An Interconnected World? Evidence of Interaction in the Arts of Epiclassic Cacaxtla and Xochicalco, Mexico

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ABSTRACT

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The Epiclassic period (AD 650-900), a time of major political and artistic changes, saw the rise of independent polities throughout Mesoamerica that sought to take advantage of the decline of Teotihuacan and to express their newly formed identities through public monuments of a highly eclectic nature, stemming from the extensive interaction of distant regions. Two of these centers in Central Mexico, Cacaxtla and Xochicalco, developed distinctive art styles expressed primarily in single media categories that prominently deploy elements from the Maya style, known from the faraway tropical lowlands, today southern Mexico, Guatemala, and Honduras. To date most art historical studies have focused on the analysis of Cacaxtla murals and Xochicalco sculpture, while often relying on sixteenth-century historical documents to interpret developments at these centers. Other media categories—elite sumptuary or ritual goods (greenstone masks, figurines, and pendant plaques; *tecali* vessels; obsidian eccentrics; worked and unworked shell; ceramic effigy vessels) and utilitarian trade goods (ceramics, obsidian)—can also shed light on Cacaxtla's and Xochicalco's distant contacts, while also revealing contextual patterns that suggest different agendas in forging distinctive identities in monumental artworks. References to Teotihuacan and Maya monuments, and to a lesser extent those from Oaxaca and Veracruz, suggest different strategies were employed in the discourse of identity formation at these two centers.

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Dedication

To Yoshio and Christina Masako Nagao, for their infinite patience.

Introduction

The period in Central Mexico known as the Epiclassic (AD 650-900) is regarded as a time of major cultural changes triggered by the declining role played by the powerful metropolis of Teotihuacan (AD 100-650), whose existence had an impact that resonated throughout Mesoamerica for centuries (figs. 1-2). Perhaps coincidentally, some centers, such as Cholula, witnessed a violent end similar to that of Teotihuacan, while others, such as Monte Albán, saw their power diminished after an earlier phase of dynamic growth and elite interaction with the metropolis. In this power vacuum a number of centers apparently vied for control of commercial networks and local hegemony in their respective areas; some new cities—such as Xochicalco, Teotenango, early Tula and Chichén Itzá—emerged on the scene, while others with earlier roots, such as Cacaxtla, Cerro Portezuelo, El Tajín, Cantona, El Cuajilote (Filo-Bobos), and smaller sites in the Valley of Oaxaca rose in importance.[1] The Maya region also enjoyed a coeval period of cultural florescence, referred to as the Terminal Classic in that area (fig. 3).

Some, but significantly not all, of these centers forged a distinctive style in public monuments by focusing on sculpture (Xochicalco, Teotenango, El Tajín, Chichén Itzá and Tula) or on mural painting (Cacaxtla, El Tajín, Las Higueras, Chichén Itzá) to externalize and enhance their newfound status by deploying an eclectic combination of stylistic and

[1] On the Epiclassic see Diehl and Berlo (1989), Berlo (1989a), Kristan-Graham and Kowalski (2007), M. Smith (2007); on Cholula: Plunket Nagoda (2012), Uruñuela and Plunket (2005, 2012), with an alternative view in McCafferty (2007); on Teotenango: Piña Chan (1982; 2000); on Tula: Mastache and Cobean (1989), Kristan-Graham (2007); on Cerro Portezuelo: Nichols, Neff and Cowgill (2013), Crider (2013); on El Tajín and the Gulf Coast: Koontz (2009), Ladrón de Guevara (2005); on Cantona: García Cook (1994); on Filo-Bobos: Cortés Hernández (1994); on the Valley of Oaxaca: J. Marcus (2009), Winter (1989); on the Maya region: Miller and Martin (2004), Rice, Demarest and Rice (2005), Eduardo J. Pérez de Heredia Puente (2010), and Kristan-Graham and Kowalski (2007).

iconographic traits drawn from diverse regions. Artists working with patrons (rulers imbued with military and religious powers) at each center devised different communication strategies in the desire to proclaim a highly visible identity in which each city brought to bear different strengths and weaknesses to the process stemming from their history and economic possibilities.

