anawalt have argued that these towns were probably not a part of a single province but represented a collection of “conveniently located centers from which could be drawn loyal subjects to provide extended personal service as tribute” (Berdan and Anawalt 1997: 31). The services provided by these cities may have been the provisioning of skilled manpower, especially at strategic outlying centers, since they are listed in the same section as garrison towns and military outposts. Given that Xaltocan’s pre-imperial leaders fled the island capital near the end of the fourteenth-century, and were replaced by state-appointed emissaries in the early fifteenth century, it is conceivable that on the eve of the Spanish conquest Xaltocan was among the Aztec empire’s most loyal centers. Unfortunately, this

revelation lends little aid in understanding the kinds of taxes Xaltocan may have been procuring from its substantial domain prior to the Aztec conquest.

With little information about Xaltocan in the Codex Mendoza, perhaps a suitable analog is the province of Acolhuacan, which included at least five of the towns that were part of Xaltocan's pre-imperial domain (Ecatepec, Temascalpan, Tizayuca, Tlalquilpan, and Tonanitla; see Table 1.1 and Fig. 1.1 for reference). Tax demands for the province of Acolhuacan included large quantities of cotton cloths known as *mantas* (to be paid twice a year), and elaborate costumes representing deities (paid annually). Agricultural demands on the province were similar to most other Basin of Mexico provinces and included a bin each of maize, amaranth, beans, and chia. These items were depicted on Codex Mendoza Folios 21r and 22r (Fig. 7.1, Table 7.1).

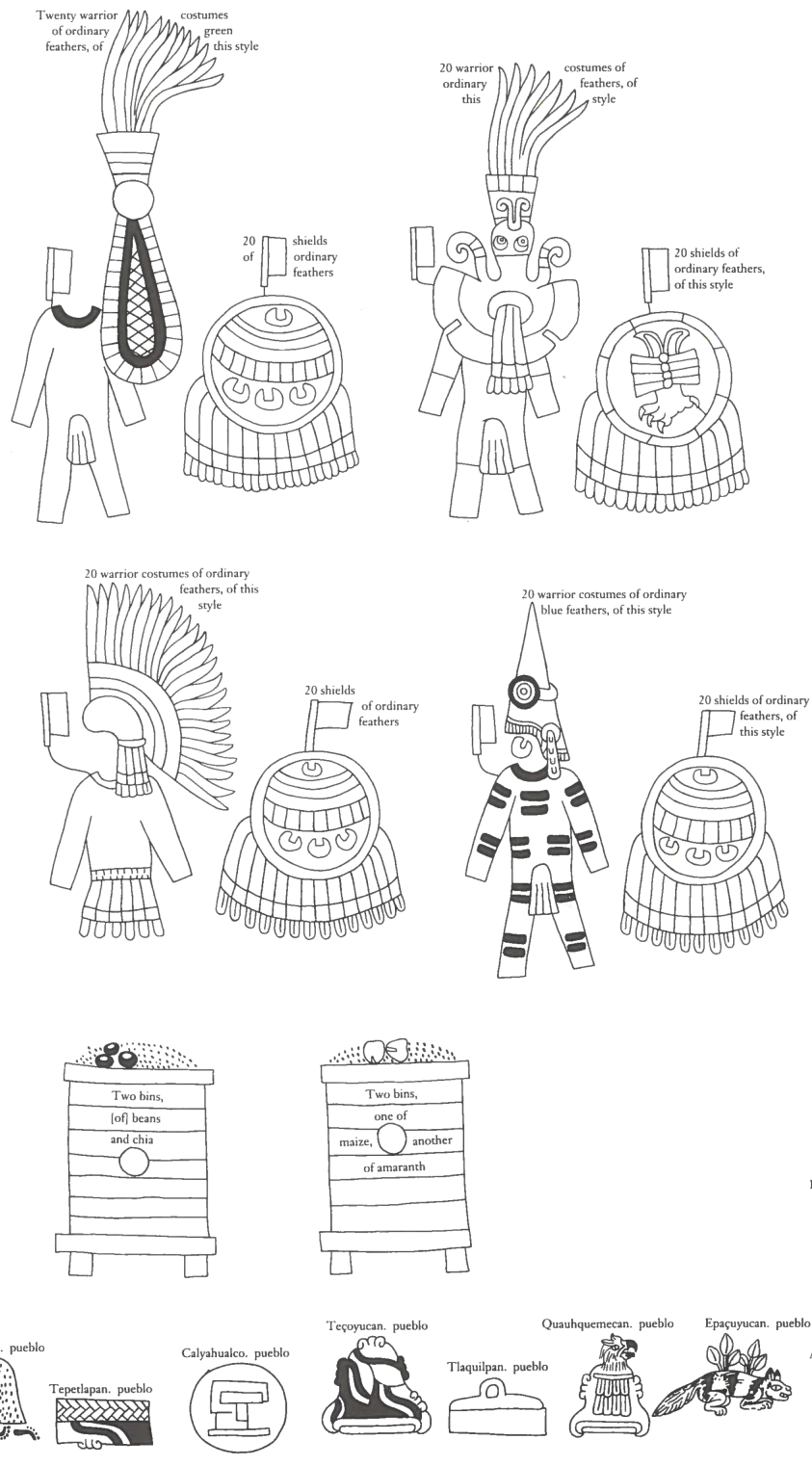


Figure 7.1. Codex Mendoza Folio 22r. Depicting the taxes paid by the province of Acolhuacan. (Berdan and Anawalt 1997:49)

Table 7.1. Tax requirements for the province of Acolhuacan. Adapted from Berdan and Anawalt (1997: 41).

Tax requirements for the province of Acolhuacan
Items given every six months:
400 red <i>mantas</i>
400 diagonally divided <i>mantas</i>
400 quilted <i>mantas</i>
2,000 large white <i>mantas</i>
400 women's tunics and skirts
400 multicolored loincloths
Items given annually:
1 yellow <i>Quaxolotl</i> warrior costume and shield
1 blue <i>Tzitzimiltl</i> warrior costume and shield
1 yellow <i>Ocelotl</i> warrior costume and shield
20 yellow coyote warrior costumes and shields
20 green <i>Xopilli</i> warrior costumes and shields
20 white and red <i>Papalotl</i> warrior costumes and shields
20 red warrior costumes with <i>Cuecalpatzactli</i> devices, and shields
20 blue <i>Cuexctecatl</i> warrior costumes and shields
1 bin of beans
1 bin of chia
1 bin of maize
1 bin of amaranth

While the information from the Codex Mendoza, and particularly the tax records from the province of Acolhuacan, provides some idea of the kinds of materials that Xaltocan's leaders might have been receiving during the pre-imperial period, the analogy is still only speculative. Thus, the material record may be a more reliable resource for determining the kinds of taxation systems used at pre-Aztec Xaltocan. If Xaltocan's leaders were receiving and amassing goods through taxes, then we might expect to find at least some archaeological evidence to support such actions. However, at Cerrito Central, there is no evidence for the kind of accumulation and concentration of goods that would clearly indicate that Xaltocan's leaders were receiving taxes from subsidiary communities. Artifacts discovered at Cerrito Central were primarily composed of commonplace objects that were probably locally produced or available at regional

markets, including plain utilitarian objects and some decorated vessels. These objects were recovered at similar rates at Cerrito Central as elsewhere at Xaltocan (see Chapter 4) indicating that Xaltocan's leaders did not have significantly larger accumulations of these goods than commoners. Even ritual deposits at Cerrito Central contained the same kinds of objects—censers, figurines, decorated vessels, and bone rasps—that were recovered in other ritual deposits at Xaltocan (see De Lucia 2014).

Of course, the lack of evidence for an accumulation of objects at Cerrito Central does not disprove the assumption that taxes were paid to Xaltocan's leaders, but considering alternative methods of taxation (see Smith 2014 described above), it might suggest that taxes were not primarily paid in the form of objects. It is possible that in lieu of or in addition to the taxation of goods, Xaltocan's leaders enlisted subsidiary communities to provide labor and military services. Xaltocan's rulers did have substantially larger and higher quality architecture than commoners at Xaltocan, and construction as well as the manufacture of building materials probably required outside help. The largest architectural program—which involved the razing of Early Postclassic architecture, capping it with fill, constructing an expansive adobe platform, and building new structures—probably required a substantial labor force, that is assuming that the construction occurred over a short period of time (see Chapter 5). Upkeep would have also been an issue with larger architecture, and perhaps subsidiary communities provided laborers throughout the year to perform repairs and renovations on these structures. This may have functioned similarly to the case outlined above wherein laborers from

Tlatelolco were responsible for the upkeep of the temple of Huitznahuac (Berdan and Anawalt 1997: 32).

Beyond construction labor, Xaltocan also presumably required a standing (or perhaps, “on call”) army. The Postclassic saw an uptick in violence and regional tension as city-states vied for power and resources and ethnohistorical sources indicate that Xaltocan was a major player in some of these engagements. While there is little evidence for violence or warfare at Xaltocan, at the very least Xaltocan presumably needed some individuals to guard territory boundaries and disputed lands.

While the material record does not provide evidence to support the historical assertion that the leaders of Xaltocan were receiving payments in the form of objects or agricultural goods from subsidiary towns, monumental architecture at Cerrito Central suggests that Xaltocan’s leaders were enlisting laborers. In fact, labor might have been a far more valuable resource than exotic or difficult to produce objects given that Xaltocan’s leaders expressed their identity and authority through architectural programs as opposed to conspicuous consumption or displays of wealth (see Chapters 4 and 5). Furthermore, as regional violence escalated and the demand for military personnel increased, the ability to marshal a military force would have been integral to maintaining power within the region. Consequently, military services might also have been more valuable to Xaltocan’s leaders than the accumulations of goods. In sum, although systems of taxation were almost certainly in use at Xaltocan during the pre-imperial period, they may have functioned far differently than they did under the Aztecs—specifically,

favoring labor and military support over the accumulation of prestige goods or exotic objects.

Xaltocan at War

Warfare in Postclassic central Mexico is a surprisingly difficult concept to define, partly because there were several different kinds of war, each with very different aims. Considerable scholarly research has been dedicated to better understanding the diverse and nuanced aims of central Mexican military engagements (Anawalt 1988; Berdan 1982; Brumfiel and Fox 2003; Canesco 1966; Harner 1977; Hassig 1988; Hicks 1979; Isaac 1983; Pohl and McBride 1991; Price 1978; Soustelle 1970; Vaillant 1950). One point of contention among ethnohistorians and anthropologists concerns the level of violence involved in Prehispanic central Mexican warfare, and Aztec warfare in particular—that is, warfare involving the Aztec empire. Many have argued that generally speaking Aztec wars were conducted with primarily non-violent aims, especially taking captives (Canesco 1966; Monajarás Ruíz 1976; Vaillant 1950). Among the scholars that argue that taking captives was the principal aim of Aztec military entanglements, most reference the “flowery wars” or *xochiyaoyotl* as shining examples. *Xochiyaoyotl* were battles that were mostly consensual and mostly non-mortal, and the Aztec empire famously engaged in frequent *xochiyaoyotl* with the autonomous city-states in the Tlaxcallan-Pueblan Valley (Coe 1977; Davies 1974; Soustelle 1970; Vaillant 1950). Given the lack of violence on the battlefield, scholars have argued that the *xochiyaoyotl* were used as an opportunity to take captives for ritual sacrifice. In a sense, *xochiyaoyotl* were akin to rituals and served the very important purpose of ensuring that the

bloodthirsty gods were satisfied through the sacrifice of captives. However, as Hicks (1979) has pointed out, the ethnohistorical records provide little indication that *xochiyaoyotl* actually resulted in the capture of large numbers of sacrificial victims, and Hicks argues that rather than taking captives, the main objective of *xochiyaoyotl* was to provide combat training.

Excluding *xochiyaoyotl*, Aztec scholars generally believe that the main motivation for violent military entanglements was the acquisition of new territory. Specifically, as the Aztec Triple Alliance continued to grow in power, access to new resources and greater quantities of resources in the form of taxes became especially important for leadership. In conquest wars, or *cocoltic yaoyotl* (literally “angry wars”), use of force was probably applied, but the main motivation was acquisition of new lands, not violence. Theoretically, battles of this nature would have ended when the opponent surrendered and offered tribute (Hassig 1988). Although *cocoltic yaoyotl* were not necessarily exceptionally violent, they generally did result in the seizing of captives for sacrifice (Hicks 1979: 90). Berdan (1982) has noted that the capture of large numbers of sacrificial victims was not merely useful for fulfilling ritual demands, but also that it substantially reduced the military strength of conquered provinces. Thus, taking captives served the dual purposes of appeasing the gods and weakening conquered armies—thereby reducing the risk of violent resistance in the future.

Although Aztec battles were not always mortal engagements, ethnohistorical documents indicate that there were instances in which excessive violence was applied (Isaac 1983). Some ethnohistorical documents (Codex Ramírez 1878; Duran 1964;

Tezozomac 1878) have gone into great detail to record the brutality with which Aztec forces trounced opponents. The Codex Ramírez, for example, specifies the excessive violence that was used when the Mexicas of Tenochtitlan attacked the Tepanecs of Azcapotzalco:

They razed the city and burned the houses and robbed and sacked everything they found, not sparing man or woman, children or old people, who were executed without mercy or pity, without leaving a thing standing or person alive, except those who fleeing, had taken refuge in the mountains, whom the Mexicans did not spare because they pursued them like savage lions, filled with fury and ire. (Codex Ramírez 1878:51)

Thus, ethnohistorical accounts suggest that at least some Aztec battles were extremely violent and resulted in the loss of significant human life. Taking the various motivations, tactics and outcomes of Aztec warfare into consideration—as Aztec military strategies were not developed in a vacuum—I turn now to the war between Xaltocan and Cuauhtitlan.

The war in question, that is, the 150-years-long war between Xaltocan and Cuauhtitlan, was fought between A.D. 1240 and 1395. While not technically an “Aztec war”, at least some of the same motivations that drove Aztec warfare probably also inspired military entanglements prior to the rise of the Aztec empire—expansion, access to resources and taxes, and the acquisition of captives. The *Anales de Cuauhtitlan* (1992) suggests that conflict initially arose when the Xaltocameca, from Xaltocan, took several Mexitin, from Chapoltepec (*Anales de Cuauhtitlan* spelling), as captives. The Mexitin were unable to defend themselves but were allied with the much stronger city-state of Cuauhtitlan. In defense of his allies, the king of Cuauhtitlan demanded that the Mexitin captives be tracked down and saved from the Xaltocameca. The troops from Cuauhtitlan

quickly accomplished this task, and among the rescued captives was a young woman, the daughter of the ruler of Chapoltepec, who eventually married the king of Cuauhtitlan. After the birth of their first son, the king of Cuauhtitlan declared that Xaltocan would forever be an enemy of Cuauhtitlan, ostensibly in honor of his wife.

Although this narrative might explain the general animosity between the two polities, true conflict did not erupt until years later, over access to hunting grounds known as Zoltepec, or “Quail Hill”. Scholars (Hicks 1994; Morehart 2010) have also suggested that competition over other natural resources—especially wood and water—may have caused friction between Xaltocan and Cuauhtitlan. Wood in particular would have been a valuable resource, used for construction, ritual, and fuel. Thus, wooded areas in the foothills surrounding the basin may have been especially coveted territories. Whatever the exact reasons for conflict, ethnohistorical records indicate that by the late thirteenth-century Cuauhtitlan and Xaltocan were engaging in consistent—though, not constant—violent interactions.

Essentially all of the details concerning the war between Xaltocan and Cuauhtitlan have been gleaned from ethnohistoric accounts, although descriptions are often vague and leave a great deal to the imagination. Sections of the *Anales de Cuauhtitlan* (1992) suggest that taking captives was an important aspect of the war, although it is often unclear how many captives were taken. In rare instances when captives are enumerated, the numbers are relatively low. In one instance, the Colhuaque (another Basin of Mexican group), in an attempt to impress Cuauhtitlan, took three captives from Xaltocan. When the three captives were delivered to Cuauhtitlan, an

alliance between the two groups was solidified, suggesting that the acquisition of three captives represented a success (*Anales de Cuauhtitlan* 1992: 60, 69).

A similar lack of specificity is used when referring to mortality rates in combat. While the ethnohistorical accounts indicate that sometimes individuals were wounded or killed, the exact number of people that were hurt or died as a result of the skirmishes is generally unclear. In one instance, the prince of Cuauhtitlan, Iztactototl, was sent by his father to ambush the Xaltocameca at their place of worship, Acpaxapocan. While Iztactototl managed to take one captive, ten men were killed on the side of Cuauhtitlan. The deaths of these soldiers infuriated the king of Cuauhtitlan, leading him to intensify his campaign against Xaltocan (*Anales de Cuauhtitlan* 1992: 65). Thus, the loss of ten men was considered an especially damaging blow to Cuauhtitlan, which again provides some sense of the scale of battles. This detail also indicates that there was an expectation (on the side of Cuauhtitlan, at least) that conflict with Xaltocan would not result in significant mortalities.

Outside of intermittent raids and skirmishes, it appears that the majority of organized battles between Cuauhtitlan and Xaltocan occurred at the boundaries, in areas where the domains of Cuauhtitlan and Xaltocan connected. According to the *Anales de Cuauhtitlan* (1992: 59), which of course favored Cuauhtitlan, these border skirmishes were typically planned raids or ambushes and involved enlisting help from allies to bolster military forces. Again, the extent of violence involved in these interactions is unclear, and it is entirely possible that very little violence was necessary. If Xaltocan's borders were insufficiently manned to fight back, surrender was probably swift.

Intermittent victories for Cuauhtitlan resulted in the slow and steady shrinking of Xaltocan's domain. After battles, the two polities would sometimes go between ten and fifteen years without conflict. Again, indicating that while conflict between the two city-states occurred over a long period of time, violent interactions were not necessarily common.

Given the fact that skirmishes were probably infrequent, and with the exception of the conquest of the island of Xaltocan in A.D. 1395, combat probably rarely took place on the well-protected island, it is not altogether surprising that there is little evidence for warfare at the site of Xaltocan. Payson Sheets (2003) has outlined twelve kinds of material evidence for Mesoamerican warfare which include ethnohistorical and historical documents, oral histories (including mythology and religion), use of (and shifts in) language and cognition, art and iconography, epigraphy, fortifications, weapons, osteology, desecratory termination rituals, assimilation or elimination, settlement patterns, and artifacts (Sheets includes features and architecture in this category). While there is very clearly ethnohistorical evidence for the war between Cuauhtitlan and Xaltocan, the stories of which were largely gleaned from oral histories during the colonial period, few of the other categories of evidence for warfare are present.

Determining how people conceptualized warfare draws from language use, especially using the linguistic categories surrounding conflict and violence as evidence. Such linguistic categories for the Basin of Mexico have already been explored somewhat in this chapter—specifically, the distinct but overlapping concepts of *xochiyaoyotl* and *cocoltic yaoyotl*. These terms give us some insight into the nature of warfare during the

Postclassic in the Basin of Mexico and indicate that warfare involved a number of different motivations and strategies, and did not always necessarily involve violence.

Neither epigraphic nor iconographic evidence is useful for determining the extent of warfare between Xaltocan and Cuauhtitlan specifically. While war-themed iconography abounds in central Mexico, dating to long before the rise of Xaltocan, very little iconography has been recovered at Xaltocan, and what has been recovered is limited mostly to geometric and floral designs on vessels, decorations and elaborations on figurines, and incisions on spindle whorls. Some of the figurines recovered at Xaltocan, and Cerrito Central specifically (see Appendix), were dressed as warriors, but warrior figurines were relatively common in Basin of Mexico (Brumfiel 1996a; Kaplan 1958), and the extent to which warrior figurines were indicative of real warfare is unclear.

Fortresses and other constructed blockades are also expected at places threatened by external violence, and although neither fortresses nor constructed barriers have been recovered at Xaltocan, it is possible that they did exist in the past. It also is possible that blockades were not constructed at Xaltocan because the surrounding lake already protected the island. Lake Xaltocan served as a natural moat, dividing Xaltocan from the mainland. Xaltocan could be reached only via boat or causeway, and both approaches would have been precarious for invaders. By boat, invaders would have been easily spotted and vulnerable to arrows and darts shot from the island. By causeway, invaders would have only narrow access to the island, and again invaders would have been easily picked off as they approached.

Other expected vestiges of warfare include weapons and portable implements of combat. Ethnohistorical documents have provided detailed accounts of the kinds of weaponry used by the Aztecs and other indigenous groups in central Mexico—including spear throwers, darts, bows and arrows, spears, swords, clubs, and slings. All of these implements predated the Aztec empire and were probably the same kinds of weapons that would have been used by Xaltocan and Cuauhtitlan's armies. However, most weapons were made partially or entirely of wood, and are rarely recovered archaeologically. The stone tips and blades which lined swords and were sometimes used on the points of darts and arrows would have been difficult to distinguish from utilitarian objects. Even objects that were clearly projectile points were often used on the tips of hunting arrows or darts and were not necessarily affiliated with combat. Hassig (1988: 79) notes that darts in particular were frequently used to hunt waterfowl, which would have been a major staple for people living at Xaltocan and Cuauhtitlan.

For obvious reasons, osteological evidence can be a very reliable line of evidence indicative of warfare and combat. However, no burials were recovered at Cerrito Central and while there have been many burials recovered elsewhere at Xaltocan (De Lucia 2010; Mata-Miguez et al. 2012; Overholtzer 2013), none of them contained indications that they died in combat or by any other violent means (e.g., human sacrifice). The only evidence consistent with violence in the vicinity of Xaltocan has come from a shrine discovered in Lake Xaltocan (though not at the Postclassic site of Xaltocan). The skeletal remains of over 30 individuals and the severed crania of 13 individuals were recovered, but they predated the establishment of the site of Xaltocan by hundreds of years. The

skeletal remains were probably indicative of violence and human sacrifice during another period of significant regional conflict (Morehart et al. 2012). These remains were not associated with Postclassic Xaltocan but they provide an example of one way that regional violence might have manifested materially during the Postclassic. Again, a lack of osteological evidence for violence at Postclassic Xaltocan does not mean that Xaltocan was not engaged in violent interactions. It only means that osteological remains from such interactions have not yet been recovered. Still, it is interesting that considerable evidence for violence was recovered (albeit, by chance) in such close proximity to Xaltocan before the area was even permanently occupied, but no such osteological evidence exists at Xaltocan dating to the period of sustained violence.

Evidence for warfare might also include termination rituals or desecratory rituals, marking the end of one regime and the start of another. While there are some deposits at Xaltocan that may be loosely defined as termination rituals, including the deposit recovered from Middle Postclassic context at Cerrito Central (see Chapter 5), none of these deposits appear to be linked to the ushering in of a new group. In fact, there is strong evidence that the ritual deposit recovered at Cerrito Central was created by the people that had already been living there for several generations, given stylistic continuity in associated features (see again Chapter 5).

Shifts in settlement patterns as well as evidence for assimilation or elimination of cultural practices are other possible outcomes of warfare that might be visible archaeologically. At Xaltocan both of these shifts were observed to some extent, but they appear to have occurred only at the end of the war with Cuauhtitlan and correspond to the

abandonment of the island by Xaltocan's nobility and the partial resettlement instituted by the Aztec empire. Again, while these do provide evidence that the island of Xaltocan was incorporated into the Aztec empire and that new leadership took over, they do not provide concrete evidence regarding the duration or nature of the war with Cuauhtitlan.

Finally, Sheets (2003) cites artifacts as another line of evidence for warfare. Material evidence for warfare could manifest in a number of ways. For example, if Xaltocan was engaged in prolonged warfare with Cuauhtitlan we might expect evidence for economic strain or shifting access to resources during the Middle Postclassic resulting in changes in artifact assemblages. While there were some observed shifts in access to materials during the Middle Postclassic at Xaltocan (see Chapter 4) none of the changes in artifact distributions suggest that Xaltocan was having difficulty accessing resources. On the contrary, during the Middle Postclassic, when Xaltocan was at war, archaeological evidence suggests that the leaders of Xaltocan were still involved in the same regional exchange networks as they had been before. Moreover, rather than being weakened by warfare, the community at large appears to have been thriving during this period.

One piece of archaeological evidence from Cerrito Central that does appear to align with the claims of ethnohistorical documents, occurs at the beginning of the Late Postclassic when the architecture at Cerrito Central was abruptly razed, and a series of large wall foundations, with massive stones reminiscent of Aztec architecture, were constructed on top (see Chapter 5). This event probably coincided with Cuauhtitlan's ultimate conquest of Xaltocan and the incorporation of Xaltocan into the Aztec empire a

few decades later. This is only proof only that Xaltocan was ultimately conquered, but does not provide any evidence for prior conflict. A lack of evidence (or very little evidence) is not necessarily sufficient to prove that the war with Cuauhtitlan did not occur, only that it does not appear to have been especially impactful on day-to-day life at Xaltocan.

Despite very little archaeological evidence for the 150 years of conflict with Cuauhtitlan, the ethnohistorical accounts are consistent in at least mentioning the war (Alva Ixtlilxóchitl 1975-77 II; *Anales de Cuauhtitlan* 1992). In the case of the *Anales de Cuauhtitlan*, the motivations for conflict and strategies used in battles and raids were sometimes recorded in great detail. Moreover, the ultimate conquest of Xaltocan, which *is* archaeologically apparent and did not occur in a vacuum, provides further evidence that the war between Cuauhtitlan and Xaltocan took place. Perhaps the lack of archaeological evidence indicates that the war did not have a significance impact on the daily lives of the people living at Xaltocan—that is, until the island was conquered. If this was the case, then how then did Xaltocan’s conflict with Cuauhtitlan manifest?

As an analogy, which may help explain the nature of the war between Cuauhtitlan and Xaltocan, I return to the concept of *xochiyaoyotl* or “flowery war”. Although *xochiyaoyotl* was ostensibly undertaken for the purpose of taking captives and providing warriors with combat training, in some cases they may have escalated and been strategically used to assert dominance and to keep rival polities in check. Such was the case in one of the earliest *xochiyaoyotl*, fought between the Mexicas under the reign of Acamapichtli (A.D. 1372-1391) and the state of Chalco beginning in A.D. 1375 (Hassig

1988). The two states both hosted substantial military forces and were well-matched opponents. In fact, *xochiyaoyotl* may have often involved evenly matched adversaries because, as Hassig (1988:129) notes, “weak opponents were simply conquered by force or frightened into submission, and wars with opponents too strong to be conquered were avoided”. However, among evenly matched adversaries outright war may have been too risky. Military forces were extremely valuable resources for Postclassic city-states. They were not only necessary for conquering new territories but also for maintaining dominance over already-conquered lands. Through *xochiyaoyotl* well-matched polities had the opportunity to assert their dominance without risking of significant loss of life. Thus, in addition to serving as venues for combat training and for seizing captives, *xochiyaoyotl* were probably strategic. As these battles were periodically conducted over long periods of time, eventually one polity’s superiority would become evident at a relatively low cost to either side.

In the case of the battle between Acamapichtli’s Mexicas and Chalco, after eight years of engaging in periodic fighting neither side emerged as dominant, and battles became increasingly competitive. Captives were taken for sacrifice and violence increased slightly as each side strove to assert dominance over its opponent. Battles continued this way for several decades, neither side was ever able to claim victory, nor did either side suffer significant loss (Hassig 1988). Although the prolonged *xochiyaoyotl* battles did not result in the conquest of Chalco, they allowed Acamapichtli’s Mexica forces to keep their adversaries at bay while still engaging in military ventures elsewhere.

The prolonged *xochiyaoyotl* between the Mexicas and Chalco may have functioned similarly to the prolonged war between Xaltocan and Cuauhtitlan. Presumably well-matched opponents, neither Xaltocan nor Cuauhtitlan would have wanted to risk considerable loss of life in a period of escalating regional conflict, especially as polity populations grew and natural resources became more valuable. Initially these military skirmishes were not necessarily mortal, but they served as “demonstrations of martial prowess designed to determine dominance” (Hassig 1988:129). I argue that a similar ideology surrounding conflict is suggested in the *Anales de Cuauhtitlan*. While conspiring to attack the Xaltocamecas at Zoltepec (Quail Hill)—the first major battle of the war between Xaltocan and Cuauhtitlan—the troops from Cuauhtitlan sought merely to chase the “bothersome” Xaltocameca away. There is no mention of captive-taking or lethal violence.