§

Before turning to the two Epiclassic centers chosen for comparison, a few words are in order concerning terms that will recur in the following discussion. First, an examination of "style" will help contextualize the position of the present dissertation in the fields of art history and archaeology. Second, discussion of periodization terminology—particularly the designations Classic and Epiclassic—will serve to set the stage by outlining the setting in Mesoamerica at this transitional time.

"Style" is a word ubiquitous in the fields of art history, anthropology and archaeology, as well as philosophy, literature, music, and history (Lang 1979), a phenomenon underscored by George Kubler (1979: 121) when he evoked the dimensions of the term's polysemy by referring to the eight columns and sixty-four "senses" given for the term in the 1971 *Oxford English Dictionary*. Yet its importance to art history cannot be underestimated.[2] Following its introduction during the Renaissance in Giorgio Vasari's discussion of manners based on biological analogy comparing stylistic and human development with birth, growth, aging, and death (Ackerman 1962: 230), it became established in eighteenth-century art history terminology in Winckelmann's work on the "Greek style as an expression of the Greek way of life" thus paving the way for the

[2] Donald Preziosi's (1998: 112) critical history characterizes form and style as "two core concepts affecting all aspects of art historical and critical practice throughout the nineteenth and twentieth centuries."

development of “period styles” applied to Western art (Gombrich 1998: 152) and later “style areas” devised as classificatory systems for “primitive art” (Pasztory 1989: 15-16). In the nineteenth century the orientation of style shifted under the aegis of Darwin’s work to an evolutionary scheme that invoked archaic, classic, and baroque phases, especially in discussions of Western art (Ackerman 1962: 230). This evolutionary model implied in style terminology would also tinge periodization terminology for Mesoamerica with value-laden terms, as discussed below.

In response to the term’s innate multivalent character, Meyer Schapiro’s (1953: 287-288) seminal article attempted to define style for different “users”: for *art historians* as “constant form—and sometimes the constant elements, qualities, and expression—in the art of an individual or a group” to study “its inner correspondences, its life-history, and the problems of its formation and change” and to identify the date and origin of artworks; for *archaeologists* as “exemplified in a motive or pattern, or in some directly grasped quality of the work of art, which helps him [the archaeologist] to localize and date the work and to establish connections between groups of works or between cultures”; for *cultural historians* and *philosophers of history* as “a manifestation of the culture as a whole, the visible sign of its unity . . . [that] reflects or projects the ‘inner form’ of collective thinking and feeling” or “period style”; and for *art critics* and *artists* as “a value term . . . applied mainly to individual artists.” Soon Kubler (1962: 129) warned against complacency in the reification of the term: “Style is like a rainbow. It is a phenomenon of perception governed by the coincidence of certain physical conditions. We can see it only briefly while we pause between the sun and the rain, and it vanishes when we go to the place where we thought we saw it.” He emphasized its abstract nature and evanescence when applied to the temporal contexts of art history: “Style pertains to the consideration of static groups of entities. It

vanishes once these entities are restored to the flow of time" (ibid.: 130). Similarly, James D. Ackerman (1962: 228) reiterated the need for this construct by identifying style with relationships that make "various kinds of order out of what otherwise would be a vast continuum of self-sufficient products" in which the elucidation of stable factors is necessary to define an art style to be able to distinguish it from another (ibid.: 230). Shortly after, in 1968 Gombrich (1998: 153-154, 157) explored pressures driving change in style, including technological improvements and social rivalry, while acknowledging that "any style can be convincingly described as transitional," thereby highlighting its malleability. Relevant to the present discussion is Gombrich's observation (ibid.: 162): "The distinctive character of styles clearly rests on the adoption of certain conventions which are learned and absorbed by those who carry on the tradition. . . . The style forbids certain moves and recommends others as effective." In other words, styles refer to clusters of acceptable behavior; implicit is the notion that departures from these canons signify deliberate choices that can only occur in conditions of openness or receptivity to change. All of these approaches to style implicitly acknowledge its identification as alien to the objects, their makers, and the cultures, yet point to the usefulness of the term as a heuristic device for understanding.