[Cuauhtitlan] noticed the Xaltocameca, who were always courting danger to go quail hunting at Quail Hill. Indeed the quail-hunting area belonged to the Xaltocameca. It was their quail hill. Then [the troops from Cuauhtitlan] conferred with each other saying, ‘Who are these so-called Xaltocameca? Let’s chase them away. They’re going to bother us’...so then, right in that spot they provoked them, intending to make war on them, until finally they exerted their full force on them. (*Anales de Cuauhtitlan* 1992: 58)

This is not to say that the war between Cuauhtitlan and Xaltocan should be understood as a “flowery war”, but only that there appear to have been some similarities with regard to the motivations, strategies and expectations of such warfare. While both sides strove to assert dominance over the other, neither side was willing to risk significant losses, which would threaten their control over their existent domains and basic autonomy. Conflicts probably only occurred when one side felt confident that they had the upper hand and could easily defeat their opponent with minimal loss of life. Often, it

appears, these battles were planned ambushes or raids. Thus, the long war between Cuauhtitlan and Xaltocan was realized as a series of intermittent skirmishes, which slowly but surely—and especially as Cuauhtitlan gained powerful regional allies—resulted in the shrinking of Xaltocan’s domain. Archaeological evidence suggests that rather than a bloody final battle (for which there is no evidence) the war ended when, upon the realization that Xaltocan could no longer defend itself, the island was largely abandoned and repopulated decades later by Mexicas sent by the Aztec empire.

Class Lines and Regional Ties

The purpose of this brief section is to analyze the extent to which the “elite” status of Xaltocan’s leaders has been taken for granted and has obscured the connections that they had within their home community. Despite the fact that the excavations at Cerrito Central represent the first formal archaeological investigations of a likely elite space at Xaltocan, longstanding suppositions about the nature of leadership and the socio-political structure at Xaltocan have informed archaeological interpretations of data recovered elsewhere at the site (Brumfiel 1991a, 1991b, 1996b, 1998, 2005b; De Lucia 2011; Morehart 2010; Overholtzer 2012). These inferences have been gleaned largely from ethnohistorical sources, which indicate that Xaltocan was ruled by successive kings who were a part of a regional pan-elite class and intertwined with the nobility from other polities through strategic marriage alliances (Alva Ixtlilxóchitl 1975-77 I; *Anales de Cuauhtitlan* 1992; Calnek 1982; Carrasco 1984; Hodge 1984; Nazareo de Xaltocan 1940). Nazareo de Xaltocan (1940), for example, went into great specificity in tracing the

ruling lineage and corresponding marriage alliances of Xaltocan (see Chapters 1 and 3). The *Anales de Cuauhtitlan* (1992: 42, 75) also referenced various kings of Xaltocan including Iztac Teuctli, Panetictzin Teuctli, Tlaltochtli and Teuctlacozauiqui. One of these names, Teuctlacozauiqui, corresponds to the earliest ruler cited by Nazareo de Xaltocan (see Table 1.2 and 1.3), though none of the other names match. Implicit in these historical narratives is the idea that the nobility of Xaltocan enjoyed the same powers, under similar systems of rule, as other Postclassic leaders, and that their socio-political station was bolstered by the support of other regional leaders.

Bonds among the rulers of Postclassic polities have been explored in great detail, especially as they relate to the ruling strategies of the Aztec empire (Berdan 1982; Calnek 1978; Rounds 1979; Smith 1986). Although less is known about the leaders at individual city-states prior to the formation of the Aztec Triple Alliance, Brumfiel (1983) has argued that early Postclassic communities probably functioned much like chiefdoms, with leaders serving basic administrative functions. Over time, rulers formed dynasties through kinship ties and began to solidify their social station through economic dominance and especially through the exaction of tribute or taxes (Smith 1986). As political leaders exerted greater economic control, the divide between the rulers and the ruled widened (Brumfiel 1983; Calnek 1982). At the same time, increased interaction in the region, fueled by trade markets, marriage alliances, and warfare paved the way for increased cooperation among rulers of independent polities. Smith (1986) has argued that these relationships were an early iteration of the kind of socio-political organization that would later characterize the Aztec empire.

Thus, drawing on ethnohistorical accounts and the abovementioned theories concerning the political and economic ascent of rulers during the Postclassic, archaeological research at Xaltocan has functioned under the basic assumption that Xaltocan's rulers were members of a regional elite class. The regional elite were reliant on commoners for the resources and labor they provided, but secure in their rank within society and bolstered by their socio-political peers. While nothing in this chapter wholly refutes this underlying assumption, research at Cerrito Central has provided new insights into the everyday lives of Xaltocan's leaders and the nature of their relationship with their home community. In particular, comparisons of the material and architectural data from Cerrito Central with data collected from elsewhere at Xaltocan have demonstrated the key differences and similarities between leaders and commoners, and elucidated the ways in which social stratification was created, maintained, and experienced.

First, it is necessary to acknowledge that architectural evidence at Cerrito Central does suggest that from as early as the eleventh-century, Xaltocan's leaders occupied a distinct social class. Their architecture was consistently larger, higher in quality, and was constructed atop a more elevated point on the landscape relative to other houses that have been excavated at Xaltocan. However, architecture recovered at Cerrito Central did share many material and stylistic similarities with the architecture of other structures at Xaltocan. In particular, a high-status house near the center of Xaltocan (De Lucia 2010, 2011), occupied between the Early and Middle Postclassic, also contained plaster floors and stucco wall-facades. Prior to the Aztec period there was also a consistent favoring of adobe over stone as a construction medium across the entire site of Xaltocan. Perhaps

then, rather than emphasizing distinct divides between social classes, architecture at Xaltocan reflects a socio-economic continuum. While the leaders of Xaltocan were decidedly on one side of the spectrum, the lines dividing them from the rest of the community were more porous than once believed.

While architectural analysis does suggest some social differentiation at Xaltocan it does not necessarily suggest that Xaltocan's leaders were closely tied to other regional leaders. In fact, the architectural techniques used by Xaltocan's leaders—specifically, a preference for adobe—were sometimes dissimilar from other regional leaders. Furthermore, analysis of artifacts at Xaltocan indicates that although Xaltocan's leaders were accessing some objects in higher quantities than commoners (e.g., Pachuca green obsidian), they do not appear to have been engaging with different exchange networks—such as the exchange networks that presumably existed among central Mexican elites during the Postclassic (Berdan 1982; Hirth 1978; Santley and Alexander 1992, see Chapter 4). The inter-elite exchange of prestige goods is one of the most fundamental practices that bound the regional elite class that existed during the Aztec period. Thus, a lack of evidence that Xaltocan was involved in these kinds of networks during the pre-imperial period also undermines the notion that Xaltocan's leaders were bolstered through their alliances with other powerful regional elites.

Altogether, data from Cerrito Central indicates that contrary to the sweeping conclusions that have been drawn about socio-political organization and elite life during the Postclassic, the people that governed Xaltocan did not live very different day-to-day lives from the wider community. Thus, in this case the use of the term “elite” as a

primary analytical category is problematic because it suggests that social status was uniform throughout the Basin of Mexico, and it obscures the very different ways that independent city-states were organized from within. Archaeological evidence at Xaltocan has indicated that while Xaltocan's leaders did occupy a place of social privilege within their home community they necessarily participated in shared rituals that helped to establish and bolster local solidarity as well as their own legitimacy (see Chapter 6). Thus, engagement with the island community was a key component to their own success as leaders.

Conclusions

The objective of this chapter has been to examine some long-accepted historical narratives about Xaltocan and to explore their veracity and nuance from the perspective of material culture. The examples above demonstrate how written histories and prior knowledge about the Aztec empire have enabled assertions about the nature of social and political organization at Xaltocan despite lacking sufficient archaeological evidence to back it up. At the most basic level, applying material evidence to written histories may help to support them or cast doubt on them. However, even in instances when written histories are neither undermined nor corroborated, comparative analyses with archaeological materials serve to alter or add perspective to long dominant historical narratives. By presenting the benefits of this approach, this chapter challenges archaeologists to pursue material evidence, even when details of the historical record are widely acknowledged. When corroborating evidence does not exist, archaeologists

should consider alternative possibilities. I argue that if we consider more carefully the biases built into written histories as we develop research questions and move forward with archaeological inquiry, we may find that alternative models for explaining the past are just as viable. In the case of my own research, these alternative models were constructed and guided largely through collaboration with the local community of Xaltocan. These partnerships, discussed more fully in Chapter 8, led me to ask different kinds of questions about the past and specifically about how local identity and solidarity were cultivated across class lines during the Postclassic.

CHAPTER 8
COMMUNITY ENGAGEMENT AND THE DECOLONIZATION OF
ARCHAEOLOGY AT XALTOCAN

Community archaeology, that is, archaeological research that prioritizes engagement and collaboration with local communities, has become increasingly common over the past two decades. The goals and methods of community archaeology are diverse and depend on the histories, conditions and motivations of communities where archaeologists work. Despite great variability, generally speaking all community archaeology projects aim to decolonize archaeological research and to democratize the process of interpretation (Merriman 2004; Little and Shackel 2007). This approach is not without challenges. Integrating new voices and diverse perspectives into archaeological research has necessitated an adaptive approach to archaeological research and interpretations, which makes space for communities and individuals that value the past in different ways (Diaz-Andreu 2017; Schanda-Hall 2004).

One of the three main tenets of projects that strive to decolonize archaeology is to collaborate closely with communities that experience most directly the implications of archaeological research, especially groups whose cultural heritage is tied to archaeological remains. Indigenous groups in particular, have long been alienated from vestiges of their own heritage. Such has certainly been the case for Native peoples in

North America. Despite the fact that North American archaeology has long thrived on the study of the Native American past, today very few Native peoples work as professional archaeologists (Atalay 2006; Bruchac et al. 2016; Silliman 2008; Smith and Wobst 2004; Watkins et al. 2000). Community archaeology offers avenues by which Indigenous peoples may be involved in the interpretation and conservation of their own material patrimony. Projects that specifically focus on integrating Indigenous voices, also known as Indigenous archaeologies, employ many of the same strategies as community archaeology, but are focused specifically on Indigenous communities.

The second tenet recognizes that, in many cases, archaeological remains are not linked to Indigenous groups but are socially meaningful to other living communities. In some cases these groups are descendant communities, defined as people that have a real or perceived ancestral link to archaeological materials. For example, African American communities in the U.S., like those of Native peoples, have been adversely affected by colonial processes and are often alienated from their cultural heritage (Battle-Baptiste 2007, 2010, 2011; Franklin and Mckee 2004; Hong 2017; Leone et al. 1995, 2005; Matthews and McGovern 2015; McDavid 2002; Morris 2014; Ogundiran and Falola 2007; Wilkie 2004). Collaborative endeavors, like the New York African Burial Ground Project, create mechanisms, intended to replace conflict with dialogue between archaeological researchers and all stakeholders. Working closely with descendent communities assures that they have a voice in how interpretations of archaeological findings are presented to the public, and whether or how archaeological remains are

available to public observation (La Roche and Blakey 1997; Mack and Blakey 2004; Rainville 2009).

Third and finally, community archaeologies also include collaborative work with local communities, even in instances when locals do not necessarily have a genetic or cultural link to people from the past. This is because local communities often have relationships with archaeological remains, particularly when those remains include features or artifacts that they regularly interact with. In these instances archaeological remains have “social value” defined as “a collective attachment to a place that embodies meanings and values that are important to a community or communities” (Jones 2017:22). Thus, a living community may still have a stake in archaeological remains even if that relationship has been born out of physical proximity as opposed to ancestral ties. In these cases, the voices and interests of local communities needed to be considered in heritage management (Walker 2014).

In general, people living in Xaltocan today consider themselves descendants. Although it would be difficult to say with certainty that any one individual can definitely trace their ancestry back to Postclassic Xaltocan, a number of ecological and historical factors do make it likely that at least some community members have Prehispanic roots in Xaltocan. For one thing, we know that Xaltocan has been continuously occupied since before the arrival of the Spanish. Although there is disagreement over the extent of a possible late fourteenth-century abandonment (see Chapter 7), beginning in at least the Late Postclassic the site has been constantly inhabited. Additionally, until 1945 when Lake Xaltocan was drained, Xaltocan remained an island. This limited the number of

inhabitants that could reasonably live in Xaltocan. Thus, large influxes of outsiders, which would have increased the population of the island, are unlikely. Regardless of their specific ancestry, the modern residents of Xaltocan are in constant interaction with the archaeological remains of their predecessors. They place social value on the material vestiges of the past. Together, these circumstances indicate that the people living in Xaltocan today are the community most closely tied to the Prehispanic site.

Previous Community Engagement at Xaltocan

Archaeological research at Xaltocan has always been a collaborative endeavor. When Elizabeth Brumfiel arrived at Xaltocan in 1987 with the intention of performing archaeological investigations she found that the modern town of Xaltocan sat directly on top of the archaeological site. The close proximity of archaeological remains and the living community necessitated that Brumfiel develop a partnership with the town. Initially, cultivating this relationship was not easy. Xaltocan has long been an insular community, suspicious of outsiders. Even before Brumfiel initiated her work she met with sixty residents who questioned her motives. Brumfiel explained that through her research the community would gain a greater understanding of Xaltocan's heritage and would be able to pass this knowledge on to their children (Brumfiel 2000). The residents agreed to let Brumfiel conduct her research, and over the course of the last thirty years she and her students have worked closely with the community of Xaltocan to make archaeological research more transparent and to disseminate findings to the public.

A number of collaborative methods have been used to increase transparency and to benefit the local community. First, Brumfiel and her students have always hired local residents to conduct archaeological survey and excavation. Community members have often been involved in different aspects of analysis as well. Additionally, archaeological researchers have typically initiated outreach programs corresponding to their projects. These outreach programs have been aimed at sharing findings with the community and have often included lectures, museum exhibits, and site tours for schoolchildren.

Lisa Overholtzer (2012) added to traditional outreach approaches in Xaltocan by organizing a community symposium at the end of her field season. The symposium focused on the archaeological history of Xaltocan and on the specific materials Overholtzer recovered during excavations. Most of the speakers were local research assistants who had the opportunity to share their interpretations of archaeological materials and their experiences working as excavators. Overholtzer's symposium was an important break from previous outreach programs at Xaltocan, because it allowed members of the community to speak as experts on the material vestiges of their own heritage. In providing community members with an opportunity to voice their own interpretations of archaeological materials, power over knowledge production was transferred, at least partially, back to the local community.

The symposium in particular, has highlighted the ways in which community archaeology can be used to give back to communities that are most impacted by the implications of archaeological research. It has also demonstrated the potential epistemological benefits of working with local communities. As individuals that are

unquestionably more connected to archaeological remains (in many senses), descendant communities are uniquely situated to interpret archaeological materials based on their own life experiences. In some cases these interpretations might be based on specific cultural practices or beliefs, which may or may not be the same today as they were in the past. Whatever the perspective of local interpretations, making space for descendant voices in archaeological research not only makes our practice more ethical but also has the potential to introduce new ways of thinking about the past (Leone and Preucel 1992; Liebmann and Rizvi 2008; Preucel and Cipolla 2008).

New Approaches to Community Collaboration at Xaltocan

The collaborative approach for my research at Xaltocan was informed and inspired by the work of my predecessors. Like Brumfiel, her collaborators, and her students, I was determined to create a project that was transparent and that would also make tangible contributions to local patrimony. Furthermore, following in the footsteps of Overholtzer, I wanted to incorporate local perspectives with the goal of generating socially valuable knowledge. This time, rather than waiting until the end of the project to consider local interpretations of archaeological materials, I brought on community members to collaborate on the project design. This early introduction of community perspective meant that the goals, interests, and experiences of locals would steer the direction of research. Community archaeology is archaeology for the people, but by collaborating with community members in the early stages of project development, it becomes archaeology by the people.

Before addressing the specific research objectives we developed for this project, it is important to situate Xaltocan in its modern context. Today, Xaltocan is a relatively small town of only about 3200 residents, located at the edge of Mexico City's ever-expanding urban sprawl. The residential town of Xaltocan is surrounded by *ejido* land, or communally owned land designated for farming, which remains in the hands of local families. *Ejido* parcels were allotted to Xaltocan families around the mid-twentieth century. Once a family has been granted an *ejido* parcel, they are allowed to use the land indefinitely under the stipulation that the land may not be left fallow for more than two years. Although few families in Xaltocan farm for their livelihood, almost all families farm enough to maintain their *ejido* parcels. While the land may not hold the same economic value for families today as it did many decades ago when farming was more central to subsistence, it still has great social value and no family would willingly sacrifice their rights to an *ejido* parcel.

In addition to *ejido* lands, Xaltocan is also surrounded by *tierras comunales*, or just *comunales*. *Comunales* are also communal lands that belong to local families, but unlike *ejidos*, which are specific parcels designated only for farming, *comunales* are more loosely defined. *Comunales* belong to communities that have been able to prove that the lands in question are rightfully theirs. Usually this proof is based on centuries of occupation. *Comunales* may be used for living or working and may also be used for communal ventures that may be decided by community assemblies. *Comunales* may not be sold nor may they be transformed into private property. Although the ways that communities administer *comunales* differ across Mexico, in Xaltocan it appears that local

families may freely build their homes on the *comunales* as long as they have familial ties to Xaltocan. In my time at Xaltocan, I witnessed an uproar that was caused when a group of squatters tried to set up camp on Xaltocan's communal land. Once word got back to members of the community it spread like wildfire. By the afternoon a large group formed in the center of town and they quickly marched out to the *comunales* and demanded that the squatters leave. This anecdote demonstrates that although the *comunales* are more loosely regulated than *ejido* lands, the community fiercely protects them as belonging exclusively to their community.

Xaltocan residents, like the residents of many rural towns in Mexico, are committed to protecting their land from outsiders. While this commitment is understandable given the number of uprisings that have been spurred by disagreements over land rights and agrarian rights in Mexico, I think that it also reflects newer concerns. Specifically, the encroaching urban sprawl from Mexico City has presented an immediate threat for many Xaltocan residents who are accustomed to small town life and who worry that population increases may result in increased crime or strains on local resources. These anxieties have perpetuated a mistrust of outsiders. This was something that Brumfiel experienced in her first visit to Xaltocan in 1987, and while the community has softened considerably to archaeologists, people interested in moving to Xaltocan full-time are often met with suspicion and even hostility.

One response to perceived threats from outsiders has been greater emphasis on the internal solidarity and community identity. Local patrimony has become especially important as a unifying concept. Archaeological and ethnohistorical projects have served

to increase awareness of Xaltocan's Prehispanic legacy (see Chapter 2). Permanent installations in the local museum exhibit archaeological findings but also include detailed descriptions concerning how archaeological materials were used and why they were meaningful. Most recently, Overholtzer constructed a replica Prehispanic adobe house in the museum. The house gives local residents and museumgoers a better idea of what life was like for an average Xaltocan resident during the Postclassic. In addition to efforts made by archaeologists, federally funded educational programs, including classes in Nahuatl and folkloric dancing have also fueled interest in the Prehispanic past. Taking cultural heritage into their own hands, residents created the *Gran Señorío de Xaltocan* (Association of the Grand Kingdom of Xaltocan), which organizes the annual International Oratory Contest as well as the Prehispanic Gastronomic Fair. The abovementioned programs, events, and organizations, which strive to maintain and promote Xaltocan's Indigenous heritage, are evidence for how modern Xaltocan residents value and identify with local patrimony.

Clearly, local patrimony is a point of pride for many residents of Xaltocan and while archaeological research has answered many questions about Xaltocan's past, there are still many questions that remain. In particular, there has long been a lack of archaeological data concerning Xaltocan's Postclassic leaders and conversations with locals revealed that many people were very interested in the lives of Prehispanic kings. I think that this interest speaks to a general sentiment that Overholtzer (2012) gleaned during her conversations with residents. Although locals are very aware of the

significance of Xaltocan as the former capital of the Otomí city-state, there is very little awareness of the Prehispanic importance of Xaltocan at the regional or national levels. According to Overholtzer (2012:349), many residents felt that this oversight was partly attributable to Xaltocan's marginal economic status in the modern world. To correct this, Overholtzer's research assistants and other members of the descendant community indicated that information regarding the past importance of Xaltocan should be widely disseminated.

While I agree that there should be more effort put into the dissemination of knowledge about Xaltocan, I also believe that increasing regional consciousness of Xaltocan's past importance hinges on supporting evidence that Xaltocan was a prominent place during the Postclassic. Given that the majority of archaeological research at Xaltocan had focused only on the archaeological remains of commoners, there was no tangible evidence for leaders. Certainly, Xaltocan's leaders played a large part in Xaltocan's ascent to regional prominence and vestiges of rulership, including monumental architecture, prestige goods, and implements of public ritual and performance, would help bolster such a claim.

I first became aware of Cerrito Central in Fall 2012, when Christopher Morehart informed me about a large mound near the center of Xaltocan. Morehart guessed, based on proximity and some test-pit findings from Brumfiel's 1991-1992 field season (Brumfiel 2005b), that the mound possibly was the site of Xaltocan's Postclassic palace. Soon after hearing about the mound, I visited Xaltocan and discovered that most local residents were familiar with Cerrito Central (my nickname for the mound, not a local

name), and like Morehart, they also believed it to be the place where Xaltocan's Prehispanic rulers lived (see Chapter 1). Given these observations and communications with local residents, and after I was graciously granted permission by the landowner Adrian Hernandez to excavate on the mound, it was decided that Cerrito Central would be the site of my archaeological investigations.

Thus, using the study of Xaltocan's leaders as a jumping off point, and in social political and economic issues facing modern residents of Xaltocan, I worked in collaboration with a handful of community leaders to outline two broad objectives: First, develop an archaeological project that is transparent and quickly disseminates findings to the local community. Second, develop research questions that will create locally meaningful knowledge, including knowledge that is of particular interest to people living in Xaltocan today and that intersects with or adds perspective to issues facing communities in the Basin of Mexico (see Chapter 1).

The first objective was an easy task—or so it would seem—because many of my predecessors had already done the legwork in determining which strategies for local outreach were most effective. Many of these strategies have been outlined above. The second objective, on the other hand, required a consideration of the issues facing modern Xaltocan and conversations with local residents about which aspects of Xaltocan's past they would most like to know more about. In light of the modern day pressures facing people living in Xaltocan, and particularly the way that shifts in regional demographics and economics are impacting daily life in Xaltocan, the first set of research questions focused on regional dynamics in the past. The second set of research questions directed

attention to the daily lives of Xaltocan's Prehispanic leaders. The following questions guided my research:

1. How did growing political turbulence in the region during the Postclassic impact Xaltocan's leaders? Did shifting political and trade alliances cause Xaltocan's leaders to change their domestic practices?
2. How did Xaltocan's leaders express their identity? How did these techniques change over time as Xaltocan was incorporated into the Aztec empire? How did Xaltocan's leaders create and maintain local identity and solidarity?

I believe that these questions, which have been addressed in this dissertation, contribute to our understanding of important components of Xaltocan's past, but also speak to issues that are familiar to people living in Xaltocan today (see Chapter 1).

The first questions are important because they address the ways that Xaltocan and Xaltocan's leaders interacted with and were affected by regional dynamics. Today, as populations rise and as people increasingly move about the region for work and school, the Basin of Mexico is a well-connected region. While regional ties in the past are not necessarily related to regional ties today, the fact that these relationships have been ongoing for centuries is a relatable, interesting and pertinent message for people living in Xaltocan today.

The second questions are important because they address the kind of relationship Xaltocan's leaders had with the wider community and how they strategically created local solidarity through identity-making practices. Rather than emphasizing the ways that Xaltocan's leaders were different from the wider community, these questions were

directed at identifying continuities in practices. Furthermore, these questions also were also aimed at discovering the ways that Xaltocan was a distinct political and cultural entity. Given the trend toward valuing community identity and shared patrimony at Xaltocan, answers to these questions have the potential for modern residents' to understanding the qualities that made Postclassic Xaltocan a unique place.

Community Outreach During and After the Project

Thus far, the main focus of this chapter has been the ways that local collaboration influenced the overall thrust of archaeological research conducted at Cerrito Central in Xaltocan. While I believe the techniques outlined above have been useful in guiding the production of knowledge in new and interesting ways, I also followed in the footsteps of my predecessors in incorporating diverse outreach strategies over the course of the excavation and analysis phases of the project. The methodologies used for community engagement are briefly outlined below. I also address some of the obstacles I faced in the implementation of some of these programs.

Like all of my forerunners in archaeology at Xaltocan, I employed a team of local research assistants to help with excavations. Among the eleven local research assistants, six of them had been involved in prior archaeological projects at Xaltocan and five had not. They ranged in age from twenty to sixty years old, and the core team (excluding myself and two female research assistants from the U.S.) was made up of six men and five women. The local research assistants claimed long ancestries in Xaltocan, and some were able to recall anecdotes from deceased relatives about archaeological objects and architecture that was still visible in the early twentieth century. All of them had some

familiarity with archaeological materials. Prehispanic objects are a part of the daily lives of modern residents of Xaltocan, as they are often discovered in backyards, around town, in agricultural fields, and especially during minor construction projects. Many families have private “museums” in their homes housing and displaying some of the more extraordinary objects they have found.

The nature of the excavation process was that teams, made up of three excavators, worked in the same unit, but at any given time all excavation teams were always in close proximity to one another. This closeness facilitated daily conversations about archaeological methodology and interpretation. This setting was also conducive to open dialogues concerning more personal experiences including family histories, cultural practices, and personal opinions regarding local heritage and archaeological materials. These dialogues informed my interpretations of archaeological materials, but also served to illuminate the diversity in opinions and experiences among local residents at Xaltocan.

Although the open and cooperative nature of excavations ensured that research assistants were actively involved in the excavation process, this only benefitted members of the local community that were most closely tied to the archaeological project. To ensure that other community members were also able to engage with archaeological materials and voice their interpretations, I also led frequent site tours, typically for children from local schools, but also for interested passersby. Although I led many site tours early in excavations, as the process continued such tours were limited considerably due to a number of factors. First, the land I worked on was private property, surrounded completely by large buildings, and was not as easily accessible or visible as many of the

places where my predecessors worked. This meant that for school tours to come view excavations, they necessarily traversed through private spaces. In one case, one of the local schoolchildren brought their dog along. The dog promptly killed one of the landowner's chickens, leading me to restrict the size of crowds that were permitted to visit. Second, several factors about my particular site meant that excavations were necessarily much deeper than many of my predecessors excavations had been (nearly four meters deep in some places). Thus excavation pits were much more dangerous than usual, and by the final month of excavation I felt it was unsafe to permit groups of small children to visit at all. Still, over the course of six months of excavations many locals did have the opportunity to come by and see excavations. Many came by regularly. Their questions were engaging, often enlightening, and demonstrated the enthusiasm many had for archaeological research focusing on the daily lives of Xaltocan's leaders.

If the excavation phase of research was relatively restricted, the analysis phase was quite the opposite. Although analysis involved far fewer local research assistants (as I performed the bulk of analysis on my own), many more people were able to view the collections and ask questions about the process of analysis. My analyses took place in a room in the front of the local museum, and allowed for people to easily walk by, walk up, and walk in to see what was going on. Again, these engagements allowed for people to ask questions about, for example, what different vessels were used for in the past, or how different design motifs helped us to understand the age of pottery fragments. Because so many residents of Xaltocan were familiar with the kinds of objects I was analyzing, questions were typically quite pointed. I often felt as though I was answering questions

that people had long been wondering. This experience made me realize that although the museum in Xaltocan does a wonderful job demonstrating some of the more interesting objects archaeological finds from Xaltocan, there is not enough information about diagnostic techniques. Residents seem especially interested in understanding how old objects are and exactly what they may have been used for. As of yet I have been unable to find the solution to this issue, but more informative museum displays, user-friendly texts, and classes at the town's cultural center (*casa de cultura*) may all be helpful steps toward better informing the public about the fundamentals of artifact analysis.

As a follow up to my initial project, I will conduct an engaged anthropology project at the local museum in Xaltocan in Summer 2017. This project has already received funding from the Wenner-Gren Foundation and will feature photographs, information cards, replicas of features, and encasements for archaeological materials. I am also participating in a collective book project—in collaboration with other archaeologists and members of the community—to create a comprehensive text, in Spanish, outlining the archaeological history of Xaltocan and the legacy of community engagement. The book will be printed and distributed at the local museum and will also be made available to the public in digital format.

Conclusions

The collaborative efforts outlined above represent a conscious move toward democratizing and decolonizing archaeological research. My dissertation project followed in the footsteps of my predecessors, drawing on effective models for

community engagement and outreach. In addition to these proven techniques, I also developed new methods for incorporating local voices. In particular, designing research in collaboration with the modern community of Xaltocan. This process ensured that the project was tailored to the specific interests and concerns of modern residents of Xaltocan, and was informed by local identity politics and daily struggles.

As community engagement is increasingly recognized as an ethical imperative, we must also acknowledge the great epistemological value of alternative interpretations—especially those made by individuals and communities that are most affected by archaeological research. In the case of Xaltocan, different kinds of research questions were developed in light of early collaborations. These questions were directed toward determining the nature of community identity and shared cultural practices as opposed to emphasizing differences across class lines, and served modern goals of strengthening community solidarity and celebrating local patrimony. Although the specific methods and research questions I used were tailored specifically to Xaltocan, many of the collaboration strategies I adapted for my dissertation project have transformative applications for archaeological research in the Basin of Mexico—and potentially for other parts of the world.

CHAPTER 9

CONCLUSION

This dissertation has aimed to present a wholly different approach to studying leaders and the nature of leadership in the past. Benefitting from previous research at commoner spaces in Xaltocan, and recognizing that like today, support from the local community and a shared identity-making practices must have been essential for maintaining authority in the past, I endeavored to determine how the practices of Xaltocan's leaders were informed by the practices of commoners. Furthermore, by examining the different ways that archaeologists, ethnohistorians, and Xaltocan's descendant community have interpreted and placed value on certain aspects of Xaltocan's past, through this dissertation I also strove to shed light on the various ways that understandings of the past have been influenced by the situated knowledge of the interpreter. Working closely with the community of Xaltocan, a series of broad research questions guided this research (see Chapters 1 and 8). The first series of questions focused on how leadership (and the practices of Xaltocan's leaders) changed over time in response to political turbulence. The second series of questions focused on how Xaltocan's leaders created and expressed identities, and how these identities were used to reinforce their social station but also to maintain local support.

Until my excavations of Cerrito Central, there has been very little archaeological research concerning Xaltocan's Postclassic leaders and pre-Aztec political organization. Despite lacking material evidence, historical texts and analogous archaeological research from elsewhere in the Basin of Mexico allowed archaeologists working at Xaltocan to gain some insight into the nature of leadership at the site. However, because the majority of previous archaeological research at Xaltocan focused on commoner spaces and practices, the resultant inferences about how Xaltocan was ruled have been necessarily general. In many cases these archaeological investigations framed Xaltocan's leaders as the antithesis to the commoners they were studying. While such an approach was undoubtedly useful for broadly classifying the socio-political status of commoners, it also implicitly reinforced social class binaries. This is not to critique previous research at Xaltocan, which has made extremely important contributions to our understanding of everyday life in the Postclassic Basin of Mexico, but rather to demonstrate how, when lacking proper material evidence, certain preconceptions about social and political relationships in the past are easily, if inadvertently, reproduced.

To better understand the nuanced relationship between Xaltocan's leaders and the wider community, my study of Cerrito Central focused on the everyday practices of Xaltocan's leaders. Drawing on theories of practice and identity (see Chapter 2), my research was geared toward discovering the ways that the actions of Xaltocan's leaders reflected the nature of their social position within their home community. Furthermore, building from these theoretical underpinnings allowed me to examine how a variety of actions and decisions—including everyday activities, but also building choices and ritual

practices—reflected the ways that Xaltocan’s leaders formed a distinct identity as leaders, but also reinforced a shared identity with the wider community. Thus, the thrust of my research, and particularly the emphasis on the common practices shared across social class lines and used to unify the community and create a collective identity, has represented a wholly different approach to understanding the nature of leadership at Xaltocan. This approach broke from previous archaeological research at Xaltocan and challenged inferences about Xaltocan’s socio-political structure, which had been informed primarily by ethnohistorical records.

Outlined in detail in Chapter 3, the principal sources for much of what archaeologists have long thought about the political system at Xaltocan has been gleaned from ethnohistorical sources penned during the sixteenth and seventeenth centuries. In some cases the details concerning Xaltocan’s leaders are quite explicit. Don Pablo Nazareo de Xaltocan’s letter to the King of Spain detailed the glory of Xaltocan’s rulers and their long legacy in the Basin of Mexico, including marriage alliances forged with other Basin of Mexico centers. In most cases however, colonial documents only briefly mention Xaltocan’s leaders, thus many of the details concerning the extent of their political power, often including their ability to marshal military forces, are implied. The biases intertwined with these sources, the majority of which were penned after the arrival of the Spanish, cast doubt on the accuracy of some of their accounts. In particular, I question the ability of sixteenth and seventeenth century historians to accurately depict how polities that rose to power in the Early Postclassic and lasted for hundreds of years as independent polities were politically organized before they were incorporated into the

Aztec empire. This may have been especially true for places like Xaltocan, which according to historical records (but also corroborated by previous archaeological research at Xaltocan and by evidence presented in this dissertation) underwent an especially dramatic political shift between the pre-Aztec and Aztec periods. Thus, the system of political organization in place at Xaltocan at the time of the Spanish arrival was conceivably very different from the system of political organization in place at Xaltocan before the Aztec conquest. Given the book burnings and intentional erasures of history that were perpetrated by the Aztecs and the Spaniards before the colonial texts cited in this dissertation were penned, it seems even less likely that colonial period historians would have been capable of understanding and accurately recording the nuances of political organization at pre-Aztec city-states.

In and of themselves, these written histories, regardless of their veracity, are not necessarily problematic for archaeologists. After all, dealing in material remains, archaeologists are uniquely poised to recover evidence that may corroborate, invalidate, or add nuance to written histories. However, in instances where little archaeological evidence exists, written histories are sometimes used to contextualize or guide archaeological research in ways that could be problematic. Specific examples from Xaltocan's historical record are addressed in Chapter 7 to illustrate this point. Chapter 7 explores three details of Xaltocan's historical narrative that have long been left unchallenged: the taxation system administered by Xaltocan's pre-Aztec leaders, the war with Cuauhtitlan, and nature of social class structure at Xaltocan and within the greater region. Using archaeological evidence from Xaltocan and elsewhere in the Basin of

Mexico, certain details of these historical assertions are called into question. Although these aspects of Xaltocan's history are not disproven, they are reinterpreted using material evidence. The reinterpretations acknowledge that political and social systems in the past, including social class divisions, the nature of leadership, and conflict, were far more nuanced than the historical record suggests.

Given the implicit problems with written histories elucidated in Chapters 3 and 7, I have argued that archaeologists should be cautious in their use of written histories to contextualize their research—especially in the development of research questions and in the formulation interpretations. As an alternative, and in an attempt to avoid skewing research based on unsubstantiated, and biased (privileging colonial worldviews and elite perspectives) preconceptions about a site's history, archaeologists should consider incorporating the perspectives of individuals from outside of the discipline, especially those who may also have a stake or special interest in archaeological findings. In the case of my own project at Xaltocan, these individuals were members of the descendant community still living in Xaltocan today. Community archaeology, which is described in more detail in Chapter 8, is increasingly common among archaeologists working across the globe because it democratizes our practice and works towards decolonizing archaeology. In addition, and more relevant to the current topic (that is, alternative viewpoints) community archaeology also has the potential to make significant epistemological contributions by infusing archaeological interpretations with novel, well-founded, and culturally-informed perspectives.

The ways that community archaeology projects engage communities are diverse. At Xaltocan, archaeologists have used a number of strategies to ensure that their research would reach the wider community. In most cases these projects have included major outreach components, especially in partnership with the local museum, and in some instances projects have found ways to welcome local interpretations of archaeological findings (Overholtzer 2012). My own research differed from previous projects in its attempt to involve local voices from the project's initiation. Guided by local perceptions of the past and especially local interest in Xaltocan's past glory as the capital of the Otomí city-state, my research focused on those aspects of Xaltocan's history that served to unify the community. Knowing that my project would likely revolve around the practices of Xaltocan's leaders, this meant that rather than focusing on the elements that *separated* Xaltocan's leaders apart from the wider community, my research would attempt to understand the practices that *united* the community of Xaltocan and distinguished it from contemporaneous Basin of Mexico centers and from the subsequent Aztec empire.

Instrumental in understanding shared practices at Xaltocan was a focus on everyday life. Using practice theory and theories of identity as guiding frameworks, my research examined evidence for the day-to-day activities of Xaltocan's leaders. This approach was somewhat unusual, because rarely do archaeological studies of leaders focus so heavily on everyday activities. Rather, they typically focus on the most extraordinary or distinctive practices, especially elaborate public events and displays of conspicuous consumption. While studies of these objects and their meanings have made

significant contributions to our understanding of the ways that past leaders projected power and authority, the pictures they paint are often incomplete. By focusing on the canonized images of rulers—those personas carved in stone or written about in texts—archaeologists perpetuate idealized representations of rulers, and fail to recognize that they were also real people.

Studies of commoners, on the other hand, which have increased in recent decades, have provided greater insights into the everyday life practices of the majority of ancient populations. Household archaeologies, which focus primarily on the material remains from inside and outside of houses, have made especially important contributions to our understanding of the complex daily lives of commoners and have helped to shed light on the activities of individuals that have often been omitted from archaeological studies—particularly women and children. They have also illuminated the significance of domestic production practices, which we now know were central to many ancient economies. Despite these breakthroughs, methodologies adapted for household archaeology continue to be used almost exclusively for archaeological investigations of commoner spaces. Studies of elites, continue to be conducted in much the same way they always have, with disproportionate emphasis on the objects and features that reflect the most extraordinary moments of leaders' lives, minimizing or overlooking evidence for everyday life. The fact that these two fundamentally different approaches to understanding the past have long been used to differentially study people that occupied different social classes, has resulted in the perpetuation of “elite-commoner” binaries, and a

intensification of the perceived differences between the lived experiences of leaders and commoners.

In an attempt to move past perpetuating social class binaries, my research at Cerrito Central took advantage of the methodological strides that have been made to understand the domestic practices of commoners. Using the “house” as a lens, I adapted methodologies that have been used for investigating day-to-day household practices to study the everyday lives of leaders. This approach is useful for a number of reasons, but especially because when the archaeological remains of commoners and leaders are studied using similar methodologies, the resultant datasets are easily comparable. In the case of Xaltocan, wherein the vast majority of archaeological research has focused on commoner spaces, this approach allowed me to easily determine the areas in which the practices of Xaltocan’s leaders converged or diverged with the practices observed throughout the wider community. Chapter 4 compares the frequencies of different artifact types recovered from Cerrito Central and site-wide data collected elsewhere at Xaltocan. These comparisons, and especially the surprising overlap in patterns of data from Cerrito Central and elsewhere at the site, suggest that the lived experiences of commoner and leaders were more intertwined, even dialectical, than initially expected. Using similar methodologies for studying the practices of leaders and commoners facilitates a more integrated study of domestic practices across social class lines. In this way, we may begin to recognize that although Xaltocan’s leaders occupied a distinct social class, they also participated in many of the same everyday practices as other members of the community.

In addition to serving as useful comparative data, the data collected by previous researchers as Xaltocan also afforded me the unique opportunity to frame my research based on what had already been discovered about commoners, as opposed to expectations. This is important because expectations about leaders, which may be based on written histories (problematized above) or other studies of leaders (also, problematized above), have the potential to greatly influence the trajectory of archaeological research and resultant interpretations. Thus, framing my research using local commoner practices as the baseline, was more conducive to recognizing shared practices across the community, and to honing in on the practices and symbol systems that may have been used to create and maintain a local identity.

Chapter 5 explores the architectural strategies used by Xaltocan's leaders to house their everyday practices. Monumental in scale, the architecture recovered from Cerrito Central asserted the authority of Xaltocan's leaders, but was also used to project community identity. Using the architecture of Xaltocan's commoners as the baseline, I found that although Xaltocan's leaders constructed large, high-quality buildings but they used many of the same building materials that were used by commoners. In particular, the use of adobe bricks to construct a large basal platform at Cerrito Central indicates that rather than procuring large stones from the mainland, Xaltocan's leaders chose to use a construction medium that was used widely across the ancient town (especially for the houses of commoners). Although the significance of this decision is unclear, at the very least it indicates that some architectural strategies (by necessity or by choice) were shared across the community, regardless of social class.

Orientation of the structures recovered from Cerrito Central were also analyzed in comparison to structures documented elsewhere in the town. These comparisons indicated that over time, and even as political regimes changed, Xaltocan's leaders consistently oriented their structures slightly east of north, at the same general orientation as commoner structures. This adherence to local orientations suggests that the actions and decisions of Xaltocan's leaders were at least partially structured by community standards and longstanding norms. Although Chapter 5 describes the numerous ways in which the structures successively built atop Cerrito Central were different (in scale and quality) from other structures found across the community, framing my archaeological research using extant commoner data as a baseline facilitated the observation of community-wide continuities that might have otherwise been missed. Thus, this approach facilitated the recognition of the way that Xaltocan's leaders, even as they asserted their authority, also sought to solidify their relationship with their home community.

Chapter 6 demonstrated the ways that Xaltocan's leaders practiced private and public rituals over time. The rituals of Xaltocan's leaders appear to have differed markedly from the rituals practices of Xaltocan's commoners. For example, at least some of the rituals practiced by Xaltocan's leaders were cloistered, confined to a small room that would allow for only a small group to participate. Commoner rituals, on the other hand, typically took place in communal courtyards and would have been accessible to everyone living in the household. Xaltocan's leaders also used neatly aligned potsherds—which presumably had been previously discarded—to outline ritual space. Potsherds were placed along the wall foundations surrounding a ritual room and were used to create ritual

surfaces contained within the room. This practice has not been observed elsewhere at Xaltocan, or elsewhere in the Basin of Mexico. Although Xaltocan's leaders appeared to have engaged in ritual practices that were quite esoteric, there were still some aspects of these rituals that they had in common with the wider community. In particular, burning events appear to have been central to all rituals at Xaltocan (this is also true throughout the Basin of Mexico). Remnants of censers and braziers were found in ritual contexts at Cerrito Central as well as at commoner houses throughout Xaltocan. Xaltocan's rulers also appear to have made their ritual practices increasingly public over time, as ritual space was moved from an enclosed room to an open patio. The practices performed in this space, one of which may have been an early iteration of a New Fire Ceremony, appear to have been more inclusive and may have even involved community members. As with much of the data presented throughout this dissertation and summarized in this chapter, the trend toward openness in ritual practice suggests that Xaltocan's leaders did increasingly make efforts to nurture local relationships.

As a complete body of work, this dissertation has demonstrated that by using an alternative approach to studying leadership and socio-political dynamics, which emphasizes shared practices across social class lines, we may begin to better understand the complex social and political relationships that structured central Mexican city-states during the Postclassic. This work has also demonstrated that studying leaders does not necessitate privileging the history of elites over the history of commoners. Rather, in the case of my research specifically, by contextualizing the practices of leaders with commoner practices we develop a more complex and nuanced sense of how community

members across social class lines were engaging in shared practices and co-creating common identities. Today, the community of Xaltocan is united based on a shared pride in local patrimony. Recognizing that similar emotional and social bonds that bind communities today also bound communities that came before, I argue that the inhabitants of the Postclassic island community of Xaltocan also experienced a sense of shared, common identity. This community identity was expressed and perpetuated by local leaders, but also informed and inspired by the community at large.

The initial goals of this dissertation were to develop a new approach for studying leaders in the past and to demonstrate that by incorporating descendant voices from the project's onset we are better positioned to understand the past through an alternative lens. I believe that in many ways these goals were achieved but they have also opened the door to future endeavors. Xaltocan is only one case study from a time period and in a part of the world wherein numerous diverse polities thrived. My research has demonstrated the many ways that our understanding of Xaltocan had been misinformed based on biased ethnohistorical documents, which privileged colonial and Aztec histories, but did not necessarily accurately recount the histories of places that existed prior to the formation of the Aztec Triple Alliance. If this was the case for Xaltocan, it is possible that the histories of other Postclassic polities have been similarly misunderstood or misrepresented. Moving forward, archaeological research at other Postclassic towns and centers in the Basin of Mexico, especially at those that pre-dated the formation of the Aztec empire, will lead to a greater understanding of how polities differed from one another. Specifically, intra-community studies may be the key to recognizing the great diversity in

how pre-Aztec Basin of Mexico polities were organized. Furthermore, as my research at Xaltocan (and the research of my predecessors) has demonstrated how useful local perspectives can be in directing research, I would hope that moving forward archaeological projects in the Basin of Mexico (but also across the world) continue to seek out new ways to meaningfully incorporate local peoples perspectives and interpretations.

REFERENCES

- Aimers, James J., and Prudence M. Rice
2006 Astronomy, Ritual, and the Interpretation of Maya "E-Group" Architectural Assemblages. *Ancient Mesoamerica* 17(1):79-96.
- Alva Ixtlilxochitl, Don Fernando de
1891 *Obras históricas*. A. Chavero, transl. Volume 1-2. Mexico: La Secretaria de Fomento.

1975-77 *Obras históricas*. Ciudad de México, D.F.: Universidad Nacional Autónoma de México.
- Anawalt, Patricia R.
1988 Pageantry of Aztec Warfare as Reflected in Military Attire. *In* *Smoke and Mist: Mesoamerican Studies in Memory of Thelma D. Sullivan*. J.K.J.a.K. Dakin, ed, Vol. 402. Oxford: BAR.
- Anders, Ferdinand, Maarten Jansen, and Luis Reyes Garcia
1991 *El libro del Ciuacoatl : homenaje para el ano del Fuego nuevo : libro explicativo del llamado Codice borbonico*. Graz: Akademische Druck- u. Verlagsanstalt.
- Ashmore, Wendy
1991 Site-Planning Principles and Concepts of Directionality among the Ancient Maya. *Latin American Antiquity* 2(3):199-226.

1992 Deciphering Maya Architectural Plans. *In* *New Theories on the Ancient Maya*. E.C. Danien and R.J. Sharer, eds. Pp. 173-184. Philadelphia: The University Museum of University of Pennsylvania.

2002 Decisions and Dispositions: Socializing Spatial Archaeology. *American Anthropologist* 104(4):1172-1183.

2009 Mesoamerican Landscape Archaeologies. *Ancient Mesoamerica* 20(2):183-187.
- Ashmore, Wendy, and Jeremy A. Sabloff
2002 Spatial orders in Maya civic plans. *Latin American Antiquity*:201-215.
- Ashmore, Wendy, and Richard R. Wilk
1988 Household and Community in the Mesoamerican Past. *In* *Household and Community in the Mesoamerican Past*. In *Household and Community in the Mesoamerican Past*. R.R. Wilk and W. Ashmore, eds. Pp. 1-27. Albuquerque: University of New Mexico Press.

- Atalay, Sonya
 2006 Indigenous archaeology as decolonizing practice. *The American Indian Quarterly* 30(3):280-310.
- Aveni, Anthony F.
 1975 Archaeoastronomy in Pre-Columbian America. *In* Selected papers from a symposium of the American Association for the Advancement of Science and the Consejo Nacional de Ciencia y Tecnologia. A.F. Aveni, ed. Austin: University of Texas Press.
 2003 Archaeoastronomy in the Ancient Americas. *Journal of Archaeological Research* 11(2):149-191.
- Aveni, Anthony F., and Sharon L. Gibbs
 1976 On the Orientation of Precolumbian Buildings in Central Mexico. *American Antiquity* 41(4):510-517.
- Ávila Lopez, Raúl
 2006 Mexicaltzingo: Arqueología de un reino culhua-mexica. Mexico City: Instituto Nacional de Antropología e Historia.
- Barlow, Robert H.
 1949 *The Extent of the Empire of the Culhua Mexica*. Berkeley: University of California Press.
 1999 Textos De Xaltocan. *In* Escritos Diversos J.M. Ruiz and E. Límon, eds. Pp. 169-195, Vol. 7. Mexico, D.F. : Instituto Nacional de Antropología e Historia.
- Battle-Baptiste, Whitney
 2007 The Other From Within: A Commentary. *In* Past Meets Present: Archaeologists Partnering with Museum Curators, Teachers, and Community Groups. J.H.J.J.a.S. Baugher, ed. Pp. 101-106: Springer.
 2010 An Archaeologist Finds Her Voice: A Commentary on Colonial and Postcolonial Identities. *In* Handbook of Postcolonial Archaeology. J.L.a.U.Z. Rizvi, ed. Pp. 387-390, Vol. 3. London: Routledge.
 2011 *Black Feminist Archaeology*. Walnut Creek, CA: Left Coast Press.
- Benson, Elizabeth P.
 1981 Mesoamerican Sites and Worldviews: A Conference at Dumbarton Oaks, October 16th and 17th 1976. Washington, D.C. : Dumbarton Oaks Publication Service.

Berdan, Frances F.

- 1982 The Aztecs of Central Mexico: An Imperial Society. New York: Holt, Rinehart and Winston.
- 1987 The Economics of Aztec Luxury Trade and Tribute. *In* The Aztec Templo Mayor. E.H. Boone, ed. Pp. 161-183. Washington, D.C.: Dumbarton Oaks Research Library.
- 1992 The Codex Mendoza. Berkeley: University of California Press.
- 1994 Economic alternatives under imperial rule: The eastern Aztec empire. *In* Economies and Politics in the Aztec Realm. Pp. 291-312. Albany, NY: Institute for Mesoamerican Studies.
- 2005 The Aztecs of central Mexico: an Imperial society. Belmont, CA: Thomson Wadsworth.
- 2008 Concepts of Ethnicity and Class in Aztec-Period Mexico. *In* Ethnic Identity in Nahua Mesoamerica: the view from archaeology, art history, ethnohistory, and contemporary ethnography. F.F. Berdan, J.K. Chance, A.R. Sandstrom, B. Stark, J. Taggart, and E. Umberger, eds. Pp. 105-132. Salt Lake City: University of Utah Press.

Berdan, Frances F., Richard E. Blanton, Elizabeth Hill Boone, Mary G. Hodge, Michael E. Smith, Emily Umberger, eds.

- 1996 Aztec Imperial Strategies. Washington, D.C.: Dumbarton Oaks Pre-Columbian Conference Proceedings.

Berdan, Frances F. and Patricia Rieff Anawalt

- 1997 Essential Codex Mendoza. Berkeley: University of California Press.

Bierhorst, John

- 1992 History and Mythology of the Aztecs: The Codex Chimalpopoca. Tuscon: The University of Arizona Press.

Blanton, Richard E. and Jeffrey R. Parsons

- 1971 Appendix I: Ceramic Markers Used for Period Designations. *In* Prehistoric Settlement Patterns in the Texcoco Region. J.R. Parsons, ed. Ann Arbor: Memoirs No. 3 Museum of Anthropology, University of Michigan.

Borbonicus, Codex

- 1974 Codex Borbonicus. Graz: ADEVA.

- Bourdieu, Pierre
 1977 *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Brady, James E.
 1997 *Settlement Configuration and Cosmology The Role of Caves at Dos Pilas*. *American Anthropologist* 99(3):602-618.
- Bruchac, Margaret, Siobhan Hart, and H. Martin Wobst, ed.
 2010 *Indigenous Archaeologies: A Reader on Decolonization*. Walnut Creek: Left Coast Press.
- Brumfiel, Elizabeth , Tamara Salcedo, and David Schafer
 1994 *Lip Plugs of Xaltocan: Function and Meaning in Aztec Archaeology*. *In Economics and Politics in the Aztec Realm*. M. Hodge and M. Smith, eds. Pp. 113-131. Albany: Institute for Mesoamerican Studies: University of New York at Albany.
- Brumfiel, Elizabeth M.
 1983 *Aztec empire Making: Ecology, Structure and the Origins of the State*. *American Anthropologist* 85(2):261-284.
- 1991a *Tribute and Commerce in Imperial Cities: The Case of Xaltocan, Mexico*. *In Early State Economies*. H.J.M. Claessen and P.v.d. Velde, eds. New Brunswick: Transaction Publishers.
- 1991b *Weaving and Cooking: Women's Production in Aztec Mexico*. *In Engendering Archaeology: Women and Prehistory*. J.M. Gero and M.W. Conkey, eds. Pp. 224-251. Oxford: Blackwell.
- 1992 *Distinguished Lecture in Archaeology: Breaking and Entering the Ecosystem – Gender, Class and Faction Steal the Show*. *American Anthropologist* 94(3):551-567.
- 1994 *Factional competition and political development in the New World: An introduction*. *In Factional competition and political development in the New World*. E.M. Brumfiel and J.W. Fox, eds. Pp. 3-13.
- 1996 *The Quality of Tribute Cloth: The Place of Evidence in Archaeological Argument*. *American Antiquity* 61(3):453-462.
- 1996 *Figurines and the Aztec empire: Testing the Effectiveness of Ideological Domination*. *In Gender and Archaeology*. R.P. Wright, ed. Pp. 144-166. Philadelphia: University of Pennsylvania Press.

- 1998 The Multiple Identities of Aztec Craft Specialists. *Archaeological Papers of the American Anthropological Association* 8(1):145-152.
- 2000 Making History in Xaltocan, Parts I and II. *In Working Together*. K. Dongoske, M. Aldenderfer, and K. Doehner, eds. Pp. 181-190. Washington, D.C.: Society for American Archaeology.
- 2004 Feasting and Figured Worlds in Postclassic Mexico. *In Mesoamerican Archaeology: Theory and Practice*. J.A.H.a.R.A. Joyce, ed. Pp. 239-264. Oxford: Blackwell.
- 2005a Ceramic chronology at Xaltocan. *In Production and Power at Postclassic Xaltocan*. E.M. Brumfiel, ed. Pp. 117-152. Mexico City: Instituto Nacional de Antropología e Historia.
- 2005b La Producción Local y el Poder en el Xaltocan Posclásico - Production and Power at Postclassic Xaltocan. Mexico City: Instituto Nacional de Antropología e Historia.
- 2006 Cloth, Gender, Continuity, and Change: Fabricating Unity in Anthropology. *American Anthropologist* 108(4):862-877.
- 2007 Solar disks and solar cycles: spindle whorls and the dawn of solar art in Postclassic Mexico. *In Interpreting Household Practices: Reflections on the Social and Cultural Roles of Maintenance Activities*, eds. S. Montón-Subías, P. González-Marcén, M. Picazo & M. Sánchez-Romero, . C.M.F. Paloma González Marcén, Sandra Montón Subías, Marina Picazo Gurina, ed. Pp. 91–113. Barcelona: Treballs d'Arqueologia.
- 2009 Estrategias de las Unidades Domésticas en Xaltocan Posclásico, México. Mexico City: Instituto Nacional de Antropología e Historia.
- 2010 Estratégias de las Unidades Domésticas en Xaltocan Posclásico, México: Informe Final al Instituto Nacional de Antropología e Historia.: Instituto Nacional de Antropología e Historia.
- 2011 Technologies of Time: Calendrics and Commoners in Postclassic Mexico. *Ancient Mesoamerican* 22:53-70.

Brumfiel, Elizabeth M., and Mary D. Hodge

- 1996 Interaction in the Basin of Mexico: the case of Postclassic Xaltocan. *Arqueología Mesoamericana: Homenaje a William T. Sanders* 417-437.