Schapiro's interpretation of the archaeological normative use of "style" has since been reappraised by archaeologists to enrich the potential of stylistic studies. Conkey and Hastorf (1990: 3) add dimension by identifying the "slippage" between what they term the two "faces" of style: the archaeologist's "outsider's view" in the writing of prehistory and the implicit human actors who "thought up, made, used, re-used, and often discarded" the archaeological materials that serve as the basis for discussions of style as a source of both tension and dynamism. In the same volume Polly Wiessner (1990: 106) defined style as a

non-verbal "means of communication based on doing something in a certain way." In addition to its common usage "to establish chronology . . . [and] to obtain information on prehistoric groups, boundaries, and interaction," she cited its communicative aim as a marker of social status, to distinguish an individual from a group, as an expression of social or ethnic identity, and as a tool to confer and support status (ibid.: 108-110).

More recently, Kristan-Graham and Kowalski (2007: 56) have noted how its use has been dismissed in twenty-first-century art historical practice given "its associations with the discipline's idealist and elitist background (Rees and Borzello 1986: 4)." However, they are quick to rescue it from oblivion, by pointing to an implied schism in usage in western art history in contrast to archaeology and non-Western art history. They refer to its continued use in archaeological research and deploy Esther Pasztory's concept of "ethnic style" as "a coherent visual form that functions as a badge of identity within the group [given] . . . formal articulation . . . ranging from dress to architecture" (Pasztory 1989: 18 cited in Kristan-Graham and Kowalski 2007: 56).

For the purposes of the following discussion, my use of the term style draws on the use of the term from different disciplines. This is in part a necessity, given the broad range of media that I have selected to examine. Contrary to the focus of much Pre-Columbian art historical enquiry that concentrates on architecture, sculpture, or murals, this dissertation also sets out to view these categories within a broader spectrum that also takes into account smaller-scale remains, which I subdivide into ritual-status items and utilitarian remains. Simply put, different media have different stories to tell. I also employ the "two-faced" view of style. On the one hand it is an etic or "outsider's" abstract construct to describe the formal qualities of material culture as a useful heuristic tool to compare and contrast archaeological materials from different geographical locations and temporal contexts that

facilitates discussion of broad categories of material remains and enables cross-cultural comparisons. On the other hand, style served an emic or "insider's" purpose as a tool for communication that can be gleaned by elucidating the choices involved in the production of objects that resulted from the interaction of forces: the maker's and/or user's culture, patron and/or consumer wishes, and the maker's training, background, and agency. What stylistic features were accepted and which were rejected? What perceptions may have been underlying motivations in these choices? What limitations may have shaped stylistic decisions on the level of the actual creation of images?

The present approach blends this "two-faced" perspective by also drawing on anthropology and art historical usage. I refer to the notion of "technological style," which refers to social and cultural processes embedded in objects through tradition (Stark 1999).[3] Cultures determine the "limitations within which the artist or craftsman works" (Gombrich 1998: 162). Artists are generally trained to work in what boils down to what can be understood as a "default style." However, they can consciously elect to deploy other modes of representation if they so choose or are instructed to do so for diverse purposes (Pasztory 1989, 1993; Schele and Miller 1986: 219). In such a context style can be envisaged as a content-bearing template that served as "a badge of identity within the group" (Pasztory 1989: 18) or as a social, status, or ethnic marker (Wiessner 1990: 108, 110). The ancient makers and observers of the pieces discussed would have been aware of a number of these choices and differences, although there is no way to determine their perceptions and explications given the lack of documentary evidence from these early times. In fact, the ability to compare material expressions dispersed in space and time via modern technology

[3] However, anthropologists generally avoid the discussion of public or monumental art and apply it to the production of utilitarian goods especially in pre-state societies (Childs 1991; Stark 1999).

(publications, photographs, and the internet) endows researchers today with a privileged panoramic—albeit still fragmentary—vision different from that of the ancient users and makers of these archaeological remains. We can juxtapose and visualize, cut and paste, and summon images from disparate places and times for simultaneously viewing in ways unavailable and unimaginable to Pre-Columbian peoples. Nevertheless, I would venture to say that the choices that they made would not have been passive and the changes manifested in styles would not have been random. Instead they would have served an intention and and would have been noticed on some level by at least some, although perhaps not all, of the original viewers.