- Brumfiel, Elizabeth M., and John W. Fox
 2003 *Factional Competition and Political Development in the New World*. Cambridge: Cambridge University Press.
- Burkhart, Louise M.
 1989 *The Slippery Earth: Nahuatl-Christian Moral Dialogue in Sixteenth-Century Mexico*. Tucson: University of Arizona Press.
- Calnek, Edward E.
 1978 The City-State in the Basin of Mexico: Late Pre-Hispanic Period. *In* *Urbanization in the Americas from its Beginnings to the Present*. J.E.H. R.P. Schaedel, and N. Scott-Kinzer, ed. Pp. 463-470. Mouton: The Hague.
- 1982 Patterns of Empire Formation in the Valley of Mexico, Late Postclassic Period, 1200-1521. *In* *The Inca and Aztec empires 1400-1800: Anthropology and History*. G.A. Collier, R.I. Rosaldo, and J.D. Wirth, eds. Pp. 43-62. New York: Academic Press.
- Canseco, Vincourt J.
 1966 *La Guerra Sagrada*. Mexico City.
- Carballo, David M.
 2007 Effigy vessels, religious integration, and the origins of the central Mexican pantheon. *Ancient Mesoamerica* 18:53-67.
- 2011 Advances in the Household Archaeology of Highland Mesoamerica. *Journal of Archaeological Research* 19:133-189.
- Carrasco, Pedro
 1984 Royal Marriages in Ancient Mexico. *In* *Explorations in Ethnohistory*. H.R.H.a.H.J. Prem, ed. Pp. 41-81. Albuquerque: University of New Mexico Press.
- Carrasco Pizana, Pedro
 1950 *Los Otomíes: Cultura e historia prehispánicas de los pueblos mesoamericanos de habla Otomiana*. Mexico, D.F. : Instituto Nacional de Antropología e Historia.
- Castañeda, Francisco de
 1986 Relación de Tequizistlán y su partido. *In* *Relaciones geográficas del siglo XVI, México*. I.R. Acuña, ed. Pp. 211-251. Mexico City: Universidad Nacional Autónoma de México.
- Chapman, John
 2000 *Fragmentation in Archaeology: People, places, and broken objects in the Prehistory of South Eastern Europe*. New York: Routledge.

- Charlton, Thomas H.
1966 Aztec Ceramics: The Early Colonial Period. Mexico City: Departamento de Monumentos Prehispánicos.
- Charlton, Thomas H., Deborah L. Nichols, and Cynthia Otis Charlton
1991 Aztec craft production and specialization: Archaeological evidence from the city-state of Otumba, Mexico. *World Archaeology* 23(1):98-114.
- Charlton, Thomas H., and Spence, Michael W.
1982 Obsidian exploitation and civilization in the Basin of Mexico. *Anthropology* 6:7-86.
- Chase, Diane Z., and Arlen F. Chase
2003 *Mesoamerican Elites: An Archaeological Assessment*. Norman: University of Oklahoma Press.
- Chimonas, Susan
2005 Occupational History of Prehispanic Xaltocan. *In* Production and Power at Postclassic Xaltocan. E.M. Brumfiel, ed. Pp. 169-194. Mexico City and Pittsburgh: Instituto Nacional de Antropología e Historia and University of Pittsburgh.
- Cobean, Robert H., James R. Vogt, Michael D. Glascock, and Terrance L. Stocker
1991 High-Precision Trace Element Characterization of Major Mesoamerican Obsidiana Sources and Further Analyses of Artifacts from San Lorenzo Tenochtitlan, Mexico. *Latin American Antiquity* 2:69-91.
- Coe, Michael D.
1977 *Mexico* (Second Edition). New York: Praeger.
- Cohen, Anthony P., ed.
2000 *Signifying Identities: Anthropological Perspectives on Boundaries and Contested Values*. London: Routledge.
- Craib, Ian
1998 *Experiencing identity*. London: Sage.
- Cuauhtitlan, Anales de
1992 History and Mythology of the Aztecs: The Codex Chimalpopoca. J. Bierhorst, transl. Tucson: University of Arizona Press.

- Davies, Nigel
1974 *The Aztecs: A History*. Norman: University of Oklahoma Press.
- de Certeau, Michel
1984 *The Practice of Everyday Life*. Berkeley: University of California Press.
- De Lucia, Kristin
2010 *A Child's House: Social Memory, Identity, and the Construction of Childhood in Early Postclassic Mexican Households*. *American Anthropologist* 112(4):607-624.

2011 *Domestic Economies and Regional Transition: Household Production and Consumption in Early Postclassic Mexico, Northwestern*.

2014 *Everyday Practice and Ritual Space: the Organization of Domestic Ritual in Pre-Aztec Xaltocan, Mexico*. *Cambridge Archaeological Journal* 24(3):379-403.
- De Lucia, Kristin, and Lisa Overholtzer
2014 *Everyday action and the rise and decline of ancient polities: Household strategy and political change in Postclassic Xaltocan, Mexico*. *Ancient Mesoamerica* 25(2):441-458.
- Del Paso Y Troncoso, Francisco
1940 *Carta al rey don Felipe II, de don Pablo Nazareo de Xaltocan*. In *Epistolario de Nueva Espana (1554-1569)*. Pp. 89-108, Vol. 586. Mexico.
- Díaz del Castillo, Bernal
1956 *The Discovery and Conquest of Mexico*. A.P. Maudslay, transl. New York: Noonday Press.
- Díaz-Andreu, Margarita
2017 *Introduction to the themed section 'digital heritage and the public'*. *International Journal of Heritage Studies* 23(5):404-407.
- Díaz-Andreu, Margarita, Sam Lucy, Stasa Babic, David N. Edwards
2005 *The Archaeology of Identity: Approaches to Gender, Age, Atatus, Ethnicity and Religion*. London: Routledge.
- Dobres, Marcia-Anne, and John E. Robb
2000 *Agency in Archaeology*. London: Routledge.

- Duran, Diego
 1964 *The Aztecs: The History of the Indies of New Spain*. D.H.a.F. Horcasitas, transl. New York.
- Elson, Christina M.
 1999 An Aztec Palace at Chiconautl, Mexico. *Latin American Antiquity* 10(2):151-167.
- Elson, Christina M., and Michael E. Smith
 2001 Archaeological Deposits from the Aztec New Fire Ceremony. *Ancient Mesoamerica* 12(2):157-174.
- Espejel, Claudia
 2005 Domestic Structures in Xaltocan. *In Production and Power at Postclassic Xaltocan*. E.M. Brumfiel, ed. Pp. 255-266. Mexico City: Instituto Nacional de Antropología e Historia.
- Evans, Susan Toby
 1998 Sexual Politics in the Aztec Palace: Public, Private, and Profane. *RES: Anthropology and Aesthetics*, No. 33 *Pre-Columbian States of Being*:166-183.
- 2004 Aztec Palaces and Other Elite Residential Architecture. *In Palaces of the Ancient New World*. S.T. Evans and J. Pillsbury, eds. Pp. 7-58. Washington, D.C.: Dumbarton Oaks.
- 2006 Antecedents of the Aztec Palace: Palaces and Political Power in Classic and Postclassic Mexico. *In Palaces and Power in the Americas: From Peru to the Northwest Coast*. J.J. Christie and P.J. Sarro, eds. Pp. 285-309. Austin: University of Texas Press.
- Evans, Susan T., and Ann Corinne Freter
 1996 Teotihuacan Valley Mexico, Postclassic Chronology. *Ancient Mesoamerica* 7:267-280.
- Franco, José Luis
 1945 Comentarios Sobre Tipología e Filogenía de la Decoración Negra Sobre Color Natural del Barro en la Cerámica 'Azteca II'. *Revista Mexicana de Estudios Antropológicos* 7:163-186.
- 1949 Algunos problemas relativos a la ceramica azteca. *Mexico Antiguo* 7:162-208.
- 1957 Motivos Decorativos en la Cerámica Azteca. Mexico City: Museo Nacional de Antropología.

- Franklin, Maria and Larry McKee
 2004 African diaspora archaeologies: present insights and expanding discourses. *Historical Archaeology* 38(1):1-9.
- Garber, James F.
 1984 A Functional Assessment and Contextual Analysis of the Sherd Disks from Cerros, Northern Belize. *In Cerámica de la Cultura Maya*. Pp. 76-83, Vol. 13.
- García, Raúl, Felipe Ramírez, Lorena Gámez, and Luis Córdoba
 1998 Chimalhuacan: Rescate de una Historia. Mexico City: Instituto Nacional de Antropología e Historia.
- Giddens, Anthony
 1979 *Central Problems in Social Theory: Action, structure, and contradiction in social analysis*. Berkeley, CA: University of California Press.
- 1981 *Contemporary Critique of Historical Materialism, Volume 1: Power, Property and the State*.
- 1984 *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.
- Gillespie, Susan D.
 1989 *The Aztec Kings: The Construction of Rulership in Mexica History*. Tucson: University of Arizona Press.
- 2008 History in Practice: Ritual Deposition at La Venta Complex A. *In Memory Work: Archaeologies of Material Practice*. B.J. Mills and W.H. Walker, eds. Pp. 109-136. Santa Fe: School for Advanced Research
- Griffin, James B., and Antonieta Espejo
 1947 La Alfarería Correspondiente al Último Periodo de Ocupación Nahua del Valle de México, I. *In Tlatelolco a Traves de los Tiempos*. Pp. 3-20, Vol. 6.
- 1950 La Alfarería Correspondiente al Último Periodo de Ocupación Nahua del Valle de México, II. *In Tlatelolco a Traves de los Tiempos*. Pp. 3-54, Vol. 9.
- Guzman, Nuño Beltrán de
 1960 *Crónicas de la coquista de Nuevo Galicia y memoria de Guzman*. Guadalajara: Instituto Jalicense de Antropología e Historia.
- Hamann, Byron E.
 2008 Chronological Pollution: Potsherds, Mosques, and Broken Gods before and after the Conquest of Mexico. *Current Anthropology* 49(5):803-836.

- Hare, Timothy, and Michael E. Smith
 1996 A New Postclassic Chronology for Yautepec, Morelos. *Ancient Mesoamerica* 7:281-297.
- Harner, Michael J.
 1977 The Enigma of Aztec Sacrifice. *Natural History* 86(4):47-51.
 Harrison-Buck, Eleanor, ed.
- 2012 Power and identity in archaeological theory and practice : case studies from ancient Mesoamerica Salt Lake City: University of Utah Press.
- Hassig, Ross
 1988 *Aztec Warfare: Imperial Expansion and Political Control*. Norman: University of Oklahoma Press.
- 1995 *Aztec Warfare: Imperial Expansion and Political Control*. Norman: University of Oklahoma Press.
- 2001 *Time, History and Belief in Aztec and Colonial Mexico*. Austin: University of Texas Press.
- Hendon, Julia A.
 1996 Archaeological approaches to the organization of domestic labor: household practice and domestic relations. *Annual Review of Anthropology* 25:45-81.
- 2002 Social relations and collective identities: Household and community in ancient Mesoamerica. *The Dynamics of Power* 30.
- Hendon, Julia A.
 2004 Living and Working at Home: The Social Archaeology of Household Production and Social Relations. *In A Companion to Social Archaeology*. L.M.a.R.W. Preucel, ed. Pp. 272-286.
- 2006 The Engendered Household. *In Handbook of gender in archaeology*. S.M. Nelson, ed. Pp. 171-198. Oxford, UK: AltaMira Press.
- 2009 *Houses in a Landscape: Memory and Everyday Life in Mesoamerica*. Durham: Duke University Press.
- Hicks, Frederic
 1979 "Flowery War" in Aztec History. *American Ethnologist* 6(1):87-92.

- 1994 Xaltocan under Mexica Domination, 1435-1520. *In* Caciques and Their People: A Volume in Honor of Ronald Spores. J. Marcus and J. Zeitlan, eds. Pp. 67-85, Vol. Anthropological Papers, 89. Ann Arbor: Museum of Anthropology, University of Michigan.
- 1996 Class and State in Aztec Official Ideology. *In* Ideology and the Formation of Early States. H.J.M. Claessen and J.G. Oosten, eds. Pp. 256–277. Leiden: E.J. Brill.
- 2005 Mexico, Acolhuacan, and the Rulership of Late Postclassic Xaltocan: Insights from an Early Colonial Legal Case. *In* Production and Power at Postclassic Xaltocan. E.M. Brumfiel, ed. Pp. 195-206. Mexico City and Pittsburgh: Instituto Nacional de Antropología e Historia and University of Pittsburgh.
- Hirth, Kenneth G.
- 1978 Interregional Trade and the Formation of Prehistoric Gateway Communities. *American Antiquity* 43(1):35-45.
- Hodge, Mary G.
- 1984 Aztec city-states. Ann Arbor: Museum of Anthropology, University of Michigan.
- 1996 Political Organization of the Central Provinces. *In* Aztec Imperial Strategies. R.E.B. F.F. Berdan, E.H. Boone, M.G. Hodge, M.E. Smith, and E. Umberger, ed. Pp. 17-46. Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- 1998 Archaeological Views of Aztec Culture. *Journal of Archaeological Research* 6(3):195-238.
- Hodge, Mary G., and Hector Neff
- 2005 Xaltocan in the Economy of the Basin of Mexico: A View from Ceramic Tradewares. *In* Production and Power at Postclassic Xaltocan. E.M. Brumfiel, ed. Pp. 319-348. Mexico City: Instituto Nacional de Antropología e Historia.
- Hodge, Mary G., and Michael E. Smith, eds.
- 1994 Economies and Politics in the Aztec Realm. Albany: Institute for Mesoamerican Studies.
- Hong, Mai-Linh K.
- 2017 "Get Your Asphalt Off My Ancestors!": Reclaiming Richmond's African Burial Ground. *Law, Culture and the Humanities* 13(1):81-103.
- Hutson, Scott R.
- 2009 Dwelling, identity, and the Maya: relational archaeology at Chunchucmil. Lanham, MD.: AltaMira Press.

- Hutson, Scott R., and Travis W. Stanton
 2007 Cultural Logic and Practical Reason: the Structure of Discard in Ancient Maya Houselots. *Cambridge Archaeological Journal* 17(2):123-144.
- Insoll, Timothy
 2007 *The Archaeology of Identities: A Reader*. London: Routledge.
- Isaac, Barry L.
 1983 Aztec Warfare: Goals and Battlefield Comportment. *Ethnology* 22(2):121-131.
- Jones, Siân
 1997 *The Archaeology of Ethnicity: Constructing Identities in the Past and Present*. London: Routledge.
 2017 Wrestling with the Social Value of Heritage: Problems, Dilemmas and Opportunities. *Journal of Community Archaeology & Heritage* 4(1):21-37.
- Joyce, Arthur A., Laura Arnaud Bustamante, and Marc N. Levine
 2001 Commoner Power: A Case Study From the Classic Period Collapse on the Oaxaca Coast. *Journal of Archaeological Method and theory* 8(4):343-385.
- Joyce, Rosemary
 2001 Burying the Dead at Tlatilco: Social Memory and Social Identities. *Archaeological Papers of the American Anthropological Association* 10(1):12-26.
- Joyce, Rosemary A., and Susan D. Gillespie
 2000 *Beyond Kinship: Social and Material Reproduction in House Societies*. Philadelphia: University of Pennsylvania Press.
- Joyce, Rosemary A., and Jeanne Lopiparo
 2005 Postscript: Doing Agency in Archaeology. *Journal of Archaeological Method and Theory* 12(4, Agency: Methodologies for Interpreting Social Reproduction, Part 2):365-374.
- Kaplan, Flora
 1958 *The Post-Classic Figurines of Central Mexico*, Columbia University.
- Klein, Cecelia F.
 1993 "Divine Excrement": The Significance of "Holy Shit" in Ancient Mexico. *Art Journal* 52(3, Scatological Art):20-27.
- LaRoche, Cheryl J., and Michael L. Blakey
 1997 Seizing Intellectual Power: The Dialogue at the New York African Burial Ground. *Historical Archaeology* 31(3):84-106.

- Lee, Galen Brokaw and Jongsoo
 2016 Fernando de Alva Ixtlilxochitl and His Legacy. Tucson: The University of Arizona Press.
- Lee, Jongsoo
 2008 The allure of Nezahualcoyotl: Pre-Hispanic history, religion, and Nahuatl poetics. . Albuquerque: University of New Mexico Press.
- León-Portilla, Miguel
 1963 Aztec Thought and Culture: A Study of the Ancient Nahuatl Mind. J.E. Davis, transl. Norman: University of Oklahoma Press.
- Leone, Mark P., Paul R. Mullins, Marian C. Creveling, Laurence Hurst, Barbara Jackson-Nash, Lynn D. Jones, Hannah Jopling Kaiser, George C. Logan and Mark S. Warner
 1995 Can an African-American Historical Archaeology be an Alternative Voice. *In* Interpreting Archaeology: Finding Meaning in the Past. I. Hodder, ed. London: Routledge.
- Leone, Mark P., Cheryl Janifer LaRoche, and Jennifer J. Babiarcz
 2005 The Archaeology of Black Americans in Recent Times. *Annual Review of Anthropology* 34:575-598.
- Leone, Mark P., and Robert W. Preucel
 1992 Archaeology in a Democratic Society: A Critical Theory Perspective. *In* Quandaries and Quests: Visions of Archaeology's Future L. Wandsnider, ed. Pp. 115-135, Vol. No. 20: Southern Illinois University.
- Lesbre, Patrick
 2010 Fernando de Alva Ixtlilxochitl et son Histoire [de la nation] Chichimèque. Nouveaux Mondes, Mondes Nouveaux.
- Levine, Marc N. and David M. Carballo ed.
 2014 Obsidian Reflections: Symbolic Dimensions of Obsidian in Mesoamerica. Boulder: University Press of Colorado.
- Liebmann, Matthew and Uzma Z. Rizvi, ed.
 2008 Archaeology and the Postcolonial Critique. Lanham, MD: AltaMira Press.
- Little, Barbara J. and Paul A. Shackel, ed.
 2007 Archaeology as a Tool of Civic Engagement. Lanham, MD: AltaMira.
- Lockhart, James
 1992 The Nahuas After the Conquest: A Social and Cultural History of the Indians of Central Mexico, Sixteenth through Eighteenth Centuries. Stanford: Stanford University Press.

- Lohse, Jon C. & Valdez, Jr., Fred, ed.
 2005 Ancient Maya Commoners. Austin: The University of Texas Press.
- López Luján, Leonardo
 2005 The Offerings of the Templo Mayor of Tenochtitlan. Albuquerque: University of New Mexico Press.
- López Varela, Sandra L., Annelou van Gijn, and Loe Jacobs
 2002 De-mystifying Pottery Production in the Maya Lowlands: Detection of Traces of Use-Wear on Pottery Sherds through Microscopic Analysis and Experimental Replication. *Journal of Archaeological Science* 29:1133-1147.
- Mack, Mark E., and Michael L. Blakey
 2004 The New York African Burial Ground Project: Past Biases, Current Dilemmas, and Future Research Opportunities. *Historical Archaeology* 38(1):10-17.
- Magliabechiano, Codex
 1983 The Codex Magliabechiano. Berkeley: University of California Press.
- Mata-Míguez, Jaime, Lisa Overholtzer, Enrique Rodríguez-Alegría, Brian M. Kemp, Deborah A. Bolnick
 2012 The genetic impact of Aztec imperialism: ancient mitochondrial DNA evidence from Xaltocan, Mexico. *American Journal of Physical Anthropology* 149(4):504-516.
- Mathews, Jennifer P., and James F. Garber
 2004 Models of cosmic order: physical expression of sacred space among the ancient Maya. *Ancient Mesoamerica* 15(1):49-59.
- Matthews, Christopher N., and Allison Manfra McGovern, ed.
 2015 The Archaeology of Race in the Northeast. Gainesville: University Press of Florida.
- McCafferty, Geoffrey
 1996 The Ceramics and Chronology of Cholula. *Ancient Mesoamerica* 7(2):299-323.
- McDavid, Carol
 2002 Archaeologies that hurt; descendants that matter: a pragmatic approach to collaboration in the public interpretation of African-American archaeology. *World Archaeology* 34(2):303-314.
- McGuire, Randall H.
 1983 Breaking down cultural complexity: inequality and heterogeneity. *Advances in archaeological method and theory* 6:91-142.

- Merriman, Nick, ed.
 2004 *Public Archaeology*. London: Routledge.
- Meskel, Lynn
 1999 *Archaeologies of Social Life: Age, Sex, Class et cetera in Ancient Egypt*. New York: Wiley-Blackwell.
- 2001 *Archaeologies of identity* *In Archaeological Theory: Breaking the Boundaries*. I. Hodder, ed. Pp. 187-213. Cambridge: Polity
- 2002 *The Intersections of Identity and Politics in Archaeology*. *Annual Review of Anthropology* 31(1):279-301.
- 2003 *Memory's Materiality: Ancestral Presence, Commemorative Practice and Disjunctive Locales*. *In Archaeologies of Memory*. R.M.V.D.a.S.E. Alcock, ed. Pp. 34-55. Malden, MA: Blackwell.
- Meskel, Lynn, and Rosemary A. Joyce
 2003 *Embodied Lives: Figuring Ancient Maya and Egyptian Experience*. London: Routledge.
- Millhauser, John K.
 2005 *Classic and Postclassic Chipped Stone at Xaltocan*. *In Production and Power at Postclassic Xaltocan*. E.M. Brumfiel, ed. Pp. 267-318. Pittsburgh and Mexico City: University of Pittsburgh and Instituto Nacional de Antropología e Historia.
- Minc, Leah D.
 1994 *Political Economy and Market Economy Under Aztec Rule*, University of Michigan.
- Monjaras-Ruiz, Jesus
 1976 *Panorama General de la Guerra entre los Aztecas*. *Estudios de Cultura Nahuatl* 12:241-264.
- Moore, Jerry D.
 1996 *Architecture and Power in the Ancient Andes: The Archaeology of Public Buildings*. Cambridge: Cambridge University Press.
- Morehart, Christopher T.
 2010 *The Archaeology of Farmscapes: Production, Power and Place at Postclassic Xaltocan, Mexico*, Northwestern University

- Morehart, Christopher T. , and Dan T.A. Eisenberg
 2008 Prosperity, Power and Change: Modeling Maize at Postclassic Xaltocan, Mexico. *Journal of Anthropological Archaeology* 29(1):94-112.
- Morehart, Christopher T., Abigail Meza Peñaloza, Carlos Serrano Sánchez,, and and Emilio Ibarra Morales Emily McClung de Tapia
 2012 Human sacrifice during the Epiclassic Period in the northern Basin of Mexico. *Latin American Antiquity* 23(4):426-448.
- Morris, David
 2014 Wildebeest Kuil Rock Art Centre, South Africa: Controversy and Renown, Successes, and Shortcomings. *Public Archaeology* 13(1-3):187-199.
- Motolinia, Fray Toribio de
 1971 *Memoriales o Libro de las cosas de la Nueva España y de los naturales de ella*. Mexico City: Universidad Autónoma de México.
- Muñoz Camargo, Diego
 1982-88 *Relación de Tlaxcala*.
- Nazareo de Xaltocan, Pablo
 1940 Carta al rey don Felipe II. *In* *Epistolario de Nueva España*. F.d.P.y. Troncoso, ed. Pp. 109-129. Mexico City: Antigua Librería Robredo.
- Nichols, Deborah L., and Thomas H. Charlton
 1996 Postclassic occupation at Otumba: A Chronological Assessment. *Ancient Mesoamerica* 7(2):231-244.
- Noguera, Eduardo
 1935 La Cerámica de Tenayuca y las Excavaciones Estratigáficas. *In* *Tenayuca*. Pp. 141-201. Mexico City: Secretaria de la Educación Pública.
- Normand, Yves
 1991 Don Pablo Nazareo de Xaltocan, un latiniste indigene du Mexique au XVI siecle. *Bulletin de l'Association Guillaume Budé: Lettres d'humanité* 50:382-395.
- Ogundiran, Akinwumi and Toyin Falola
 2007 Archaeology of Atlantic Africa and the African Diaspora. *African Diaspora Newsletter* 10(4):12.

Olivier, Guilhem

- 2002 The Hidden King and the Broken Flutes: Mythical and Royal Dimensions of the Feast of Tezcatlipoca. *In* Toxcatl, in *Representing Aztec Ritual: Performance, Text, and Image in the Work of Sahagún*. E.Q. Keber, ed. Pp. 107–42. Boulder: University Press of Colorado.

Overholtzer, Lisa

- 2012 Empires and Everyday Material Practices: A Household Archaeology of Aztec and Spanish Imperialism at Xaltocan, Mexico, Northwestern University.
- 2013 Archaeological interpretation and the Rewriting of History: Deimperializing and Decolonizing the Past at Xaltocan, Mexico. *American Anthropologist* 115(3).

Parmentier, Richard J. .

- 1987 The sacred remains: Myth, history, and polity in Belau. Chicago: University of Chicago Press.

Parsons, Jeffrey R.

- 1966 The Aztec Ceramic Sequence in the Teotihuacan Valley, Mexico. Ann Arbor: University of Michigan.
- 2006 The Last Pescadores of Chimalhuacán, Mexico: An Archaeological Ethnography. Ann Arbor: University of Michigan Press.

Parsons, Jeffrey R., Elizabeth Brumfiel, and Mary Hodge

- 1996 Developmental Implications of Earlier Dates for Early Aztec in the Basin of Mexico. *Ancient Mesoamerica* 7(2):217-230.

Parsons, Mary H.

- 1972 Aztec Figurines From the Teotihuacán Valley, Mexico. *In* *Miscellaneous Studies in Mexican Prehistory*. J.R.P. M.W. Spence, and M.H. Parsons, ed. Pp. 81-164. Anthropological Papers. Ann Arbor: Museum of Anthropology, University of Michigan.

Pauketat, Timothy R., and Susan M. Alt

- 2005 Agency in a Postmold? Physicality and the Archaeology of Culture-making. *Journal of Archaeological Method and Theory* 12(3):213-237.
- 2003 Mounds, Memory and Contested Mississippian History. *In* *Archaeologies of Memory*. R.M.V. Dyke and S.E. Alcock, eds. Pp. 151-179. Malden, MA: Blackwell.

- Paynter, Robert, and Randall H. McGuire
 1991 The Archaeology of Inequality Material Culture, Domination and Resistance. *In* The Archaeology of Inequality. R.H. McGuire and R. Paynter, eds. Pp. 1-27. Oxford: Blackwell.
- Pérez-Rocha, Emma, and Rafael Tena
 2000 La nobleza indígena del centro de México después de la conquista. Mexico City, D.F.: Instituto Nacional de Antropología e Historia.
- Plunket, Patricia, ed.
 2002 In Domestic Ritual in Ancient Mesoamerica. Los Angeles: Cotsen Institute of Archaeology.
- Pohl, John, and Angus McBride
 1991 Aztec, Mixtec and Zapotec Armies, No. 239. Oxford: Osprey Publishing.
- Price, Barbara J.
 1978 Demystification, enriddlement, and Aztec cannibalism: A materialist rejoinder to Harner. *American Ethnologist* 5(1):98-115.
- Preucel, Robert W. and Craig N. Cipolla
 2008 Indigenous and Postcolonial Archaeologies. *In* Archaeology and the Postcolonial Critique. M.a.U.Z.R. Liebmann, ed. Lanham, MD: AltaMira Press.
- Rainville, Lynn
 2009 Protecting Our Shared Heritage in African-American Cemeteries. *Journal of Field Archaeology* 34(2):196-206.
- Ramirez, Codex
 1878 El Códice Ramirez [written c. mid-16th century]. Mexico City: 17-149.
- Ramirez Casas, Omar
 2008 El augurio del ahuízote. Pp. 30 min. Mexico.
- Robin, Cynthia
 2001 Peopling the past: New perspectives on the ancient Maya. *Proceedings of the National Academy of Sciences* 98(1):18-21.
- 2002 Outside of Houses: the practices of everyday life at Chan Noohol, Belize. *Journal of Social Archaeology* 2(2):245-268.
- 2002 Gender and Maya Farming: Chan Nòohol, Belize. *In* Ancient Maya Women. T. Ardren, ed. Pp. 12-30. Walnut Creek, CA: AltaMira Press.

- 2003 New Directions in Classic Maya Household Archaeology. *Journal of Archaeological Research* 1(4):307-356.
- 2012 Chan: An Ancient Maya Farming Community. Gainesville: University Press of Florida.
- Rodman, Margaret C.
 1992 Empowering Place: Multilocality and Multivocality. *American Anthropologist* 94(3):640-656.
- Rodríguez-Alegría, Enrique
 2010 Incumbents and Challengers: Indigenous Politics and the Adoption of Spanish Material Culture in Colonial Xaltocan, Mexico. *Historical Archaeology* 44(2):51-71.
- Rosenswig, Robert M., and Douglas J. Kennett
 2008 Reassessing San Estevan's Role in the Late Formative Political Geography of Northern Belize. *Latin American Antiquity* 19(2):124-146.
- Rounds, Jeffrey
 1979 Lineage, class, and power in the Aztec empire. *American Ethnologist* 6(1):73-86.
- Sahagún, Bernardino de, Arthur J.O. Anderson, and Charles E. Dibble
 1982 (1950) *General history of the things of New Spain: Florentine Codex*. Salt Lake City: University of Utah Press.
- Sahagún, Fray Bernardino de
 1558-1585 *Códice matritense de la real academia de la historia*. Madrid: Fototipia de Häuser y Menet.
- Sanders, William T., Jeffrey R. Parsons, and Robert R. Santley
 1979 *The Basin of Mexico: Ecological Processes in the Evolution of a Civilization*. New York: Academic Press.
- Santley, Robert S., and Rani T. Alexander. ". " . Springer US, 1992. 23-49.
 1992 The political economy of core-periphery systems. *In Resources, Power, and Interregional Interaction*. E.M.a.P.A.U. Schortman, ed. Pp. 23-49: Springer.
- Santley, Robert S., and Kenneth G. Hirth
 1993 *Prehispanic Domestic Units in Western Mesoamerica*. Boca Raton, FL: CRC Press.

- Schadla-Hall, Tim
 2004 The Comforts of Unreason: The Importance and Relevance of Alternative Archaeology. *In* Public Archaeology. N. Merriman, ed. Pp. 255-272. London: Routledge.
- Schmidt, Peter R., and Thomas C. Patterson, eds.
 1995 Making Alternative Histories: The Practice of Archaeology and History in Non-Western Settings. Santa Fe, NM: School for Advanced Research Press.
- Schortman, Edward M., Patricia A. Urban, and Marne Ausec
 2001 Politics with Style: Identity Formation in Prehispanic Southeastern Mesoamerica. *American Anthropologist* 103(2):312-330.
- Séjourné, Laurette
 1983 Arqueología e Historia del Valle de México: De Xochimilco a Amecameca. Mexico City: Siglo Veintiuno.
- Sheets, Payson D.
 2003 Warfare in Ancient Mesoamerica: A Summary View. *In* Ancient Mesoamerican Warfare M.K.B.a.T.W. Stanton, ed. Pp. 287-302. Walnut Creek, CA: AltaMira Press.
- Shennan, S.J.
 1994 Archaeological Approaches to Cultural Identity London: Routledge.
- Silliman, Stephen W., ed.
 2008 Collaborating at the Trowel's Edge: Teaching and Learning in Indigenous Archaeology. Volume 2. Tucson: University of Arizona Press.
- Smith, Claire, and H. Martin Wobst, ed.
 2004 Indigenous Archaeologies: Decolonising Theory and Practice. London: Routledge.
- Smith, Michael E.
 1987 The Expansion of the Aztec empire: A Case Study in the Correlation of Diachronic Archaeological and Ethnohistorical Data. *American Antiquity* (1):153-169.
 2002 Domestic Ritual at Aztec Provincial Sites in Morelos. *In* Domestic Ritual in Ancient Mesoamerica. P. Plunket, ed. Pp. 93-114. Los Angeles: Cotsen Institute of Archaeology.

- 2008 Aztec City-State Capitals. Gainesville: University Press of Florida.
- 2014 The Aztecs Paid Taxes, Not Tribute. *Mexicon* 36(1):19-22.
- Smith, Michael E., and John F. Doershuk
 1991 Late Postclassic Chronology in Western Morelos, Mexico. *Latin American Antiquity* 2(4):291-310.
- Smith, Michael E., Cynthia Heath-Smith, and Lisa Montiel
 1999 Excavations of Aztec Urban Houses at Yautepec, Mexico. *Latin American Antiquity* 10(2):133-150.
- Smith, Michael E. and Frances Berdan
 1996 Introduction. *In Aztec Imperial Strategies*. R.E.B. F.F. Berdan, E.H. Boone, M.G. Hodge, M.E. Smith, and E. Umberger, ed. Pp. 1-9. Washington, D.C.: Dumbarton Oaks.
- Soustelle, Jacques
 1970 *Daily Life of the Aztecs on the Eve of the Spanish Conquest*. Stanford: Stanford University Press.
- Stahl, Ann Brower
 1993 Concepts of Time and Approaches to Analogical Reasoning in Historical Perspective. *American Antiquity* 58(2):235-260.
- Sugiyama, Saburo
 1993 Worldview Materialized in Teotihuacan, Mexico. *Latin American Antiquity* 4(2):103-129.
- Tezozomoc, Hernando Alvarado
 1878 *Cronica Mexicana*. Mexico City.
- 1943 *Crónica Mexicana*. Mexico, D.F.: Ediciones de la Universidad Nacional Autonoma Mexico.
- Tlatelolco, Anales de
 2004 *Anales de Tlatelolco* Mexico City: CONACULTA.
- Tolstoy, Paul
 1958 Surface Survey of the Northern Valley of Mexico: The Classic and Postclassic Periods. *Transactions of the American Philosophical Society* 48(5).
- Tringham, Ruth
 1991 Households with faces: The challenge of gender in prehistoric architectural remains. *In Engendering archaeology: women and prehistory*,. Pp. 93-131. Oxford: Blackwell.

- Tudela, Codex
 1980 [Codex Tudela]. Madrid: Ediciones Cultura Hispanica.
- Umberger, Emily
 1996 Art and Imperial Strategy in Tenochtitlan. *In* Aztec Imperial Strategies. R.E.B. F.F. Berdan, E.H. Boone, M.G. Hodge, M.E. Smith, E. Umberger, ed. Pp. 17–45. Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- Vaillant, George C.
 1938 A Correlation of Archaeological and Historical Sequences in the Valley of Mexico. *American Anthropologist* 40:535-573.
 1950 The Aztecs of Mexico. *In* Origin, Rise and Fall of the Aztec Nation. London.
- Walker, Dominic
 2014 Decentering the Discipline? Archaeology, Museums and Social Media. *AP: Online Journal in Public Archaeology* 1:77-102.
- Watkins, Joe, K. Anne Pyburn, and Pam Cressey
 2000 Community Relations: What the Practicing Archaeologist Needs to Know to Work Effectively with Local and/or Descendant Communities. *In* Teaching Archaeology in the Twenty-First Century S.J.a.S. Bender, George S. , ed. Pp. 78-81. Washington, D.C.: Society for American Archaeology.
- Whalen, Michael E. and Jeffrey R. Parsons
 1982 Appendix I: Ceramic Makers Used for Period Designations. *In* Prehispanic Settlement Patterns in the Southern Valley of Mexico: The Chalco Xochimilco Region. J.R. Parsons, E.M. Brumfiel, M.H. Parsons, and D.J. Wilson, eds. Pp. 385-459. Ann Arbor: Memoirs No. 14 Museum of Anthropology, University of Michigan.
- Wilk, Richard R., and Wendy Ashmore, eds.
 1988 Household and Community in the Mesoamerican Past. Albuquerque: University of New Mexico Press.
- Wilk, Richard R., and William L. Rathje
 1982 Household Archaeology. *American Behavioral Scientist* 25(6):617-639.
- Wilkie, Laurie A.
 2004 Considering the Future of African American Archaeology. *Historical Archaeology* 38(1):109-123.

Yaeger, Jason, and Marcello A. Canuto.

2000 Introducing An Archaeology of Communities. *In* The Archaeology of Communities: A New World Perspective. M.A.Canuto and J. Yaeger, eds. Pp. 1-15. London: Routledge.

Zorita, Alonso de

1909 Historia de la Nueva España. Mexico City: Librería general de V. Suárez.

APPENDIX

What follows is a summary of the data recovered from excavations at the site of Cerrito Central between the months of July 2014 and December 2014. Please note that data summarized below does not reflect all data. Some data, including soil chemical data and faunal data, is still undergoing analysis and will be presented in future publications.

Ceramic Analysis

This section discusses previous studies of Postclassic ceramics found at Xaltocan and throughout the northern Basin of Mexico. This section also outlines the typology used in this study and cites comparative references used during analysis. I also discuss the excavation, treatment, and storage processes for the ceramics, and the procedures used to analyze ceramic fragments including key definitions for forms and decorative techniques. The ceramic typology is grouped based on time period, diagnostic type, and form.

Previous Studies

The earliest comprehensive ceramic chronology for the Basin of Mexico was created by George Vaillant in 1938, and combined his own findings from excavations at Chiconautla, Nonoalco, and Los Melones, with research results from others working in the area (notably, Noguera 1935). Four primary ceramic types anchored Vaillant's (1938) chronology—Aztec I, II, III, and IV Black-on-Orange. These four broad ceramic types, which are still in use today, are differentiated largely on the basis of design.

The basic timeline of Vaillant's typology was centered on the assumption that ceramic styles changed every 52 years, corresponding to the 52-year Aztec calendrical cycle (Overholtzer 2012:95). Thus, in Vaillant's timeline each ceramic type (beginning with Aztec I in A.D. 1247) lasted only 52 years, and was then completely replaced by the next type. However, over time, as the corpus of archaeological data from the region expanded and the accuracy of dating techniques improved, it has become clear that the transitions between ceramic typologies was not linked to calendrical cycles (Evans and Freter 1996; Parsons, et al. 1996). Several elaborations and amendments to Vaillant's original typology were made throughout the 1940's and 1950's, (Franco 1945,1949,1957, Griffin and Espejo 1947, 1950), but most of the major breakthroughs were made when Basin of Mexico chronologies were expanded to include other central Mexican regions associated with the Aztec empire (Blanton and Parsons 1971; Brumfiel 2005a; Charlton 1966; Evans and Freter 1996; Hare and Smith 1996; Hodge 1998; Nichols and Charlton 1996; Parsons 1966; Parsons, et al. 1996; Sanders, et al. 1979; Smith and Doershuk 1991; Tolstoy 1958; Whalen and Parsons 1982).

More recently, absolute dating of samples from stratified domestic deposits has helped to concretize the timeline of the typology considerably. The most current timeline for the emergence and use of Aztec Black-on-Orange pottery at Xaltocan is as follows: Aztec I pottery emerges around A.D. 900 (possibly earlier) and remained in use until around A.D. 1300 in some regions. Aztec II emerged at approximately A.D. 1240 and was used alongside Aztec I pottery for at least a century, before largely replacing it around A.D. 1300. After Aztec I ceramics largely fell into disuse, primarily Aztec II

ceramics were used for a short period of time, dating from between A.D. 1300-1350. Between A.D. 1350-1400 Aztec III pottery became widespread and persisted until well after the arrival of the Spanish. Aztec IV emerged during the Early Colonial period, and is often found mixed with Aztec III pottery (which was also used during the Early Colonial period).

The chronology listed above has been honed based on decades of archaeological research and fine-tuning of seriation. With every new archaeological project, and especially with the ever-expanding corpus of radiocarbon data, ceramic chronologies for Xaltocan (and other Basin of Mexico centers) will only continue to improve. Previous research projects in the Basin of Mexico have demonstrated that ceramic chronologies are highly regional and were probably dependent on trade relationships, access to resources, and local preferences. Thus, although the chronology listed above is useful for Xaltocan, it has become increasingly clear that chronological overlap in Aztec Black-on-Orange types varied geographically within the Basin of Mexico.

Excavation Methods, Treatment, Storage

The vast majority of ceramic sherds were recovered during screening, however some, particularly those associated with features, were recovered in situ. Complete, or nearly complete vessels were also frequently recovered in situ. Ceramic vessels recovered in situ were excavated more carefully, typically using wooden tools and brushes, as opposed to trowels. These vessels were photographed and drawn before they were removed from their matrix. Most complete, or nearly complete, vessels were recovered from the New Fire deposit outlined in chapter 6.

All ceramic sherds recovered in the screens were washed using soft brushes and water, and left out in the sun to dry. Larger ceramic sherds and partial vessels received more delicate cleanings, still with brushes and water, though washers were aware of surface treatments and advised to minimize scrubbing. These objects were also left out in the sun to dry. Once dry, all ceramic sherds were placed in clean cotton bags. The bags themselves were labeled with all provenience information, and clean tags were placed in the bags with the ceramics which also contained all the provenience information. All washing and labeling was conducted by field assistants who were quite capable and meticulous in their process. The double labeling method, along with my own records, made errors in labeling quite rare. In the analysis process 4 bags were found to be mislabeled, but using my own records and the tag information we were able to correct all errors. Small errors did not impact the final outcome of ceramic analysis.

During analysis, it was possible to refit some sherds, particularly large sherds dating to the Early Postclassic. Although no complete vessels were reconstructed (except for those found intact in situ), sherds that could be refitted were attached with white glue and left to dry. Joined pieces were noted in analysis, and joined pieces that comprised substantial portions of decorated vessels were photographed.

After analysis all ceramic were returned to their original, labeled cotton bags and tied shut using cotton string. In the instances that tags or bag labels had been damaged or become difficult to read due to moisture or dust, bag labels were replaced. Bags were stored according based on SubOp and Area in the back of the archaeology museum at Xaltocan. All of bags associated with my project (PAX-E) were placed in a special

storage area away from the archaeological materials recovered from previous projects. Most bags were not placed in storage boxes, but bags that included mostly complete vessels were stored separately in sealed cardboard boxes for greater accessibility and protection.

Analytical Procedures

A total of 112,421 pottery sherds weighing in at a grand total of 2,072.7 kg were excavated at Cerrito Central over the course of six months. All materials were classified by bag (even when there were multiple bags that corresponded to the same area). When a bag was opened, the contents were quickly analyzed for accidental inclusions of figurine fragments, lithic fragments, shell, stucco, or other special objects. Contents were also scanned to determine if the context had been mixed with modern materials. Frequently, due to plowing and inclusive trash pits, the areas located close to the surface included some modern objects—especially modern ceramics. Modern ceramics were easy to identify as they were typically very bright orange, thin, and contained a bright shiny glaze that is simply not found during the Postclassic or Colonial periods. Often times, modern ceramics were also multicolored. If it was determined that contexts had been mixed, all modern ceramics were separated out, and regardless of form, color, or surface treatment, were counted and weighed as one category. A note was made that the area was mixed with modern remains, and the remaining ceramics were then analyzed using the same procedures as were used for non-mixed contexts.

There were two rounds of ceramic analysis. During the first round of analysis, every bag of ceramics was analyzed. Ceramic sherds (not inclusive of modern sherds)

were sorted based on their form and type, and rim sherds were separated from body sherds. These categories are outlined in more detail below. A second round of more detailed ceramic analyses were conducted on about 10% of the bags. These analyses, included the analysis of rim sherds (regardless of form) and the analysis of jar (olla) rim sherds, and were far more detailed. These analyses involved looking at individual rim sherds to determine the thickness, wear, decoration, temper, and the estimated diameter of the original object. A more detailed discussion of these analyses, including copies of the Filemaker Pro forms that were used to collect data, may be found in the following section.

Categories Used for Ceramic Analysis

In the first round of analysis ceramics were divided into categories based on type (which encompassed a variety of styles), forms and then rims were separated from body sherds. All ceramic sherds were counted and weighed within broad type categories based on type. These categories were as follows: Aztec Black-on-Orange I, Aztec Black-on-Orange II, Aztec Black-on-Orange III, Aztec Black-on-Orange IV, Redwares, Polychrome, Miscellaneous Wares I, Miscellaneous Wares II, Comals, Ollas (jars), Thin Orange Wares, Handles, and Supports. These categories were then separated based into variants and forms. The principal reference for typing recovered ceramics was an unpublished document called the “Brumfiel Ceramic Manual”, which is an ever-adapting guide that drew on a numerous established typologies from throughout the Basin of Mexico (including McCafferty 1996; Minc 1994; Parsons 1966; Vaillant 1938). This document has been honed over the decades specifically for the objects typically

recovered at Xaltocan. The document includes illustrations of various ceramic types and variants (particularly those that are identified based on their design) and profile drawings of olla and comal rims to help in the identification of different rim types.

Once sorted, Filemaker Pro forms and databases were used to organize and aggregate ceramic data. Forms were sufficiently detailed to ensure detailed and type-specific analysis. As an example, please see FIGS. A.1. and A.2 below, which demonstrate the attributes used to analyze Aztec Black-on-Orange I ceramic fragments and the attributes used to analyze olla fragments.

Black-on-Orange Aztec I

	Var. A		Var. B		Var. C		Var. H		Misc. or Unid		Total
	Rims	Bodies	Rims	Bodies	Rims	Bodies	Rims	Bodies	Rims	Bodies	Rims
Bowls											
Basins											
Molcajetes											
Dishes											
Plates											
Unid Int Dec											
Misc Forms											
Aztec I Comments											
Aztec I Total Rims			Aztec I Total Rims Weight				Aztec I Total Body Sherds				Aztec I Body Sherds Weight

Figure A.1. Example of form section (Aztec Black-on-Orange I) used during ceramic analysis.

Ollas	Direct Flaring	Direct Upright	Everted Rim	Flattened Everted	Incurving Rim	Exterior Bevelled	Thin walled	Wedge	Handle off Rim	Other/ Unid	Total Rims	Bodies	
Olla Comments													
	Ollas Total Rims Weight												Olla Bodies Weight

Figure A.2. Example of form section (Ollas) used during ceramic analysis.

The Filemaker Pro database I used was originally create by Elizabeth Brumfiel and then adapted by Lisa Overholtzer. I also made minor adjustments to the database settings. Specifically, I separated Aztec Black-on-Orange III ceramics from Aztec IV ceramics. In Overholtzer's original database the two types were combined for analysis because Brumfiel's original typology had Aztec III and IV ceramics both dating to Xaltocan's Late Postclassic (A.D. 1350-1521). However, in light of Overholtzer's (2012) latest ceramic chronology, which places Aztec III ceramics in the Late Postclassic and Aztec IV ceramics in the Colonial period, it seemed more prudent to separate the two categories. The variants however, were left the same, explaining why Aztec III ceramics include variants A-G and Aztec IV ceramics include variants H-K (see below for more details). Other than this minor adjustment, and a few project-specific adjustments made to the heading, the form I received from Overholtzer was more than sufficient and was left largely unchanged. One advantage of using the same categories for ceramic analysis as my predecessors is that it facilitated site-wide comparisons (explored in Chapter 4). The following broad ceramic types were used to organize ceramic data:

Aztec Black-on-Orange (I-IV)

Aztec Black-on-Orange ceramics were the most common decorated types recovered at Cerrito Central.

Aztec I Black-on-Orange

Aztec I pottery is characterized by emblematic designs such as flowers painted in thick lines. It often has stamped bases and is generally thicker and more crudely made than pottery from later periods. Variants include: the exterior contains glyph-like images

and zoomorphic shapes, vessels often have a stamped base (variant A), alternating black combs and wavy lines separate sets of short vertical lines (variant B), decorated panels with sets of diagonal wavy lines separate concentric loops and chevrons (variant C).

Aztec II Black-on-Orange (Variants B-M)

Aztec II ceramics have stylized, geometric designs with lines of medium-thickness. Aztec II pottery is characterized by the “zacate” or grass motif, which looks like a fringe and is sometimes looped or “6” shaped. Variants include: calligraphic, with free zacate (variant B), calligraphic with short zacate (variant C), calligraphic, zacate with loop element (variant D), calligraphic with spiked zacate (variant E), geometric with free zacate (variant F), geometric, zacate with loop element (variant G), geometric with bounded zacate (variant H), geometric, with loops in place of zacate element (variant I), decorative panel consists of a series of loops and horizontal lines (variant J), loop and line motif with bounded zacate at the base or the top of the design panel (variant K), plain bowls with thin black line around rim (variant L), interior decorated bowls (variant M).

Aztec III Black-on-Orange (Variants A-G)

Aztec III pottery contains distinctive, yet simple geometric designs; especially thin parallel lines, dashes, dots, and a reduced zacate form. Aztec III ceramics are painted with very fine lines. The base orange color of Aztec III pottery from Xaltocan also tends to be a lighter, more muted shade of orange than other Black-on-Orange types. Variants included: large open loops in place of the zacate element (variant A), tight, enclosed semi-circular loops in place of zacate element, thinner lines and more precise (variant B), with reduced zacate element in the border (variant C), with dashes replacing zacate

element, vessel wall is usually plain below the decorative band of dashes, lines and dots (variant D), dashes and reduced zacate in heavy lines or solid dots replacing the zacate element (variant E), fine lines and “fancy” motifs, curving and scrolling (variant F), sets of parallel lines, bordered by looped motif or undulating motif (variant G).

Aztec IV Black-on-Orange (Variants H-K)

Similar to Aztec III, Aztec IV pottery contains thin parallel lines, dashes, and dots, but it also has very thick lines, and some variants have naturalistic motifs. Aztec IV pottery often contains representations of objects, particularly flowers and birds, which are drawn in the European style. Variants include: decoration consists of heavy and fine parallel lines (variant H), wide parallel lines encircle the rim and decorative panel with curvilinear scrolls are beneath (variant I), slanting or curving lines at the rim and a decorative panel covered with large curvilinear scrolls and spirals (variant J), naturalistic motifs, such as feathers, eagles, or down balls (variant K).

Aztec Black-on-Orange types may also be identified based on support shape. Aztec I and II vessels often have conical supports, whereas Aztec III and IV vessels typically feature slab supports. Aztec IV ceramics also sometimes contain “butterfly” supports, which are thin conical supports that extend out from the base and loop at the end creating a snail shape.

Aztec Black-on-Orange pottery is found at Xaltocan throughout the Postclassic period and each of the four types are associated with multiple variants—Aztec I (Variants A-C), Aztec II (Variants A-M), Aztec III (Variants A-G) Aztec IV (Variants H-K)—and forms (bowls, basins, molcajetes, plates, and unidentified). Thus, after Aztec Black-on-

Orange ceramics were organized based on type (I-IV), they were sorted based on variant, form, and whether they represented a rim sherd or a body sherd (again, see Fig. A.1 for reference).

Redwares

Redware analysis at Xaltocan has drawn heavily on Leah Minc's (1994) exhaustive Redware typology for the Basin of Mexico. For the purposes of analysis at Xaltocan, Redware was divided up into three broad categories based on finish: Plain Red, Black-on-Red and Black-and-White-on-Red. All Redware bodies were weighed together as one small timesaving step during analysis. Rims were weighed separately based on broad type: Plain Red, Black-on-Red and Black-and-White-on-Red (outlined below).

Plain Red (Variants A-K)

Just as it sounds, Plain Red pottery is Redware that contains a red slip or red paint base and does not contain decoration. In general, Plain Red ceramic fragments were differentiated based on thickness, form, and interior or exterior colors (red, buff, black or brown). Variants included: bowls with thickening on interior wall with rounded lip (variant A), thin-walled bowls with red exteriors and buff or red interiors (variant B), thin-walled bowls with red interiors and buff or black-brown exteriors (variant C), plain red *copas* (cups) (variant D), plain red plates (variant E), red, annular-base bowls (variant F), and Red-on-Brown (variant K).

Black-on-Red (Variants A-K)

Black-on-Red ceramics were primarily bowls, decorated on the outside. They contained red base slip and black paint in various designs and shapes. The majority of

Black-on-Red ceramics contained successive vertical lines and undulating, wave-like lines. Many Black-on-Red ceramics also contained incised lines that were J-shaped or curling at the ends. Variants included: widely separated, thick (5 mm), vertical black lines on the exterior (variant A), widely separated, thin (2-3 mm), vertical black lines on the exterior (variant B), two horizontal lines, connected by a series of vertical lines, “grill” motif on exterior (variant C), clusters of thin (2-3 mm), vertical black lines on exterior (variant D), contains spiraled or lazy-s motif black lines on exterior and interior (variant E), thin, vertical black lines, widely-spaced on exterior of thin, 45° angled bowl rims (variant F), thin, 45° angled bowl rims with complex curving black-painted motifs (variant G), black horizontal lines outlined by incising, frame incised vertical lines with scrolls at the ends (variant H), black horizontal lines outlined by incising, frame black spiraled and stepped designs also outlined by incising (variant I), incised cane-shaped (inverted J’s) vertical lines run along exterior of vessel wall (variant J), incised scrolls run around the exterior of vessel (variant K).

Black-and-White-on-Red (Variants A-L)

Black-and-White-on-Red pottery is composed similarly to Black-on-Red pottery, containing a bright red slip base. The paint on top is black and white. Designs were typically geometric, including triangular shapes, circles, and thick diagonal lines. Variants are differentiated based on design. Variants included: decorative red band along rim, divided by thick (1 cm) black lines in triangular shapes filled with grainy white paint (variant A), two parallel narrow diagonal line divide decorative band into triangles (variant B), thick (1 cm) vertical black lines divide decorative panels and top rim, white

decoration painted on them (variant C), thick (1 cm) black lines angled lines divide decorative panels with white decoration, red and black bands run horizontally below the rim (variant D), thick (>1 cm) black bands begin at or below the rim and are overlain by complex white motifs (variant E), a black band at or just below the rim is overlain with white tick marks or dotted half circles. White chevrons, rows of triangle, circles of wavy lines overlay red exterior of vessel (variant F), series of horizontal black bands beginning below the red rim, are overlain by white loops, circles, lazy-s and chevron motifs (variant G), a series of horizontal black bands, beginning at the rim, are overlain by white triangles, loops, spikes, circles, dots or wavy lines, with dots at the rim (variant H), thin, 45° angled rim, decorated with oblique black bands with white decoration on top of and between them (variant I), two parallel black bands run around rim of vessel with 1-2 cm of red space between them, red space is decorated with white curvilinear designs (variant J), thin, 45° angle rim, contains scroll or chain motif (variant K), undulating white lines overlie black rim band with interspersed circles, complex black designs are outlined with thinner white lines (variant L).

Comals

Comals are flat circular cooking surfaces. They contained rims of varying heights, angles and thicknesses. The bottoms of comals recovered at Xaltocan were rough and often contained evidence for burning over open flame. The top surfaces were smoothed. Comals did not typically contain decorations. Comal rims were separated based on their thickness, shape and angle. The variants included: thick (0.9-1.4 cm) high-walled, typically light brown or light orange in color (variant A), thin (0.4-0.9 cm) high-walled,

typically brown or reddish brown (variant B), thick (around 1 cm), low- or flat-walled, reddish brown and light brown (variant C), medium thick (0.7-0.9 cm), low- and upcurved-walls, brown and orange (variant D), thin (0.4-0.7 cm) low- and flat-rimmed (variant E), medium thick (0.7-0.9 cm), beveled, recurving rim (variant F), thick (around 1 cm), short rim, juts up at 45° angle (variant G), bolster-rimmed (globular shape around rim) (variant H), L-shaped rim (right angle) (variant I), misshapen rim, without clear edge (variant J).

Ollas

Ollas, or jars, were cooking vessels, which typically contained globular bodies, a neck and a rim. Ollas often contained handles and rims varied considerably in shape, height, and angle. Sizes and shapes of ollas also differed greatly. Like comals, ollas were utilitarian vessels used for cooking and were not typically decorated. Many ollas contained burn marks on their exterior indicating that they had been placed atop an open flame. Wall thickness of ollas ranged considerably dependent on the size of the complete vessel and the quality of paste, among other factors. Olla rims variants are not given letter designations but instead are named for their shape and include: direct flaring rims, direct upright rims, everted rims, exterior beveled rims, incurving rims, and thin-walled rims.

Plain Bowls

Plain bowls were smaller than ollas with rims that were wider than their base. Bowls were typically thinner than Ollas and comals and were often composed from finer paste. Although some plain bowls did have evidence for burning it appears that bowls were more often used as serving vessels and were less likely to have evidence for burning

than ollas or comals. Like ollas and comals plain bowls were not decorated, though there were also many decorated bowl fragments found which have been separated based on their decoration. Plain bowls were quite diverse and included the following variants: plain orange bowls (variant A), plain thin orange bowls with straight flaring rims (variant B), plain orange bowls with thickened interiors (variant C), thick bowls (>7.5 mm thick) (variant D), brown bowls (variant E), crude bowls (variant F), eroded service ware (variant G), *casuelas*/basins (variant H), *tecomates*/rounded bowls (variant I), miniature bowls (variant J), miniature plates (variant K), miniature dishes with handles (variant L), other miniature dishes (variant M).