Given this approach to style as a bearer of meaning, the distinction between style and iconography requires brief clarification. While style refers to the formal treatment in which elements are rendered to enhance meaning, discrete emblems and signs are the substance of iconography for present purposes. Iconography refers to the realm of specific symbols and identifiable subject matter, while style is the more abstract lens of formal qualities through which these elements are rendered and perceived. Another way of comprehending this conceptual difference is by imagining the array of possible fonts that could applied to the words on a page as the style and the actual words, signs, or emblems as the iconographic content.

The matter of how to tease out notions of intention from Pre-Columbian works predating historical texts by centuries and in the absence of any direct survivors of these ancient traditions is indeed a challenge that . Ethnographic enquiry such as Susanne Küchler's (Melion and Küchler 1991: 27ff) work on New Ireland Malangan is a startling reminder of how starkly different insider and outsider perceptions of objects can be and how outsider asssumptions can be totally misplaced. For outsiders, the complex baroque

intricately decorative imagery of Malangan funerary sculpture would seem to invite stylistic study to delineate hands or schools or iconographic analysis to identify ancestors, deities, totems or other entities. Despite the use of these pieces in mortuary ceremonies, their manufacture and function is utterly alien to Western notions of artistic creation and funerary sculpture, revealing a potential gulf between objects and their social users and scholars seeking an entry to understanding this other world. Nevertheless, Michael Smith's (2007: 595-596) outline of steps in addressing "shared forms, styles, and symbols" offers some clues as to how this can be achieved: "evaluate the degree of similarity, . . . reconstruct the use or social context of the elements as fully as possible, . . . compare the temporal and geographical distribution of the similar elements, . . . and place the comparisons within the wider context of independent evidence about the sites, their organization, and the wider cultural system." I attempt to employ a comparative and contextual analysis through what is known of Mesoamerican worldview through a judicious use of archaeological and ethnohistorical lines of evidence.[4]

Now a word regarding periodization is in order to contextualize the discussion of the Classic to Epiclassic period transition in Mesoamerica. Schapiro (Schapiro, Janson, and Gombrich 1970: 113) observed that many different period classifications with admittedly vague boundaries are possible in European art, depending on the problem and theoretical perspective at hand. Similarly, periodization schemes for Mesoamerica have also mirrored changes in knowledge and hermeneutical trends that have shaped style terminology. A number of early chronologies mirrored the evolutionary bias mentioned earlier in the discussion of style, beginning with Herbert Spinden's 1917 Pre-Archaic / Archaic / Post-

[4] My approach to Mesoamerican materials in this dissertation is an outgrowth of my earlier work based on a contextual analysis of Templo Mayor offerings (Nagao 1985).

Archaic scheme for Maya civilization (López Austin and López Luján 2000). Alfonso Caso's 1942 chronology offered slightly more neutral terms while introducing stylistic designations: Horizon I-Archaic / Horizon II-Tzakol / Horizon III-Tepeu / Horizon IV-Mixteco-Puebla; Robert Wauchope modified it in 1951 by changing "Archaic" to "Preclassic" and later structured the Mesoamerican past on the basis of carbon-14 dates into the Preclassic / Classic / Postclassic division, which has prevailed to the present (ibid.: 18). However, this system was brought under fire in the late 1960s-early 1970s by Barbara Price, William Sanders, and Eric Wolf, who advocated the terminology of horizons and intermediate phases employed in South American archaeology to eschew the value-laden Preclassic-Classic-Postclassic system. Their proposed system made it possible to contrast periods of broad culture horizons manifested by "horizon styles"[5] that alternated with phases of cultural regionalization expressed by a diversity of local intermediate styles (Berlo 1989a; Stone-Miller 1993). However, this system presented other problems and was never universally accepted.[6] Today "the terms [Preclassic, Classic, and Postclassic] have lost their original connotations and the problem of characterizing processes has taken precedence over that of mere terminology" (López Austin and López Luján 2000: 19).

The Classic period in Mesoamerica has generally been dated to about A.D. 150/250-900/1000 (López Austin and López Luján 2000: 16; Valverde Valdés, Liendo Stuardo and Gutiérrez León 2010: 36), but it serves as a useful general construct that encompasses coeval chronologies in different regions of Mesoamerica. As an abstraction it cuts across

[5] The identification of Mesoamerican "horizon styles" also presented inconsistencies. Although there was overall agreement in correlating the first and second horizons with the Olmec and Teotihuacan styles, respectively, the third horizon has been identified with either the Mixteca-Puebla style (Berlo 1989a) or the Aztec style (Umberger and Klein 1993).