Handles

Handles were found in a variety of shapes, sizes, and forms. Some of them were colored using a slip or paint (variants J and K). Although the majority of handles recovered were fragmentary, originally they were attached the sides of ollas and other serving and cooking vessels. The most common forms included: doughnut-shaped (variant A), toothpaste-shape, which was a thin curving handle that literally looks like toothpaste squeezed out of a tube (variant B), doughnut-shaped coming directly off the rim (variant C), strap-shaped (variant D), strap-shaped off the rim (variant E), straight hollow (variant F), straight solid (variant G), twisted double-stranded (variant H), small tab-shaped (variant I), cream-slipped (variant J), and hollow red (variant K).

Supports

Supports were attached to the bottoms of serving vessels, especially bowls, basins, and molcajetes. In many instances supports were painted or otherwise decorated.

Paint color and decoration was not used to classify supports. Supports were classified based on form which included: hollow conical (variant A), hollow cylindrical (variant B), hollow effigy, which included a number of forms that were primarily zoomorphic (variant C), hollow “key” shaped (variant D), heavy solid conical (variant E), conical (variant F), spider, which was a thin and slightly curving conical support that looked like a spider leg (variant G), plain slab, which was rectangular in shape (variant H), split slab or slitted slab, contained (usually two) long rectangular slits (variant I), nubbin, which was a tiny rounded protrusion (variant J), annular (variant K), miniature slab (variant L), miniature conical (variant M).

Results of Ceramic Analysis

Early Postclassic Ceramic Data

Table A.1. Early Postclassic Aztec I Black-on-Orange

AZTEC I TYPE	Totals
Aztec I Bowls Misc Bodies	81
Aztec I Bowls Misc Rims	122
Aztec I Bowls Var A Bodies	40
Aztec I Bowls Var A Rims	150
Aztec I Bowls Var B Bodies	1
Aztec I Bowls Var B Rims	6
Aztec I Bowls Var C Bodies	3
Aztec I Bowls Var C Rims	10
Aztec I Dishes Misc Bodies	3
Aztec I Dishes Misc Rims	9
Aztec I Dishes Var A Bodies	5
Aztec I Dishes Var A Rims	15
Aztec I Dishes Var B Bodies	2
Aztec I Dishes Var B Rims	2
Aztec I Misc Forms Misc Bodies	1
Aztec I Misc Forms Misc Rims	1
Aztec I Molcajetes Var A Bodies	4
Aztec I Molcajetes Var A Rims	9
Aztec I Plates Misc Bodies	43
Aztec I Plates Misc Rims	62
Aztec I Plates Var A Bodies	20
Aztec I Plates Var A Rims	27
Aztec I Plates Var C Bodies	1
Aztec I Plates Var C Rims	4
Aztec I Unid Int Dec Misc Bodies	8
Aztec I Unid Int Dec Misc Rims	11
Aztec I Unid Int Dec Var A Bodies	1
Aztec I Total Body Sherds	213
Aztec I Total Rims	428
Aztec I Body Sherds Weight (g)	3401.98
Aztec I Total Rims Weight (g)	10151.93

Table A.2. Early Postclassic Aztec II Black-on-Orange *

AZTEC II TYPE	Totals
Aztec II Basins Misc Rims	1
Aztec II Bowls Misc Bodies	4
Aztec II Bowls Misc Rims	2
Aztec II Bowls Var B Rims	2
Aztec II Bowls Var C Bodies	1
Aztec II Bowls Var C Rims	2
Aztec II Bowls Var E Rims	2
Aztec II Bowls Var F Rims	1
Aztec II Bowls Var G Rims	2
Aztec II Bowls Var H Rims	2
Aztec II Bowls Var I Rims	1
Aztec II Bowls Var J Rims	2
Aztec II Bowls Var K Rims	1
Aztec II Dishes Var G Bodies	1
Aztec II Plates Misc Bodies	6
Aztec II Plates Misc Rims	3
Aztec II Plates Var B Rims	2
Aztec II Plates Var C Rims	1
Aztec II Plates Var E Rims	1
Aztec II Plates Var G Bodies	1
Aztec II Plates Var G Rims	3
Aztec II Plates Var H Bodies	2
Aztec II Plates Var H Rims	1
Aztec II Plates Var I Rims	1
Aztec II Unid Int Dec Misc Bodies	1
Aztec II Total Body Sherds	16
Aztec II Total Rims	30
Aztec II Body Sherds Weight (g)	215.91
Aztec II Total Rims Weight (g)	377.47

*Although Aztec Black-on-Orange I alone is the diagnostic ceramic type for the Early Postclassic, some Aztec Black-on-Orange II ceramics were found in these contexts. Possibly, these contexts were transitional or abutted Middle Postclassic pits that may have introduced later phase ceramics into mostly Early Postclassic contexts. Occasionally gophers also move around small ceramic sherds as they burrow. The contexts that were deemed Early Postclassic were done so based on both their ceramic composition and radiocarbon dates. Only 46 Aztec Black-on-Orange II ceramics were found in Early Postclassic context, which makes up <0.2% of all ceramics found in Early Postclassic context. No Aztec Black-on-Orange III or IV ceramics were found in Early Postclassic contexts.

Table A.3. Early Postclassic Redwares

REDWARE TYPES	Totals
Plain Red Var A Bodies	61
Plain Red Var A Rims	23
Plain Red Var B Bodies	20
Plain Red Var B Rims	1
Plain Red Var C Bodies	43
Plain Red Var C Rims	10
Plain Red Var K Bodies	21
Plain Red Var K Rims	21
Plain Red Misc Bodies	24
Plain Red Misc Rims	12
Plain Red Total Rims	67
Black-on-Red Var B Bodies	1
Black-on-Red Var G Rims	1
Black-on-Red Var H Bodies	1
Black-on-Red Var H Rims	1
Black-on-Red Var I Rims	1
Black-on-Red Var J Bodies	8
Black-on-Red Var J Rims	27
Black-on-Red Var K Rims	3
Black-on-Red Misc Bodies	60
Black-on-Red Misc Rims	38
Black-on-Red Total Rims	71
Black-and-White-on-Red Var E Rims	1
Black-and-White-on-Red Var G Rims	4
Black-and-White-on-Red Var H Rims	2
Black-and-White-on-Red Var I Rims	1
Black-and-White-on-Red Var J Bodies	2
Black-and-White-on-Red Misc Bodies	43
Black-and-White-on-Red Misc Rims	50
Black-and-White-on-Red Total Rims	58
Redwares Total Bodies	268
Redwares Total Rims	196
Redwares Bodies Weight (g)	1853.96
Redwares Total Rims Weight (g)	1761.33

Table A.4. Early Postclassic Comals

COMAL TYPES	Totals
Comals Var A Rims	288
Comals Var B Rims	251
Comals Var C Rims	117
Comals Var D Rims	45
Comals Var E Rims	1
Comals Var F Rims	2
Comals Var G Rims	1
Comals Var J Rims	1
Comals Misc Rims	80
Comals Bodies	2121
Comals Total Rims	785
Comal Bodies Weight (g)	51004.19
Comals Total Rims Weight (g)	25251.77

Table A.5. Early Postclassic Ollas

Olla Type	Totals
Direct Flaring Rim	308
Direct Upright Rim	356
Everted Rim	16
Exterior Beveled Rim	1
Flattened Everted Rim	11
Incurving Rim	39
Other Unidentified Rim	2
Thin walled Rim	1
Total Olla Rims	734
Olla Bodies	7818
Olla Bodies Weight (g)	199586.4
Ollas Total Rims Weight (g)	18402.69

Table A.6. Early Postclassic Plain Bowls

PLAIN BOWLS	TOTALS
Plain Bowls Var A Rims	396
Plain Bowls Var B Rims	3
Plain Bowls Var D Rims	2
Plain Bowls Var E Rims	60
Plain Bowls Var F Rims	74
Plain Bowls Var G Rims	7
Plain Bowls Var M Rims	1
Plain Bowls Misc Rims	74
Plain Bowl Bodies	833
Plain Bowl Total Rims	617
Plain Bowl Bodies Weight (g)	11545.8
Plain Bowl Rims Weight (g)	9783.8

Table A.7. Early Postclassic Handles

HANDLE TYPES	Totals
Handles Var A	32
Handles Var B	12
Handles Var C	2
Handles Var D	164
Handles Var E	3
Handles Var F	9
Handles Var G	9
Handles Var H	4
Handles Var I	9
Handles Var J	3
Handles Var K	9
Handles Var L	1
Handles Total	257
Handles Weight (g)	19524.3

Table A.8. Early Postclassic Supports

SUPPORT TYPES	Totals
Supports Var A	14
Supports Var B	28
Supports Var C	5
Supports Var D	3
Supports Var F	37
Supports Var G	16
Supports Var H	8
Supports Var I	1
Supports Var J	5
Supports Var K	2
Supports Var M	2
Supports Total	121
Supports Weight (g)	5796.56

Middle Postclassic Ceramic Data

Table A.9. Middle Postclassic Aztec I Black-on-Orange

AZTEC I TYPE	Totals
Aztec I Basins Total Rims	1
Aztec I Basins Var Misc Bodies	1
Aztec I Basins Var Misc Rims	1
Aztec I Bowls Misc Bodies	31
Aztec I Bowls Misc Rims	36
Aztec I Bowls Var A Bodies	4
Aztec I Bowls Var A Rims	30
Aztec I Bowls Var B Rims	1
Aztec I Bowls Var C Rims	2
Aztec I Dishes Misc Bodies	2
Aztec I Dishes Misc Rims	3
Aztec I Dishes Var A Bodies	2
Aztec I Dishes Var A Rims	4
Aztec I Misc Forms Misc Bodies	1
Aztec I Misc Forms Misc Rims	1
Aztec I Molcajetes Var A Rims	1
Aztec I Plates Misc Bodies	20
Aztec I Plates Misc Rims	18
Aztec I Plates Var A Bodies	6
Aztec I Plates Var A Rims	5
Aztec I Unid Int Dec Misc Bodies	6
Aztec I Total Body Sherds	73
Aztec I Total Rims	102
Aztec I Body Sherds Weight (g)	1160.79
Aztec I Total Rims Weight (g)	2112.2

Table A.10. Middle Postclassic Aztec II Black-on-Orange

AZTEC II TYPE	Totals
Aztec II Basins Misc Rims	5
Aztec II Bowls Misc Bodies	35
Aztec II Bowls Misc Rims	53
Aztec II Bowls Var B Bodies	7
Aztec II Bowls Var B Rims	36
Aztec II Bowls Var C Rims	19
Aztec II Bowls Var E Bodies	8
Aztec II Bowls Var E Rims	3
Aztec II Bowls Var F Rims	8
Aztec II Bowls Var G Bodies	2
Aztec II Bowls Var G Rims	4
Aztec II Bowls Var H Rims	4
Aztec II Bowls Var I Rims	3
Aztec II Bowls Var J Rims	22
Aztec II Bowls Var K Bodies	3
Aztec II Bowls Var K Rims	10
Aztec II Bowls Var M Rims	7
Aztec II Dishes Misc Bodies	2
Aztec II Dishes Misc Rims	7
Aztec II Dishes Var H Rims	7
Aztec II Dishes Var J Rims	7
Aztec II Molcajetes Misc Rims	10
Aztec II Molcajetes Var G Rims	3
Aztec II Molcajetes Var H Bodies	2
Aztec II Molcajetes Var K Rims	3
Aztec II Plates Misc Bodies	91
Aztec II Plates Misc Rims	36
Aztec II Plates Var B Bodies	2
Aztec II Plates Var B Rims	8
Aztec II Plates Var C Bodies	8
Aztec II Plates Var C Rims	4
Aztec II Plates Var E Rims	7
Aztec II Plates Var F Bodies	4
Aztec II Plates Var F Rims	10
Aztec II Plates Var G Bodies	11
Aztec II Plates Var G Rims	39
Aztec II Plates Var H Rims	13
Aztec II Plates Var I Bodies	21
Aztec II Plates Var I Rims	9
Aztec II Plates Var J Bodies	2
Aztec II Plates Var K Rims	3
Aztec II Plates Var M Bodies	5
Aztec II Unid Int Dec Var B Rims	2
Aztec II Total Body Sherds	203
Aztec II Total Rims New	342
Aztec II Body Sherds Weight (g)	1918.4
Aztec II Total Rims Weight (g)	5944.02

Table A.11. Middle Postclassic Aztec III Black-on-Orange

AZTEC III TYPE	Totals
Aztec III Basins Misc. Rims	1
Aztec III Basins Var A Rims	2
Aztec III Basins Var D Rims	1
Aztec III Basins Var F Rims	1
Aztec III Bowls Misc III Bodies	2
Aztec III Bowls Misc III Rims	2
Aztec III Bowls Misc IV Bodies	1
Aztec III Bowls Total III Rims	2
Aztec III Bowls Var A Bodies	1
Aztec III Bowls Var A Rims	1
Aztec III Bowls Var B Bodies	1
Aztec III Bowls Var B Rims	1
Aztec III Bowls Var G Rims	1
Aztec III Dishes Var A Rims	1
Aztec III Dishes Var G Bodies	1
Aztec III Dishes Var G Rims	1
Aztec III Dishes Total Rims	2
Aztec III Molcajetes Misc III Bodies	3
Aztec III Plates Var A Bodies	1
Aztec III Plates Var A Rims	2
Aztec III Plates Var B Bodies	1
Aztec III Plates Var B Rims	6
Aztec III Plates Var C Bodies	2
Aztec III Plates Var C Rims	2
Aztec III Plates Var D Bodies	2
Aztec III Plates Var D Rims	3
Aztec III Plates Var E Bodies	1
Aztec III Plates Var E Rims	3
Aztec III Plates Var F Rims	2
Aztec III Plates Var G Rims	4
Aztec III Total Body Sherds	14
Aztec III Total Rims	39
Aztec III Body Sherds Weight (g)	144.8
Aztec III Total Rims Weight (g)	526.5

Table A.12. Middle Postclassic Redwares

REDWARE TYPES	Totals
Plain Red Var A Bodies	118
Plain Red Var A Rims	52
Plain Red Var B Bodies	31
Plain Red Var B Rims	5
Plain Red Var C Bodies	91
Plain Red Var C Rims	30
Plain Red Var D Bodies	5
Plain Red Var D Rims	7
Plain Red Var K Bodies	22
Plain Red Var K Rims	19
Plain Red Misc Bodies	104
Plain Red Misc Rims	46
Plain Red Total Rims	159
Black-on-Red Misc Bodies	88
Black-on-Red Misc Rims	63
Black-on-Red Var A Bodies	4
Black-on-Red Var A Rims	5
Black-on-Red Var B Bodies	13
Black-on-Red Var B Rims	14
Black-on-Red Var E Bodies	7
Black-on-Red Var E Rims	1
Black-on-Red Var F Bodies	1
Black-on-Red Var H Bodies	3
Black-on-Red Var H Rims	2
Black-on-Red Var I Bodies	2
Black-on-Red Var I Rims	2
Black-on-Red Var J Bodies	4
Black-on-Red Var J Rims	19
Black-on-Red Total Rims	109
Black-and-White-on-Red Misc Bodies	272
Black-and-White-on-Red Misc Rims	232
Black-and-White-on-Red Var A Rims	12
Black-and-White-on-Red Var B Rims	8
Black-and-White-on-Red Var C Bodies	5
Black-and-White-on-Red Var C Rims	9
Black-and-White-on-Red Var D Rims	3
Black-and-White-on-Red Var F Bodies	2
Black-and-White-on-Red Var F Rims	2
Black-and-White-on-Red Var G Rims	6
Black-and-White-on-Red Var K Rims	4
Black-and-White-on-Red Var L Bodies	2
Black-and-White-on-Red Var L Rims	2
Black-and-White-on-Red Total Rims	278
Redwares Total Bodies	770
Redwares Total Rims	547
Redwares Bodies Weight (g)	4823.78
Redwares Total Rims Weight (g)	4905.04

Table A.13. Middle Postclassic Comals

COMAL TYPES	Totals
Comals Misc Rims	61
Comals Var A Rims	1
Comals Var B Rims	15
Comals Var C Rims	82
Comals Var D Rims	163
Comals Var E Rims	183
Comals Var F Rims	42
Comals Var H Rims	1
Comals Var J Rims	1
Comals Bodies	2627
Comals Total Rims	549
Comal Bodies Weight (g)	40762.2
Comals Total Rims Weight (g)	15555.88

Table A.14. Middle Postclassic Ollas (Jars)

OLLA TYPES	TOTALS
Direct Flaring Rim	233
Direct Upright Rim	368
Everted Rim	23
Exterior Beveled Rim	2
Flattened Everted Rim	73
Incurving Rim	30
Other Unidentified Rim	4
Thin walled Rim	3
Total Jar Rims	736
Olla Bodies	10370
Olla Bodies Weight (g)	277298.9
Ollas Total Rims Weight (g)	22180.3

Table A.15. Middle Postclassic Plain Bowls

Plain Bowls	Totals
Plain Bowls Var A Rims	252
Plain Bowls Var B Rims	1
Plain Bowls Var C Rims	1
Plain Bowls Var D Rims	6
Plain Bowls Var E Rims	31
Plain Bowls Var F Rims	16
Plain Bowls Var G Rims	1
Plain Bowls Var K Rims	9
Plain Bowls Var L Rims	1
Plain Bowls Var M Rims	2
Plain Bowls Bodies	1075
Plain Bowls Total Rims	320
Plain Bowls Bodies Weight (g)	13113.12
Plain Bowls Rims Weight (g)	3746.5

Table A.16. Middle Postclassic Handles

HANDLE TYPES	Totals
Handles Var A	78
Handles Var B	8
Handles Var C	3
Handles Var D	105
Handles Var E	2
Handles Var F	8
Handles Var G	2
Handles Var I	8
Handles Var J	16
Handles Var K	12
Handles Total	242
Handles Weight (g)	21735.1

Table A.17. Middle Postclassic Supports

SUPPORT TYPES	Totals
Supports Var A	19
Supports Var B	9
Supports Var C	1
Supports Var D	3
Supports Var F	22
Supports Var G	15
Supports Var H	10
Supports Var I	1
Supports Var J	2
Supports Var K	5
Supports Var M	1
Supports Total	88
Supports Weight (g)	4392.25

Late Postclassic Ceramic Data

Table A.18. Late Postclassic Aztec I Black-on-Orange

AZTEC I TYPES	Totals
Aztec I Basins Var Misc Rims	1
Aztec I Bowls Misc Bodies	24
Aztec I Bowls Misc Rims	37
Aztec I Bowls Var A Bodies	5
Aztec I Bowls Var A Rims	37
Aztec I Bowls Var B Rims	2
Aztec I Bowls Var C Rims	1
Aztec I Dishes Var A Bodies	2
Aztec I Dishes Var A Rims	2
Aztec I Dishes Var B Rims	1
Aztec I Plates Misc Bodies	22
Aztec I Plates Misc Rims	14
Aztec I Plates Var A Bodies	3
Aztec I Plates Var A Rims	11
Aztec I Unid Int Dec Misc Bodies	2
Aztec I Unid Int Dec Misc Rims	1
Aztec I Total Body Sherds	57
Aztec I Total Rims	107
Aztec I Body Sherds Weight (g)	760.26
Aztec I Total Rims Weight (g)	1992.3

Table A.19. Late Postclassic Aztec II Black-on-Orange

AZTEC II TYPES	Totals
Aztec II Basins Misc Rims	3
Aztec II Basins Var B Rims	2
Aztec II Basins Var K Rims	3
Aztec II Bowls Misc Bodies	9
Aztec II Bowls Misc Rims	19
Aztec II Bowls Var B Bodies	3
Aztec II Bowls Var B Rims	4
Aztec II Bowls Var C Bodies	3
Aztec II Bowls Var C Rims	7
Aztec II Bowls Var E Rims	2
Aztec II Bowls Var F Rims	3
Aztec II Bowls Var G Bodies	3
Aztec II Bowls Var G Rims	4
Aztec II Bowls Var H Rims	4
Aztec II Bowls Var I Rims	5
Aztec II Bowls Var J Bodies	3
Aztec II Bowls Var J Rims	7
Aztec II Bowls Var K Rims	5
Aztec II Dishes Misc Bodies	8
Aztec II Dishes Misc Rims	4
Aztec II Dishes Var B Bodies	1
Aztec II Dishes Var B Rims	2
Aztec II Dishes Var F Rims	1
Aztec II Dishes Var G Bodies	5
Aztec II Molcajetes Misc Bodies	3
Aztec II Molcajetes Misc Rims	7
Aztec II Plates Misc Bodies	43
Aztec II Plates Misc Rims	11
Aztec II Plates Var B Rims	10
Aztec II Plates Var C Bodies	4
Aztec II Plates Var C Rims	2
Aztec II Plates Var D Rims	2
Aztec II Plates Var E Rims	4
Aztec II Plates Var F Bodies	3
Aztec II Plates Var F Rims	4
Aztec II Plates Var G Bodies	5
Aztec II Plates Var G Rims	9
Aztec II Plates Var H Bodies	2
Aztec II Plates Var H Rims	6
Aztec II Plates Var I Bodies	3
Aztec II Plates Var I Rims	2
Aztec II Plates Var J Rims	4
Aztec II Plates Var M Bodies	3
Aztec II Plates Var M Rims	4
Aztec II Total Body Sherds	119
Aztec II Total Rims	140
Aztec II Body Sherds Weight (g)	3604.7
Aztec II Total Rims Weight (g)	5783.58

Table A.20. Late Postclassic Aztec III Black-on-Orange

AZTEC III TYPES	Totals
Aztec III Basins Var A Rims	14
Aztec III Basins Var B Rims	6
Aztec III Basins Var D Rims	13
Aztec III Bowls Misc Bodies	15
Aztec III Bowls Misc Rims	14
Aztec III Bowls Var A Rims	9
Aztec III Bowls Var C Rims	8
Aztec III Bowls Var E Rims	11
Aztec III Bowls Var F Rims	10
Aztec III Bowls Var G Bodies	6
Aztec III Bowls Var G Rims	12
Aztec III Dishes Misc III Bodies	6
Aztec III Dishes Var A Rims	13
Aztec III Dishes Var B Bodies	6
Aztec III Dishes Var B Rims	9
Aztec III Dishes Var D Bodies	8
Aztec III Dishes Var D Rims	9
Aztec III Dishes Var F Rims	12
Aztec III Molcajetes Misc Bodies	5
Aztec III Molcajetes Var A Rims	9
Aztec III Molcajetes Var B Rims	8
Aztec III Molcajetes Var D Bodies	6
Aztec III Molcajetes Var D Rims	6
Aztec III Plates Misc Bodies	166
Aztec III Plates Misc Rims	137
Aztec III Plates Var A Rims	6
Aztec III Plates Var B Bodies	9
Aztec III Plates Var B Rims	19
Aztec III Plates Var C Bodies	9
Aztec III Plates Var C Rims	35
Aztec III Plates Var D Bodies	112
Aztec III Plates Var D Rims	163
Aztec III Plates Var E Bodies	7
Aztec III Plates Var E Rims	25
Aztec III Plates Var F Bodies	12
Aztec III Plates Var F Rims	14
Aztec III Plates Var G Rims	22
Aztec III Unid Int Dec Var E Rims	17
Aztec III Unid Int Dec Var F Rims	6
Aztec III Unid Int Dec Misc Bodies	7
Aztec III Total Body Sherds	374
Aztec III Total Rims	607
Aztec III Body Sherds Weight (g)	2221.07
Aztec III Total Rims Weight (g)	4932.29

Table A.21. Late Postclassic Aztec IV Black-on-Orange

AZTEC IV TYPES	Totals
Aztec IV Molcajetes Misc Bodies	1
Aztec IV Basins Misc Bodies	1
Aztec IV Bowls Misc Bodies	1
Aztec IV Bowls Misc Rims	3
Aztec IV Molcajetes Var K Bodies	2
Aztec IV Molcajetes Var K Rims	1
Aztec IV Plates Var H Bodies	1
Aztec IV Plates Var H Rims	1
Aztec IV Plates Var K Rims	1
Aztec IV Plates Misc Rims	8
Aztec IV Plates Misc Bodies	6
Aztec IV Total Rims	14
Aztec III Body Sherds Weight (g)	54.6
Aztec III Total Rims Weight (g)	117.6

Table A.22. Late Postclassic Redwares

REDWARE TYPES	Totals
Plain Red Var A Bodies	303
Plain Red Var A Rims	91
Plain Red Var B Bodies	103
Plain Red Var B Rims	8
Plain Red Var C Bodies	174
Plain Red Var C Rims	35
Plain Red Var D Bodies	13
Plain Red Var D Rims	10
Plain Red Var K Bodies	12
Plain Red Var K Rims	10
Plain Red Misc Bodies	205
Plain Red Misc Rims	83
Plain Red Total Rims	237
Black-on-Red Var B Bodies	14
Black-on-Red Var B Rims	19
Black-on-Red Var E Bodies	11
Black-on-Red Var E Rims	19
Black-on-Red Var H Rims	4
Black-on-Red Var I Bodies	5
Black-on-Red Var I Rims	3
Black-on-Red Var J Bodies	3
Black-on-Red Var J Rims	17
Black-on-Red Misc Bodies	186
Black-on-Red Misc Rims	95
Black-on-Red Total Rims	157
Black-and-White-on-Red Var A Rims	12
Black-and-White-on-Red Var B Rims	2
Black-and-White-on-Red Var C Bodies	9
Black-and-White-on-Red Var C Rims	14
Black-and-White-on-Red Var D Rims	5
Black-and-White-on-Red Var E Rims	6
Black-and-White-on-Red Var F Rims	3
Black-and-White-on-Red Var G Rims	6
Black-and-White-on-Red Var H Rims	2
Black-and-White-on-Red Var K Rims	4
Black-and-White-on-Red Misc Bodies	533
Black-and-White-on-Red Misc Rims	440
Black-and-White-on-Red Total Rims	492
Redwares Total Bodies	1571
Redwares Total Rims	886
Redwares Bodies Weight (g)	8463.38
Redwares Total Rims Weight (g)	6291.94

Table A.23. Late Postclassic Comals

COMAL TYPES	Totals
Comals Var B Rims	6
Comals Var C Rims	72
Comals Var D Rims	220
Comals Var E Rims	329
Comals Var F Rims	60
Comals Var G Rims	2
Comals Misc Rims	162
Comals Bodies	3573
Comals Total Rims	851
Comal Bodies Weight (g)	39272.6
Comals Total Rims Weight (g)	18131.86

Table A.24. Late Postclassic Ollas (Jars)

OLLA TYPES	Totals
Direct Flaring Rim	222
Direct Upright Rim	539
Everted Rim	7
Exterior Bevelled Rim	2
Flattened Everted Rim	86
Incurving Rim	31
Thin walled Rim	4
Other Unidentified Rim	5
Olla Bodies	13178
Total Olla Rims	896
Olla Bodies Weight (g)	195984.4
Ollas Total Rims Weight (g)	17094.3

Table A.25. Late Postclassic Plain Bowls

PLAIN BOWL TYPES	Totals
Plain Bowls Misc Rims	9
Plain Bowls Var A Rims	639
Plain Bowls Var D Rims	4
Plain Bowls Var E Rims	104
Plain Bowls Var F Rims	41
Plain Bowls Var K Rims	13
Plain Bowls Var L Rims	3
Plain Bowls Var M Rims	20
Plain Bowls Bodies	2144
Plain Bowls Total Rims	833
Plain Bowls Bodies Weight (g)	20579.91
Plain Bowls Rims Weight (g)	7487.05

Table A.26. Late Postclassic Handles

HANDLE TYPES	Totals
Handles Var A	126
Handles Var B	20
Handles Var C	9
Handles Var D	91
Handles Var E	4
Handles Var F	9
Handles Var G	13
Handles Var I	20
Handles Var J	26
Handles Var K	13
Handles Total	331
Handles Weight (g)	19466.44

Table A.27. Late Postclassic Supports

SUPPORT TYPES	Totals
Supports Var A	12
Supports Var B	11
Supports Var D	2
Supports Var E	2
Supports Var F	38
Supports Var G	42
Supports Var H	24
Supports Var I	2
Supports Var J	9
Supports Var K	3
Supports Var M	3
Supports Total	148
Supports Weight (g)	5039.89

Colonial Ceramic Data

Table A.28. Colonial Aztec I Black-on-Orange

AZTEC I TYPE	Totals
Aztec I Basins Var Misc Rims	1
Aztec I Bowls Misc Bodies	9
Aztec I Bowls Misc Rims	13
Aztec I Bowls Var A Rims	10
Aztec I Bowls Var B Rims	2
Aztec I Dishes Misc Bodies	2
Aztec I Dishes Var A Bodies	1
Aztec I Dishes Var A Rims	1
Aztec I Plates Misc Bodies	7
Aztec I Plates Misc Rims	6
Aztec I Plates Var A Bodies	1
Aztec I Plates Var A Rims	2
Aztec I Plates Var C Rims	1
Aztec I Unid Int Dec Var A Bodies	1
Aztec I Total Body Sherds	20
Aztec I Total Rims	36
Aztec I Body Sherds Weight (g)	411.4
Aztec I Total Rims Weight (g)	459.9

Table A.29. Colonial Aztec II Black-on-Orange

AZTEC II TYPE	Totals
Aztec II Bowls Misc Bodies	4
Aztec II Bowls Misc Rims	2
Aztec II Bowls Var B Bodies	3
Aztec II Bowls Var B Rims	5
Aztec II Bowls Var C Bodies	2
Aztec II Bowls Var C Rims	1
Aztec II Bowls Var D Rims	1
Aztec II Bowls Var F Bodies	1
Aztec II Bowls Var F Rims	1
Aztec II Bowls Var G Rims	2
Aztec II Bowls Var H Rims	3
Aztec II Bowls Var I Rims	1
Aztec II Bowls Var J Bodies	1
Aztec II Bowls Var J Rims	2
Aztec II Bowls Var K Rims	2
Aztec II Dishes Misc Bodies	6
Aztec II Dishes Misc Rims	2
Aztec II Dishes Var J Rims	1
Aztec II Molcajetes Misc Rims	1
Aztec II Molcajetes Var B Rims	1
Aztec II Molcajetes Var G Rims	2
Aztec II Molcajetes Var I Bodies	1
Aztec II Molcajetes Var J Bodies	1
Aztec II Plates Var B Bodies	2
Aztec II Plates Var B Rims	2
Aztec II Plates Var C Bodies	1
Aztec II Plates Var C Rims	2
Aztec II Plates Var E Rims	1
Aztec II Plates Var F Bodies	2
Aztec II Plates Var F Rims	5
Aztec II Plates Var G Bodies	2
Aztec II Plates Var G Rims	3
Aztec II Plates Var H Bodies	2
Aztec II Plates Var H Rims	3
Aztec II Plates Var J Bodies	3
Aztec II Plates Var J Rims	2
Aztec II Plates Var M Bodies	4
Aztec II Plates Var M Rims	2
Aztec II Total Body Sherds	33
Aztec II Total Rims New	47
Aztec II Body Sherds Weight (g)	436.1
Aztec II Total Rims Weight (g)	483.4

Table A.30. Colonial Aztec III Black-on-Orange

AZTEC III TYPE	Totals
Aztec III Basins Misc Rims	1
Aztec III Basins Var B Bodies	1
Aztec III Bowls Misc Rims	2
Aztec III Bowls Total Rims	5
Aztec III Bowls Var A Bodies	1
Aztec III Bowls Var C Rims	1
Aztec III Bowls Var D Rims	2
Aztec III Dishes Misc III Bodies	3
Aztec III Dishes Var C Rims	1
Aztec III Dishes Var D Bodies	2
Aztec III Molcajetes Misc Bodies	1
Aztec III Molcajetes Misc Rims	1
Aztec III Molcajetes Var B Rims	1
Aztec III Molcajetes Var C Rims	3
Aztec III Molcajetes Var D Bodies	2
Aztec III Molcajetes Var F Rims	1
Aztec III Plates Misc Bodies	2
Aztec III Plates Misc Rims	1
Aztec III Plates Var A Bodies	1
Aztec III Plates Var A Rims	3
Aztec III Plates Var B Bodies	3
Aztec III Plates Var B Rims	3
Aztec III Plates Var C Bodies	1
Aztec III Plates Var C Rims	3
Aztec III Plates Var D Bodies	17
Aztec III Plates Var D Rims	23
Aztec III Plates Var E Bodies	3
Aztec III Plates Var E Rims	8
Aztec III Plates Var F Bodies	1
Aztec III Plates Var F Rims	2
Aztec III Plates Var G Bodies	2
Aztec III Plates Var G Rims	7
Aztec III Total Body Sherds	40
Aztec III Total Rims	68
Aztec III Body Sherds Weight (g)	408.3
Aztec III Total Rims Weight (g)	638.2

Table A.31. Colonial Aztec IV Black-on-Orange

AZTEC IV TYPE	Totals
Aztec IV Plates Misc IV Bodies	53
Aztec IV Plates Misc IV Rims	39
Aztec IV Molcajetes Var I Rims	13
Aztec IV Molcajetes Var J Rims	7
Aztec IV Molcajetes Var K Bodies	15
Aztec IV Molcajetes Var K Rims	17
Aztec IV Molcajetes Misc IV Rims	21
Aztec IV Dishes Var I Rims	5
Aztec IV Dishes Var K Bodies	3
Aztec IV Dishes Var K Rims	5
Aztec IV Bowls Var K Bodies	3
Aztec IV Plates Var H Bodies	5
Aztec IV Plates Var H Rims	42
Aztec IV Plates Var I Rims	11
Aztec IV Plates Var J Bodies	21
Aztec IV Plates Var J Rims	12
Aztec IV Plates Var K Bodies	7
Aztec IV Plates Var K Rims	13
Aztec IV Total Bodies	107
Aztec IV Total Rims	185
Aztec IV Body Sherds Weight (g)	1339.4
Aztec IV Total Rims Weight (g)	2863.99

Table A.32. Colonial Redwares

REDWARE TYPES	Totals
Plain Red Misc Bodies	54
Plain Red Misc Rims	148
Plain Red Var A Bodies	58
Plain Red Var A Rims	103
Plain Red Var B Bodies	9
Plain Red Var B Rims	120
Plain Red Var C Bodies	16
Plain Red Var C Rims	3
Plain Red Var D Bodies	2
Plain Red Var D Rims	7
Plain Red Var K Bodies	9
Plain Red Total Rims	179
Black-on-Red Misc Bodies	100
Black-on-Red Misc Rims	43
Black-on-Red Var B Bodies	6
Black-on-Red Var B Rims	6
Black-on-Red Var C Bodies	3
Black-on-Red Var C Rims	3
Black-on-Red Var E Bodies	5
Black-on-Red Var E Rims	8
Black-on-Red Var G Rims	5
Black-on-Red Var H Bodies	2
Black-on-Red Var H Rims	3
Black-on-Red Var J Bodies	2
Black-on-Red Var J Rims	4
Black-on-Red Total Rims	72
Black-and-White-on-Red Misc Bodies	313
Black-and-White-on-Red Misc Rims	261
Black-and-White-on-Red Var A Rims	3
Black-and-White-on-Red Var B Rims	1
Black-and-White-on-Red Var C Rims	8
Black-and-White-on-Red Var E Bodies	2
Black-and-White-on-Red Var E Rims	2
Black-and-White-on-Red Var F Rims	1
Black-and-White-on-Red Var G Rims	1
Black-and-White-on-Red Var H Rims	2
Black-and-White-on-Red Var I Rims	3
Black-and-White-on-Red Total Rims	282
Redwares Total Bodies	939
Redwares Total Rims	502
Redwares Bodies Weight (g)	4945.27
Redwares Total Rims Weight (g)	3773.09

Table A.33. Colonial Comals

COMAL TYPES	Totals
Comals Var B Rims	2
Comals Var C Rims	31
Comals Var D Rims	138
Comals Var E Rims	173
Comals Var F Rims	44
Comals Var G Rims	5
Comals Misc Rims	86
Comals Bodies	2015
Comals Total Rims	479
Comal Bodies Weight	22242.7
Comals Total Rims Weight	10955

Table A.34. Colonial Ollas (Jars)

OLLA TYPES	Totals
Direct Flaring Rim	200
Direct Upright Rim	550
Everted Rim	15
Exterior Beveled Rim	3
Flattened Everted Rim	89
Incurving Rim	43
Other Unidentified Rim	4
Olla Bodies	13702
Total Olla Rims	906
Olla Bodies Weight	211565.3
Ollas Total Rims Weight	17052.2

Table A.36. Colonial Plain Bowls

PLAIN BOWLS	Totals
Plain Misc Rims	4
Plain Bowls Var A Rims	427
Plain Bowls Var B Rims	6
Plain Bowls Var E Rims	63
Plain Bowls Var F Rims	13
Plain Bowls Var H Rims	1
Plain Bowls Var J Rims	9
Plain Bowls Var K Rims	126
Plain Bowls Bodies	1162
Plain Bowls Total Rims	523
Plain Bowls Bodies Weight	11325.92
Plain Bowls Rims Weight	4795.87

Table A.37. Colonial Handles

HANDLE TYPES	Totals
Handles Var A	55
Handles Var B	13
Handles Var C	3
Handles Var D	60
Handles Var E	1
Handles Var F	12
Handles Var G	3
Handles Var H	1
Handles Var I	10
Handles Var J	5
Handles Var K	8
Handles Total	171
Handles Weight (g)	8954.87

Table A.38. Colonial Supports

SUPPORT TYPES	Totals
Supports Var A	4
Supports Var B	6
Supports Var F	23
Supports Var G	29
Supports Var H	36
Supports Var I	5
Supports Var J	6
Supports Var K	9
Supports Var M	2
Supports Total	120
Supports Weight (g)	3564.34

Lithic Analysis

Lithic artifacts were recovered from nearly 80% of excavation contexts and comprise a substantial category of excavated materials. These artifacts included chert and obsidian tools and debitage. This section of the Appendix presents the results of previous studies of lithics at Xaltocan, comparative resources used during lithic analyses, excavation methods, condition and treatment of specimens, the analytical procedures used, and the results of analysis. This section does not include groundstone artifacts, including grinding stones and mortars. These objects were analyzed separately.

Excavation Methods:

No special precautions were taken for the excavation of lithic materials. Most lithics were recovered in the screens, following the excavation procedures outlined in Chapter 1. All specimens were washed with water and soft brushes, and allowed to dry in the sun. After lithics were dry they were placed into clean plastic bags and tied with cotton string. Bags were labeled with provenience information and the original provenience tags were deposited into the bags with the cleaned lithics.

Analysis:

Lithic materials were analyzed based on area. A total of 682 areas had lithic remains and each of these areas was analyzed. A total of 7,600 lithic tool and debitage pieces were recovered during excavations. During analysis, the quantity, material, color, tool form, and weight (recorded in grams) of lithics were recorded. This represents only a cursory lithic analysis and in the future analyses of use wear and retouching may be

conducted to glean more information about the lithic use and production at Cerrito Central.

Lithics were first categorized based on material. The vast majority of lithic remains were composed of obsidian (98.6%, n=7,597) and the remaining lithic artifacts were composed of chert (1.4 %, n=103). Obsidian was then divided into four major categories based on color. Color variants of obsidian included: green, gray, black, and brown. The vast majority of obsidian was green, also known as “Pachuca obsidian” (see chapter 4), which probably comes from Sierra Las Navajas, Hidalgo, Mexico. Chert was not divided based on color. Gray obsidian, though markedly less numerous than green also made up a substantial proportion of recovered obsidian. Although gray obsidian sources in central Mexico are more numerous and fairly difficult to source macroscopically (Charlton and Spence 1982), given the proximity, Otumba or Paredón are the two most likely sources for Xaltocan’s gray obsidian (Charlton and Spence 1982; Cobean et al. 1991). There simply was not a large enough sample, nor enough variation in chert color to justify color categories. Chert colors ranged from white to tan, and one piece of pink chert was recovered.

After grouping obsidian into color categories, both obsidian and chert artifacts were separated based on tool form. Recovered tool forms included: prismatic blades, prismatic cores, unifacial tools, bifacial tools, projectile points, eccentrics, punches, and debitage. Prismatic blades were defined as prismatic flakes in which the length was at least twice the width. Prismatic cores were defined as blocks of obsidian or chert with evidence of a striking platform and for the removal of flakes. Unifacial tool were defined

as flakes with evidence for shaping on only one side. Unifacial tools also lacked the distinctive prism shape of prismatic blades. Bifacial tools were flaked on both sides. Projectile points were defined as bifacial tools that contained points and flat basal edge where the tool may have been hafted to an arrow or spear. Eccentrics were generally defined as an irregularly shaped chipped artifact. All eccentrics recovered during excavations were either C-shaped or E-shaped. Punches were defined as long and thin cylinder-shaped tools that narrowed to a point at one end. Debitage was a broad category that contained flakes and other fragmentary specimens in which the intended form was not identifiable.

Previous Studies:

Previous analyses of the lithic remains at Xaltocan have drawn data from commoner household contexts and from survey collections (Brumfiel 1991a; Brumfiel and Hodge 1996; Millhauser 2005). Patterns observed in these studies indicate that during the Postclassic 90-95% of lithic artifacts were made of obsidian, the bulk were made of green obsidian from the Pachuca source (Cerro de Navajas) in Hidalgo. After Pachuca green, the most common lithic material was gray obsidian, presumably from Otumba in the state of Mexico. Other variants included black and brown obsidian, which were frequently lumped in with gray obsidian during analysis (Millhauser 2005:269).

Earlier studies of obsidian at Xaltocan were particularly concerned with the impact of the Aztec conquest on access to resources and the overall wealth of residents. Presumably, the shift from being a relatively wealthy, autonomous capital, to a less wealthy subject city would have impacted exchange markets and access to raw materials

at Xaltocan. Seeking to determine how Aztec domination during the Late Postclassic affected the production and consumption of lithic tools at Xaltocan, previous studies revealed patterns in obsidian quantity, material, form, use wear and retouching, which might be indicative of changes in access to resources over time.

Perhaps the most obvious shift observed among previous studies at Xaltocan was the decline of obsidian from the Middle Postclassic to Late Postclassic. Similar declines in obsidian have been observed at other Postclassic sites in the Basin of Mexico, and are presumably linked to the rise of the Aztec empire. Other evidence that might be indicative of a substantial change in Xaltocan's access to obsidian resources might be a downturn in material diversity. Aztec domination may have changed the avenues by which Xaltocan's residents acquired obsidian resources and may have restricted the kinds of materials they could access. Previous studies have found that throughout the Postclassic a general increase in the amount of Pachuca green obsidian is evident, but it begins well before the formation of the Aztec empire. Given the steady rise, it is unclear if the decrease in material diversity of lithic artifacts is linked a restricted market. The preeminence of one lithic material over another may reflect local preference or availability, as opposed to political control of resources and exchange.

Results:

The results of lithic analyses are presented below. These tables and charts present only a summary of the statistics and counts for lithic artifacts.

Table A.39. Early Postclassic Lithic Results

Color and Material	Number of Pieces (n)	Percent of Total
Green Obsidian	1355	84.1%
Gray Obsidian	179	11.1%
Black Obsidian	39	2.4%
Chert	39	2.4%
TOTAL	1612	

Table A.40. Middle Postclassic Lithic Results

Color and Material	Number of Pieces (n)	% of Total
Green Obsidian	1681	89.6%
Gray Obsidian	138	7.3%
Black Obsidian	31	1.6%
Brown Obsidian	1	<.1%
Chert	26	1.4%
TOTAL	1877	

Table A.41. Late Postclassic Lithic Results

Color and Material	Number of Pieces (n)	% of Total
Green Obsidian	2471	89.4%
Gray Obsidian	216	7.8%
Black Obsidian	49	1.7%
Brown Obsidian	1	<.1%
Chert	28	1%
TOTAL	2765	

Table A.42. Average number of lithics recovered from areas where lithics were present

Time Period	Lithic Count /100 rim sherds	Lithic Weight (grams) /100 rim sherds	Increase or Decrease from Previous Period
Early Postclassic	68.9	135 g	N/A
Middle Postclassic	89.2	169 g	25% increase (based on weight)
Late Postclassic	72.6	108 g	36% decrease (based on weight)

Table A.43. Average lithic weights during the Postclassic

Time Period	Average Weight (grams)/Lithic Object
Early Postclassic	2 g
Middle Postclassic	1.9 g
Late Postclassic	1.5 g

Table A.44. Comparing Early Postclassic forms among green and gray obsidian

Color	Prismatic Blades	Prismatic Cores	Bifacial Tools	Unifacial Tools	Punches	Eccentrics	Flakes and Shatter	Projectile Points
Green	863 (63.7%)	5 (0.4%)	1 (<0.1%)	2 (<0.1%)	0	1 (<0.1%)	475 (35.1%)	8 (0.6%)
Gray	51 (28.5%)	0	0	1 (0.6%)	0	0	122 (68.2%)	5 (2.8%)

Table A.45. Comparing Middle Postclassic forms among green and gray obsidian

Color	Prismatic Blades	Prismatic Cores	Bifacial Tools	Unifacial Tools	Punches	Eccentrics	Flakes and Shatter	Projectile Points
Green	1128 (67.1%)	9 (0.5%)	1 (<0.1%)	11 (0.8%)	2 (<0.1%)	0	517 (30.8%)	13 (0.8%)
Gray	35 (25.4%)	0	0	2 (1.4%)	0	0	98 (71%)	3 (1.4%)

Table A.46. Comparing Late Postclassic forms among green and gray obsidian

Color	Prismatic Blades	Prismatic Cores	Bifacial Tools	Unifacial Tools	Punches	Eccentrics	Flakes and Shatter	Projectile Points
Green	1564 (63.3%)	20 (0.8%)	3 (<0.1%)	8 (0.3%)	0	1 (<0.1%)	864 (35%)	11 (0.5%)
Gray	56 (26%)	3 (1.4%)	0	3 (1.4%)	0	0	149 (69%)	5 (2.3%)

Conclusions

Overall, it is apparent that at Postclassic Cerrito Central green obsidian was consistently the most common lithic material. Although no earlier phases were excavated at Cerrito Central (or at Xaltocan), previous studies at a nearby Classic/Epiclassic site (Michpilco) revealed more equitable distributions of green and gray obsidian, with each comprising roughly 45% of total lithics (Millhauser 2005: 273, 310). This indicates that in the region, relative use of green obsidian had spiked dramatically by the Postclassic period. This upsurge might have been linked to a change in consumer demands, or it may indicate that Pachuca green obsidian became the focus of obsidian suppliers and became

the main option in the market. Similar surges in the relative frequency of green obsidian are observed throughout the Basin of Mexico, indicating that this was not a site-specific change.

Throughout the Postclassic changes in use of green obsidian (relative to other types) are subtle. While there is a slight relative increase in green obsidian between the Early and Middle Postclassic periods (about 5.5%), between the Middle and Late Postclassic periods there is not a significant change (.2% decrease). By the Middle Postclassic nearly 90% of lithic material at Cerrito Central was green obsidian, and this pattern continues into the Late Postclassic period. These patterns are par with the rest of Xaltocan, where we do not see a drastic change in the proportion of obsidian materials between the Middle and Late Postclassic periods (Millhauser 2005: 285). This might indicate that Xaltocan's leaders participated in the same exchange networks markets as their constituents. It is also worth noting that the major political shift that occurred as the Aztec empire rose to power does not appear to have impacted the kinds of obsidian materials people at Xaltocan were accessing, though it may have impacted the quantity. These broad patterns in lithic data are consistent with other Postclassic sites in central Mexico.

In terms of overall lithic quantity, the Middle Postclassic saw the greatest surge. Between the Early and Middle Postclassic periods the frequency of obsidian increased from 135g to 169g per 100 rim sherds, a rise of approximately 25%. This increase corresponds to patterns observed in previous studies at Xaltocan and throughout the Basin of Mexico. Also in accordance with earlier studies, there is a marked decrease

(36%) in obsidian frequency between the Middle and Late Postclassic periods. This is presumably linked to the rise of the Aztec empire and reflects greater restriction to lithic resources. If this was the case then it seems to have impacted Xaltocan's leaders at a similar rate to the wider community of Xaltocan. Another line of evidence that may support this theory is the fact that the average weight of lithic objects dropped by about 21% between the Middle and Late Postclassic periods (from 1.9g to 1.5g). While other forms of analysis would be necessary to support the following hypothesis, this downturn in the average size of lithic objects may indicate that with more restricted access to raw materials, lithics were increasingly retouched or reused, and in the process reduced in size. Previous studies at Xaltocan have found some evidence that use and reuse of lithics increased at Xaltocan during the Late Postclassic (Millhauser 2005: 297) but more research is necessary.

By far the most abundant forms recovered at Cerrito Central were prismatic blades, comprising about two-thirds of green obsidian objects throughout the duration of the Postclassic (with only marginal shifts between periods). A similar pattern was observed in Millhauser's (2005: 287) analysis of Late Postclassic lithic forms at Xaltocan, however his Early Postclassic data does not correspond as well with regard to prismatic blades comprising only about 55% of all lithic forms. However, as Millhauser notes, his sample Early Postclassic sample was especially small and might not reflect lithic data patterns at Xaltocan as a whole.

Another noteworthy pattern observed in the lithic data from Cerrito Central is that for green obsidian, the ratio of blades to flakes and shatter was roughly 2:1, whereas the

same ratio for gray obsidian was roughly equal to the inverse, at 1:2. Millhauser observed similar patterns in gray obsidian during the Early Postclassic, but by the Late Postclassic blade to flake and shatter ratio for gray obsidian was roughly 1:1, with slightly higher quantities of blades.

Unfortunately, as with Millhauser's sample, the sample from Cerrito Central is limited and having not excavated the full expanse of the area it is unclear what biases in the raw data might exist. Overall, it appears that the patterns observed in lithic data at Cerrito Central generally align with the patterns observed in lithic data recovered from across the site, suggesting that lithic use by Xaltocan's leaders was not markedly different from others in the community. No workshop spaces were located, nor were caches with substantial lithic material, although one large core and another large biface were recovered in Late Postclassic context.

Stucco Analysis

In archaeological studies, stucco is commonly used as a catchall phrase to describe a lime-based mixture used primarily for architectural or decorative purposes. In this dissertation however, I have chosen to address to kinds of lime-based materials, stucco and plaster, differently. While both stucco and plaster are made from a mixture of lime, aggregate, and water, at Cerrito Central the product materials are somewhat different and probably served slightly different functions. Whereas plaster is used to describe the material primarily used for floor surfaces and possibly to line other interior

surfaces, stucco describes the material used to line the exterior of structures to create wall facades and possibly molded architectural features.

Based on these criteria, the only plaster materials recovered through excavations were *in situ*, which might be because when removed from its original context plaster quickly crumbles. In some areas clusters of melted (in appearance) lime and aggregate were recovered, especially in midden contexts, and these may be examples of floor fragments that were disposed of. They may also be the refuse from lime production. In comparison to stucco, plaster was thinner and more friable. Plaster floors were constructed by spreading wet plaster over a thin layer of *tezontle* gravel. Through this process the gravel actually melded with the plaster. The combining of these materials created an enduring floor surface, but when fragments of plaster were chipped away they quickly crumbled. Compared with stucco, the plaster floors appear to have been made from a finer mixture of lime, aggregate, and water. The assumption is that when

Stucco, on the other hand, refers to the fragmented material recovered in fill. Compared to plaster, stucco was thicker (approximately 3-6 cm), contained coarser aggregate and was generally harder and more resilient. Stucco was probably used to line the exterior of buildings, and four structural stones were recovered during excavations that still had stucco adhered to them. Although we have evidence for the production of red pigment, only a very small number of red-painted stucco fragments were recovered (see below for more details). Thus, the vast majority of stucco acquired in excavations was plain and was discovered in fill contexts, possibly ripped from the walls of preceding buildings.

Results of Stucco Analysis

In total, 9,957 pieces of stucco were recovered during excavations. 9,719 of these dated to the Postclassic, Stucco use at Xaltocan appears to have increased steadily throughout the Postclassic. In Early Postclassic areas where plain white stucco was present, an average of 20.2 pieces of stucco were recovered. During the Middle Postclassic, an average of 25.2 pieces were recovered in areas where stucco was present. In the late Postclassic in areas where stucco was present, an average of 26.9 pieces were recovered (Table A.47).

Table A.47 Amounts of plain stucco obtained through excavations at Cerrito Central

Time Period	Number of Areas with Plain Stucco	Number of Total Pieces of Plain Stucco	Average Plain Stucco Per Area*	Total Weight (kg)	Average Weight Per Area* (g)
Early Postclassic	32	626	20.194	12.354 kg	398.516 g
Middle Postclassic	150	3759	25.228	129.864 kg	871.575 g
Late Postclassic	199	5322	26.879	155.063 kg	783.149 g
Colonial**	21	237	11.85	5.591 kg	279.56 g

* Average only includes areas that contained plain stucco. Areas where no stucco was recovered were not included in these calculations.

** Colonial contexts are difficult to define at Cerrito Central because of modern disturbances. These numbers may not accurately reflect the amounts of stucco created and used during this time period. These data will be largely ignored for the duration of this analysis.

Red Stucco

A small quantity of red painted stucco was recovered at Cerrito Central dating to the Middle and Late Postclassic periods. This might suggest that red paint was only used to accent stucco walls and did not cover them completely. One piece of stucco, recovered from an Late Postclassic context, contained an undulating motif (Fig. 4.6).

Colonial Period

Very few purely Colonial contexts were recovered at Cerrito Central, having been disturbed by modern plowing, construction, and trash pits. However, many contexts which have been categorized as “modern” or “mixed”, almost always contain some colonial artifacts, and at least some of the stucco may date to the colonial period.

Groundstone Analysis

Ground stone artifacts, or grinding stones, did not comprise a large proportion of excavated material at Cerrito Central. Only about 5.5% of the areas excavated contained ground stone, and only in rare instances was more than one ground stone object found in a given area. These artifacts included basalt *manos* and *metates*. *Manos* refer broadly to stones that are hand-held and used to grind or mash corn, spices, and other foods against a stone surface, referred to as a *metate*. For this study *manos* were separated into two categories: true *manos*, and hand grinders. In this case, true *manos* refer to the stone tools that are elongated in shape (roughly ovoid) and may be rounded or flattened on the edges. Traditional *manos* may be rolled or grinded along a flat or curved surfaces, and are especially useful for processing corn. Grinders, or hand grinders, were also used from grinding, but rather than rolled, or pushed along a surface, grinders are gripped in the palm and are used for mashing (with a twisting motion). Grinders were probably used with *molcajetes*, which were bowls or basins made of ceramic and probably stone. *Molcajetes* and contained a rough, often texture surface which the grinder would press

objects up against. Hand grinders were probably used for making salsa and for grinding spices, whereas *manos* were probably more useful for processing corn.

This section of the Appendix presents the excavation methods, condition and treatment of specimens, the analytical procedures used, and the results of the ground stone analysis. Only a very cursory study of ground stone materials was conducted, and in the future, a more in depth study may provide a greater understanding of food processing practices at Cerrito Central, and how they changed over time.

Excavation Methods

No special precautions were taken for the excavation of ground stone materials. Many ground stone fragments were discovered *in situ*, although this was often in fill contexts, and other times they were recovered in the screens. All specimens were washed with water and soft brushes, and allowed to dry in the sun. After ground stone fragments were dry they were placed into clean cotton bags and tied with cotton string. Bags were labeled with provenience information and the original provenience tags were deposited into the bags with the cleaned ground stone fragments.

Analysis

Ground stone materials were analyzed dependent on the area where they were recovered. A total of 52 areas had ground stone remains and each of these areas was analyzed. A total of 63 ground stone fragments were recovered during excavations. During analysis, the quantity, form, and weight (recorded in grams) of ground stone objects were recorded. All ground stone objects were also photographed.

As already mentioned, essentially all ground stone remains were fragmentary. They were almost all comprised of basalt, with a few exceptions that will be addressed below. Ground stone fragments were initially divided into two broad categories: manos and metates, and manos were then subdivided into two categories: true manos and hand grinders. Once divided these objects were counted and weighed. The results, divided by time periods, are presented in Table A.48. below.