[6] For example, it masked cultural phenomena under the assumption that stylistic diffusion during cultural horizons resulted from vague processes such as imperial expansion, trade, or the dispersal of "influence" (Pasztory 1993b: 117).

local developments and does not coincide strictly with the florescence and decline of different regions or centers. For instance, Maya civilization began far before and continued long after the Classic period; numerous Maya urban centers rose and fell in diverse regions of the Southern and Northern Maya Lowlands spanning 1200 B.C. to A.D. 1519 (Valverde Valdés, Liendo Stuardo and Gutiérrez León 2010). In contrast, the dates for Teotihuacan (150 B.C.-A.D. 600/650) cover roughly half of the Classic period, while the rise and fall of Monte Albán in the Valley of Oaxaca more or less coincide with the dates for Teotihuacan (López Austin and López Luján 2000: 16).The final phase of the Classic period, the Epiclassic, saw the emergence of diverse centers (El Tajín, Xochicalco, Tula Chico, Chichén Itzá), the florescence of others (Cacaxtla, Cerro Portezuelo), and perhaps the temporary abandonment of others (Cholula).

The term "Epiclassic" was coined in 1959 by Wigberto Jiménez Moreno (1966) to refer to a transitional phase between the Classic and the Postclassic, roughly corresponding to A.D. 650-950. It is applied especially to the Central Highlands, while Terminal Classic is the name for the same time frame for the Southern and Northern Maya Lowland regions. Although Berlo (1989a) and Cohodas (1989) critiqued it in light of a greater understanding based on archaeological discoveries made since the 1960s, their assessments have been superceded to some degree by more recent work that has pushed the long-held A.D. 750-end date of Teotihuacan back to ca. 600-650 (Cowgill 2013: 133-134).[7] A growing body of evidence reinforces the interpretation of the Epiclassic as a distinctive period of multifaceted adjustments after the collapse of the Teotihuacan state. It was manifested archaeologically in changes in settlement patterns, the proliferation of bichrome

[7] Linda Manzanilla has pushed it back even further by dating the great conflagration at Teotihuacan to A.D. 550, but Cowgill (2013) questions this early date on the basis of ample stratigraphic evidence linking it to AD 600-650.

Coyotlatelco ceramics throughout the highlands, evidence of migration and intrusive resettlement at Teotihuacan (ibid.; Gómez Chávez and Cabrera Castro 2006; Solar Valverde 2006), and trade patterns shifting away from the metropolis (Nichols, Neff and Cowgill 2013; Crider 2013). The Classic-Epiclassic terminology suggests a clearer distinction from the Classic than the Classic-Late Classic-Terminal Classic terminology applied to the Maya Lowlands, where greater underlying continuity can be traced. Teotihuacan's demise was felt more strongly in the Central Highlands than in the Maya Lowlands, coastal lowlands, and Guatemala highlands, where its impact had already begun to diminish well before the conflagration event marking the city's symbolic end. Epiclassic is not merely an ethnocentric construct devised to show the preeminence of Central Mexican hegemony in Mesoamerica; instead it underscores the unique role of Teotihuacan and is thus more appropriate for characterizing the developments in the Central Highlands. It was a time when monumental arts recorded an awareness of diverse stylistic traditions in which forms and styles "served new masters," to draw on Nelson's (1996: 119-120) use of the term "appropriation," which emphasizes the personal agency underlying choices.[8]

To set the stage for the Epiclassic period the two preeminent cultural traditions for the Classic period—the Maya world and Teotihuacan—will be outlined to highlight the contrasting nature of scale and power exemplified by these traditions in the transition to the Epiclassic. The longevity and diversity of Maya civilization spanned early urban centers with monumental architecture in the Middle Preclassic in Campeche and northern Guatemala, which spread in the Early Classic period to the Peten, Motagua river basin,

[8] At the same time, Kirk Ambrose's (2012) reservations about appropriation should not be overlooked. He questions whether the term might potentially obscure more than it can yield and raises the possibility that "not all aspects of cultural products are deliberate." Instead he advocates reappraising Thomas Aquinas's "elastic notion of influence to explore the myriad causes that coalesce in the production of a work of art." (I thank Stephen Murray for bringing this to my attention.)