Table A.48. Quantities of different groundstone types dating to different time periods

Time Period	Manos	Manos Weight (g)	Grinders	Grinders Weight (g)	Metates	Metates Weight (g)
Early Postclassic	2	664	0	0	2	1540.4
Middle Postclassic	6 (54.5%)	2356	1 (9.1%)	89.3	4 (36.4%)	3898.4
Late Postclassic	25 (67.6%)	5443	7 (18.9%)	1378.5	5 (13.5%)	1771.9
Mixed/ Colonial	5	1140	2	325.8	4	1251.2
Totals	38	9603	10	1793.6	15	8461.9

During the Postclassic there appears to have been a marked increase in ground stone overtime, particularly between the Middle and Late Postclassic periods. The number of ground stone fragments increases drastically, as does the number of fragments per 1000 rim sherd (Table A.49). The weight of ground stone is also measured in the table below, however I argue that count rather than weight may be a better indicator of relative frequency.

Table A.49. Frequency of groundstone fragments dating to different time periods

Time Period	Number of ground stone fragments/1000 rim sherds	Increase or decrease from previous period
Early Postclassic	1.8	
Middle Postclassic	5.3	194% increase
Late Postclassic	9.8	85% increase
Colonial	X	

Conclusions

Interpreting the significance of the ground stone remains in the context of Cerrito Central is tricky given the relatively small sample size. Essentially all ground stone objects were fragmentary and found in fill contexts, suggesting that the majority of ground stone remains recovered in excavations were trash, or used-up materials, and do not necessarily indicate their original place of use. Comparing these small data sets over time might provide some evidence for general patterns in ground stone tool use over time. For example, during the Postclassic there is a marked uptick in the frequency of ground stones, specifically in *manos* and grinders. The frequency of ground stone was measured using the ratio of ground stone fragments per 1000 rim sherds. This ratio was selected, as opposed to weight/rim sherds, because the size of *metate* fragments varied enough to skew the data considerably, especially given this very small sample. The supposition is that the number of fragments (n) might better reflect the number of objects in circulation.

Considering that the vast majority of ground stone objects were fragmentary, the relative rates at which they were recovered may reflect their life span. *Metates*, which are found at a particularly low relative frequency during the Late Postclassic, may reflect their longevity. As large and mostly immobile objects (at least during use) *metates* may have been less susceptible to breakage than *manos*. It is also possible that during the Late Postclassic, when access to resources was more restricted, people living at Xaltocan may have been less willing to dispose of *metates*, which were made of much larger chunks of basalt than *manos*. As a raw material, large chunks of basalt may have been difficult to

obtain given that basalt, a volcanic rock, did not occur naturally on the island. Without much evidence for ground stone production on the island, the supposition is that people living on Xaltocan purchased finished metates in markets (as well as manos and grinders). The strain on stone resources, given the surge in building during the Late Postclassic, may have negatively impacted the availability of metates (and inversely, the cost) in particular. If metates became more expensive or more difficult to acquire during the Late Postclassic then people living at Xaltocan may have been willing to keep broken or worn down metates for longer.

Manos and grinders, on the other hand, were fashioned from significantly smaller raw stones, which would not necessarily have been impacted by building demands, hence their steady availability during the Late Postclassic. Furthermore, new tribute demands during the Late Postclassic might have resulted in an uptick in food processing and cooking. Cooked and processed foods may have been used directly as tribute but also may have been sold at markets to acquire tribute goods that could not be produced rapidly enough. This might account for the uptick in manos and grinders from the Middle (5.3 fragments/1000 rim sherds) to Late Postclassic (9.8 fragments/1000 rim sherds). While the frequency increase over time is striking, the small sample size continues to cast considerable doubt on its significance.

Figurine Analysis

Figurines were analyzed separately and this section does not include all of the data results gleaned from analysis. Below (Table A.50), I only present the time period, and basic “type” of figurine recovered, and the weight of the object. The figurine types

were identified based on two different and overlapping typologies (Kaplan 1958; Parsons 1972). More detailed data concerning the figurines recovered at Cerrito Central will be presented in future publications.

Table A.50. Figurine Data

Sub Op	Area	Type	Weight (g)
2	b4	Parsons III-X??	43.5
3	f1	Unidentified Zoomorphic	27.3
3	c2/d1	Parsons III-G or H (Kaplan Chiconautla III-A Xochiquetzal)	52.7
3	p4	Parsons II-B (Kaplan Chiconautla III T; Xochiquetzal)	19.1
8	p7	Kaplan Chiconautla III-S	117.2
8	p8	Coyote	12.5
8	n1	Parsons I-A	25.6
8	l5	Unidentified; Parsons III-G??	26.3
8	b2	Unidentified Parsons	54.2
9	ab4	Unidentified	36.8
9	w6	Mud Man	20.6
9	m1	Unidentified	27.0
9	Feat 18	Mud Man	33.2
10	f1	Unidentified Parsons III	50.7
10	f1	Coyote	25.5
10	d2	Parsons II-B (Kaplan Chiconautla III-T; Xochiquetzal)	40.5
13	h4	Coyote	11.4
15	b2	Parsons III-H	21.8
15	c4	Serpent	25.0
16	d2	Unidentified	6.5
17	a1	Unidentified	38.9
19	d1	Parsons III-F4	11.6
20	b3	Parsons I-B	18.2
20	c1	Parsons III-A	18.8
20	c2	Parsons III-L	12.9
20	b2	Unidentified	12.2
21	l2	Parsons III-F?	34.1
21	l2	Parsons III-R	40.2
22	h1	Unidentified Parsons III	3.8
23	c4	Unidentified	74.7
26	m2	Coyote	13.8
26	i1	Parsons I-A	13.1

27	f3	Unidentified Parsons III	38.7
38	g2	Parsons I-A	59.1
38	g2	Parsons III-B(3?)	67.3
38	g2	Unidentified, knotted cloth	54.0
38	Feat 21	Parsons I-A	27.1
38	Feat 21	Parsons I-A	25.8
38	Feat 26	Unidentified Parsons III	53.1
39	c3	Parsons III-D	15.0
43	I4	Parsons III-C	27.1
44	j1	Ballplayer	30.8
44	c2	Parsons I-A	92.5
44	c2	Parsons I-A	22.5
44	Feat 28	Parsons I-A	25.9
44	Feat 28	Unidentified Parsons III	9.2
44	Feat 28	Unidentified	26.2

Special Objects

What follows are archaeological materials that were deemed “special objects” these items were found in relatively low frequency in excavations, but may have special meaning or significance. These objects were all analyzed in much the same way, and the excavation methods are outlined below.

Excavation and Storage

Unless otherwise noted, no special precautions were taken for the excavation of special objects. Special objects were often recovered in screens but were also recovered *in situ*. Unless otherwise noted, all specimens were washed with water and soft brushes, and allowed to dry in the sun. After the objects were dry they were placed into clean plastic or cotton bags (depending on size) bags and tied with cotton string. Bags were labeled with provenience information and the original provenience tags were deposited into the bags with the cleaned objects.

Data Analysis of Special Objects

Rattle Balls (stone and ceramic)

Small molded or grinded balls were found in certain excavation units. The assumption is that some of these balls were probably placed on the inside of rattles (particularly the ceramic balls found during the Early Postclassic. Other times these balls may have served as weapons, to be shot from blowguns or slung from slingshots.

Table A.51. Rattle balls recovered at Cerrito Central

Bag #	Time Period	Sub Op	Area	Type	Diameter (cm)	Weight (g)
3053	Early Postclassic	9	Y2	Ball (ceramic)	1.1	2.5
3146	Early Postclassic	9	AB2	Ball (ceramic)	0.8	1.2
2085	Early Postclassic	10	O1	Ball (ceramic)	1.6	5.2
1794	Middle Postclassic	20	R1	Ball (stone)	1.6	6.4
3344	Middle Postclassic	33	AA1	Ball (stone)	1.3	5.2
156	Late Postclassic	26	Feat. 2	Ball (ceramic)	1.4	3.5
336	Late Postclassic	20	B1	Ball (stone)	1.9	5.6
8	Colonial	38	A1	Ball (stone)	1.7	10.4
418	Colonial	15	B2	Ball (stone)	1.1	4.55
1772	Colonial	9	U2	Ball (stone)	1	1.8
12	Colonial	39	A1	Ball (stone) (2)	1.4	12
56	Colonial	40	D1	Ball (stone) (3)	1.2	7

Table A.52. Rattle balls recovered from Cerrito Central and separated based on time period

Time Period	(n) Type	Diameter (cm)	Weight (g)
Early Postclassic	(3) Ceramic Ball	1.1, 0.8, 1.6	2.5, 1.2, 5.2
Middle Postclassic	(2) Stone Ball	1.6, 1.3	6.4, 5.2
Late Postclassic	(1) Ceramic Ball, (1) Stone Ball	1.4 1.9	3.5 5.6
Colonial	(7) Stone Ball	1.7, 1.1, 1, 1.4, 1.3, 1.7, 1.2, 1.3, 1.3	10.4, 4.6, 1.8, 12, 8.3, 7, 5.9, 7.8

Bone Tools (needles and punches)

Table A.53. Bone tools recovered at Cerrito Central

Time Period	Bag Number	Sub Op	Area	Type	Size (cm)	Weight (g)
Early Postclassic	3202	7	J1	bone needle	4.1 x .2	8.5
Early Postclassic	3132	9	AC1	bone needle	5.1 x .25	11.34
Early Postclassic	1865	21	S1	bone needle	5.6 x .2	8.5
Early Postclassic	3146	9	AB2	bone punch	6.7 x 1.1	1.7
Early Postclassic	3217	7	K1	bone needle	4.4 x .4	17
Middle Postclassic	3222	22	Y4	bone needle	3.7 x .4	14.2
Middle Postclassic	3206	22	Y3/Z1	bone needle	8.1 x .4	5.67
Late Postclassic	210	38	g2	bone punch	7.7 x 1.4	15.71
Late Postclassic	3466	101	H1	bone needle	4.4 x .25	10.5
Late Postclassic	1170	23	C1	bone punch	8.7 x 1.4	6.5
Colonial	1048	44	C1	bone punch	8.9 x .8 x .6	3.2

Bone Rasps

Table A.54. Bone rasps recovered at Cerrito Central

Time Period	Bag Number	Sub Op	Area	Size (cm)	Weight (g)
Middle Postclassic	843	21	L2	13 x 2.9 x 4.5	167.2
Late Postclassic	2098	13	D2	9.5 x 1.8 x 1.1	5.8
Colonial	1634	38	Feat. 43	10.6 x 2.7 x 1.1	10.2

Censer Parts (censer bowls, handles, serpent handles)

Censer parts were recovered at a relatively high frequency at Cerrito Central.

Censers are indicative of ritual practice, and given the extensive evidence for ritual practice, this is not an altogether surprising revelation. The majority of censer handles

were serpent handles, which contained the image of an open-mouthed serpent face at the end of the handle (Fig. A.3).



Figure A.3. Serpent handle recovered at Cerrito Central

Table A.55. Censer handles and other censer fragments recovered at Cerrito Central

Time Period	Bag Number	Sub Op	Area	Type	Size (cm)	Weight (g)
Early Postclassic	2008	9	W8	Serpent Handle	6.8 x 3.1 x 2.7	40.9
Middle Postclassic	3340	3	G2	Serpent Handle	6.8 x 2.4	56.26
Middle Postclassic	1181	8	L6	Censer Handle	7.3 x 5.3 x 4.7	75.4
Middle Postclassic	1622	14	H3	Serpent Handle	6.2 x 2.7 x 3	24.6
Middle Postclassic	???	21	L3	Serpent Handle	26.4 x 3.6	164.4
Middle Postclassic	842	21	L3	Serpent Handle	25.5 x 3.5	165.5
Middle Postclassic	872	22	M2	Censer Bowl	15.6 x 7.3	176.8
Late Postclassic	3312	2	B4	Censer Handle	8.4 x 2.2	56.59
Late Postclassic	3335	2	G2	Censer Handle	6.9 x 2.9 x 2.2	45.85
Late Postclassic	3312	2	B4	Serpent Handle	6.2	70.65
Late Postclassic	604	9	B5	Censer Handle	12.5 x 3 x 4.8	162.1
Late Postclassic	550	21	E1	Serpent head	4.2 x 2.3 x 3.2	15.1
Late Postclassic	876	22	K1	Serpent Handle	8.8 x 4 x 2	47.3
Colonial	1116	44	Feat. 28	Serpent Head	7.5 x 2 x 5	49.9

Earspools

Table A.56. Earspools recovered from Cerrito Central

Time Period	Bag Number	Sub Op	Area	Size (cm)	Weight (g)
Middle Postclassic	858	38	M1	1.9 x 2.4 x 1.3	1.4
Late Postclassic	793	22	L1	.4 x .9 x .7	0.5
Colonial	702	9	Feat 18	1 x 2.1	2.05
Colonial	702	9	Feat 18	7.5 x 3.7 x 1.2	2.05

Obsidian Eccentrics

Both recovered eccentrics were made from green Pachuca obsidian. The first dates to the Colonial period and was a C-shaped. The second dates to the Early Postclassic and was tri-lobed (E-shaped).

Table A.57. Obsidian eccentrics recovered at Cerrito Central

Time Period	Bag Number	Sub Op	Area	Type	Size (cm)	Weight (g)
Colonial	495	9	B3	C-Shaped	2.5 x 1.9 x 0.4	1.9
Early Postclassic	3156	10	P3	Tri-lobed	2.9 x 1.1 x .3	1.2

Shell

Table A.58. Shell recovered at Cerrito Central

Time Period	Bag Number	Sub Op	Area	Type	Size (cm)	Weight (g)
Early Postclassic	1433	23	T1	Shell (unworked)	3.5 x 1.9	4.2
Early Postclassic	2045	10	K2	Shell (unworked)	5.2 x 3.4 x .2	11.2
Early Postclassic	3049	9	Y1	Shell (worked)	1.7 x 1.1 x .2	25.5
Early Postclassic	3129	13	H3	Shell (unworked)	.7 x .1	2
Middle Postclassic	2027	27	U1	Shell (unworked)	1 x .8 x .1	8.5
Middle Postclassic	1610	26	L2	Shell (bead)	1.5 x 0.6 x .1	0.2
Middle Postclassic	1772	9	U2	Shell (flower bead)	2.7 x 1.8 x .1	1.6
Late Postclassic	1683	25	C1	Shell (unworked)	2.5 x 2.4 x .9	3.6
Late Postclassic	2142	7	C2	Shell (unworked)	1.7 x .9	1

Ceramic Sherd Disks

Sherd disks represent a surprisingly insignificant proportion of the artifacts assemblage found at Cerrito Central (Fig. A.4). Only 9 total shaped sherd disks were recovered at Cerrito Central, many from the same context (Early Postclassic fill). This is a significant smaller number of sherd disks than have been recovered in commoner households elsewhere at Xaltocan. Lisa Overholtzer, for example, excavated two Late Postclassic households near the edge of Xaltocan and recovered nearly 200 ceramic sherd disks. Given that Cerrito Central was not completely excavated and only a small number of rooms from any given time period were excavated, we can't be sure that these data accurately reflect the true, however this is one area of distinct difference.

Ceramic sherd disks are recycled objects, produced from discarded ollas and comals. While it is largely unclear what purpose ceramics disks served, there are a handful of possibilities. Notched sherd disks may have served as weights for fishing nets (Parson 2006). Fishing was an important subsistence practices for people living at Xaltocan, and some notched disks show evidence for linear wear which provide further evidence that they may have been tied to fishing nets. Many notched ceramic sherd disks were made from Classic period Thin Orange pottery, which would have required that people went elsewhere to obtain discarded Thin Orange pottery, or finished disks that were discarded. Overholtzer (2012) has argued that notched ceramic sherd disks were probably found already finished at one of the many Classic period sites in the Zumpango region (Parsons 2008) and brought back to Xaltocan for reuse. Although only one notched ceramic sherd was found at Cerrito Central (Fig. A.5), it is in good shape when

compared with the notched ceramic sherds found in Overholtzer's excavations (see Overholtzer 2012: Fig. 7.22). This might suggest that in some cases Thin Orange pottery was collected from refuse and notched ceramic disks were produced during the Early Postclassic from the Classic period refuse.

Plain ceramic disks, that is disks that are not notched or perforated (perforated disks have been found elsewhere at Xaltocan but were not recovered at Cerrito Central and will not be discussed herein), are more difficult to interpret. Some scholars have posited that they served as caps for jar mouths (Garber 1984; Rosenswig and Kennett 2008), however, as Overholtzer (2012) has noted, the sherd disks recovered at Xaltocan are simply too small to have covered the mouth of any jar. No jars with such narrow necks have been recovered at Xaltocan. In at least one case, non-circular worked sherds from the Maya site of Kaxob were interpreted as tools for ceramic production (Lopez Varela et al. 2002), however this hypothesis remains highly speculative when applied to a site like Xaltocan where no such use-wear analyses have been conducted. It is possible that plain ceramic sherd disks served as play things for children or as game pieces. The majority of plain disks recovered came from the same context (the fill in Sub Op 8), which might indicate that they were used in mass, possibly as game pieces, counting pieces or even divination devices.

One Colonial period ceramic disk (Fig A.6) was recovered which suggests that whatever the significance, people at Xaltocan continued to produce and use ceramic sherd disks well into the Colonial period. The data below present the type, context, size, and weight of the ceramic disks. Many of the plain ceramic sherds were similar in size

and thickness, with an average diameter of about .91 cm and an average weight of about 12.56 g. The notched ceramic disk was much thinner at .3 cm, as was the colonial disk at .4 cm. Both also weighed less (8.2g and 6.2 g, respectively).

Table A.59. Ceramic disks recovered from Cerrito Central

Time Period	Bag Number	Sub Op	Area	Type	Size (cm)	Weight (g)
Early Postclassic	1414	8	p6	Plain	3.1 x 2.9 x 1.3	12.3
Early Postclassic	1389	8	p5	Plain	3.7 x 3.3 x 1.1	14.4
Early Postclassic	1444	8	p7	Plain	3.6 x 1	20.6
Early Postclassic	1358	8	p4	Plain	3.7 x 1.1	17.7
Early Postclassic	1358	8	p4	Notched	3.7 x .3	8.2
Middle Postclassic	1140	8	14	Plain	2.3 x 1.9 x .9	6.2
Middle Postclassic	806	22	i2	Plain	3.8 x 3.6 x 0.7	15.3
Late Postclassic	365	20	b3	Plain	1.5 x .3	1.29
Colonial	3250	3	c1	Glazed	3.4 x 2.5 x .4	6.2

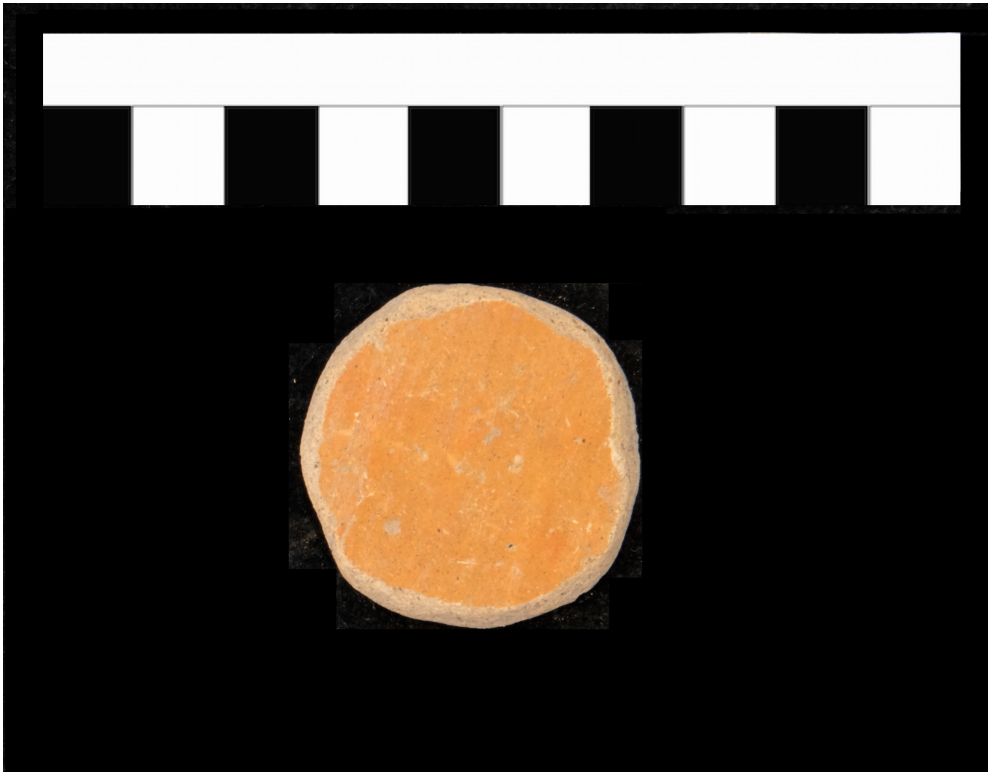


Figure A.4. Plain orange ceramic disk from Cerrito Central

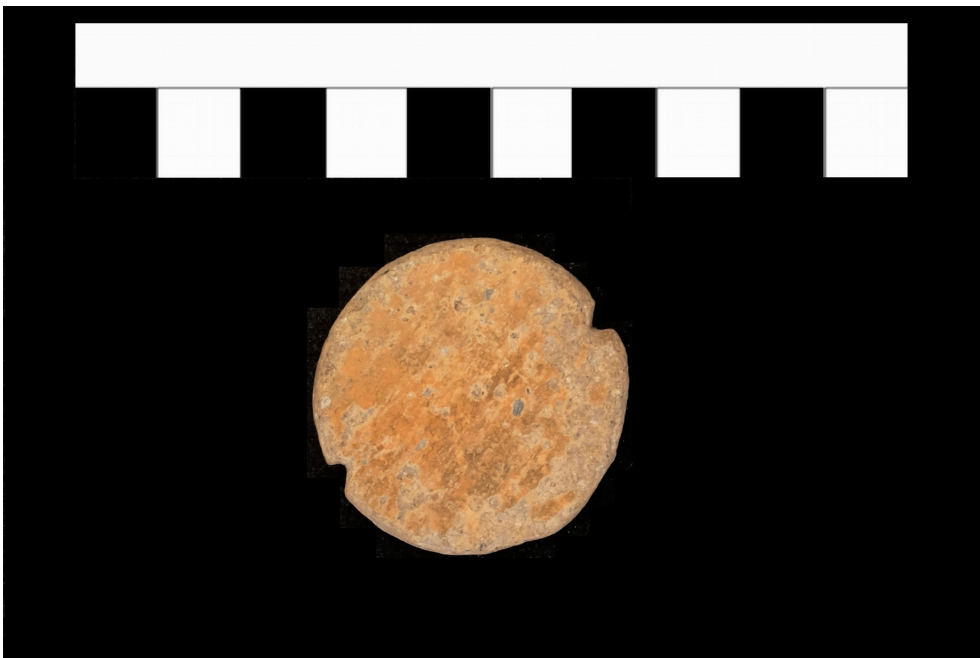


Figure A.5. Notched ceramic disk from Cerrito Central

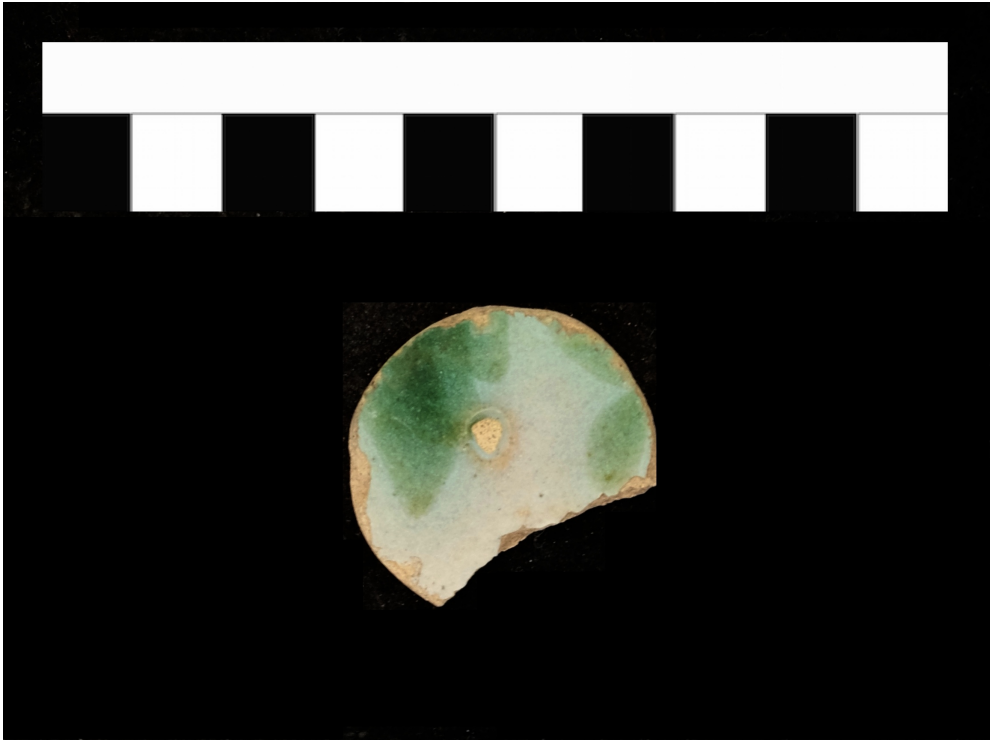


Figure A.6. Colonial period ceramic disk from Cerrito Central

Stamps

Stamps were analyzed as “goodies”. Their provenience information was recorded, and they were weighed, measured, and photographed. The first stamp dates to the Middle Postclassic (Fig A.7) and was dual-paned, though only one side of the stamp remains intact. The intact side contains two concentric circles with a t-shaped design at the center. Twelve u-shaped designs radiate around the concentric circles, and there is a raised dot in each of the four corners of the pane. Dividing the two panes is a series of seven poked holes, aligned vertically. The second pane is more fragmentary, but about five u-shaped designs are observed, the same as those on the first pane. Possibly, the second pane

contained a mirror image of the first. The second stamp is from the Late Postclassic (Fig. A.8) and contains a chevron motif.

Table A.60. Stamps recovered from Cerrito Central

Time Period	Bag Number	Sub Op	Area	Size (cm)	Weight (g)
Middle Postclassic	1369	22	V2	5.2 x 2.7 x 1.9	27.6
Late Postclassic	59	27	C1	5.5 x 3.7 x 2.9	24.6



Figure A.7. Middle Postclassic stamp



Figure A.8. Late Postclassic stamp

Sculpted Tezontle

Both sculpted *tezontle* objects were found in the same area in Middle Postclassic contexts. The small sculptures appear to have contained

Table A.61. Sculpted *tezontle* recovered at Cerrito Central

Time Period	Bag Number	Sub Op	Area	Type	Size (cm)	Weight (g)
Middle Postclassic	1181	8	L6	sculpted (zoomorphic)	6.9 x 5 x 3.5	69.6
Middle Postclassic	1181	8	L6	sculpted (zoomorphic)	6 x 4.2 x 3	66.5

Whistles

Table A.62. Whistles recovered at Cerrito Central

Time Period	Sub Op	Area	Type	Size (cm)	Weight (g)
Late Postclassic	39	C5	Whistle (zoomorphic)	5.5 x 4	24.4
Late Postclassic	9	B5	Whistle (zoomorphic)	3.6 x 3.4 x 2	14.4

Miscellaneous Objects

Table A.63. Miscellaneous Objects recovered at Cerrito Central

Time Period	Bag Number	Sub Op	Area	Object Type	Size (cm)	Weight (g)
Early Postclassic	1492	8	P9	Polished Black Celt	5.9 x 2.8	37.8
Late Postclassic	1278	10	D3	Turquoise disk	1.6	0.7
Late Postclassic	2142	7	C2	Lip Plug	2.1 x 1.3 x .6	3.5
Late Postclassic	3347	2	G9	Foot with talon		38.2