Belize, and highland Guatemala, to the adjoining Usumacinta river basin in the Late Classic and to the Pasión river basin in the Terminal Classic, when Puuc Maya sites also arose in the Northern Lowlands of the Yucatán peninsula (Valverde Valdés, Liendo Stuardo and Gutiérrez León 2010: 38-40). The longevity and diversity of these centers make it difficult to select a single center as a model; instead the following overview offers a generalized vision of Maya culture that will serve primarily as a means of contrast with Teotihuacan.[9] Maya cities-states rose and fell, formed alliances, competed for domination, and strove to display their power through monumental architecture and sculpture and to hoard it through lavish burials containing luxurious personal accoutrements. Architecture in sprawling urban centers characteristically included masonry temple pyramids raised on tall platforms, palaces, acropolises, long range-type rooms arranged around courtyards, ballcourts, sometimes paved roads linking different areas or complex waterworks to channel and store water. Commoners lived in oval or rectangular thatched huts on the outskirts of settlements. Stucco and stone aculpture—stelae, lintels, architectural decoration, and ballcourt markers—generally commemorated individual rulers represented with lavish attire and accompanied by hieroglyphic inscriptions recording dynastic histories, names and dates of major events in rulers' lives, sometimes with supernatural companions to bolster the ruler's authority. In some cases mural painting has survived the moist conditions of the tropical rainforest and depicts a range of elite ritual, conflict, and possibly ceremonial activities. The scale of construction and sculpture and the specialization evident in all production

[9] Admittedly this may be doing a disservice to Maya centers by glossing over their differences and by blending them into a single abstract entity to contrast with Teotihuacan. Megan O'Neil (personal communication 2014) rightly pointed out that there is no single "Maya style," but rather multiple styles associated with specific centers. However, I would stress that my intention here is not to identify the developments at Cacaxtla and Xochicalco with specific Maya centers, instead I would suggest they drew on generalized awareness of developments in the Maya region and that they choose to draw inspiration from this generalized región in part to distance themselves from earlier Teotihuacan imagery.

large and small attest to centralized authority, hierarchical society, expert artisans who possessed specialized knowledge to produce exquisite pieces, and a large body of laborers. Jade was the ultimate luxury material, complemented by worked shell, Maya blue pigment, red cinnabar and hematite, exquisitely carved eccentric flints, and elaborate polychrome ceramic vessels and censer bases.

Despite the diversity of styles that arose that each Maya center made visible in public monuments, elite burial goods, and personal status ornaments, it is possible to speak of an abstract notion of the Classic period Southern Lowland Maya style composed of generalized traits that distinguished it from that of Teotihuacan. The Classic period saw a greater emphasis on rulers, who were represented standing, sometimes sitting, alone or accompanied by subsidiary figures often in asymmetrical compositions. Human figures were rendered in generally naturalistic proportions, usually with some part of the skin—whether arms, torso, or legs—exposed to emphasize the presence of the rounded smooth surfaces of the flesh of the human body beneath elaborate textile, feather, and jade attire and insignia. In multifigure compositions, figures are evoked in interaction, in positions that imply a moment frozen in stone or stucco, in which the viewer is engaged only in the less common cases of startling three-dimensional depictions of rulers gazing straight ahead. This adhesion to lifelike individualistic features is repeated in other media, such as jade funerary masks, terracotta figurines, polychrome cylinder vessels, and tall censer bases. Supernaturals and animals are imbued with the same attention to detail to suggest individuality and verisimilitude even in images of fantastic entities. Art styles in different media at Teotihuacan could not have been more different.

In contrast, Teotihuacan was a metropolis, the heart of a state system whose power was recognized in faraway regions throughout Mesoamerica. Occupied continuously for six

to seven centuries, it grew to be an enormous city that attracted people from throughout the Valley of Mexico who opted to live together in a single metropolis instead of in a series of smaller urban settlements (Pasztory 1992: 285). From its inception it was designed on a grid plan based on a standardized measurement unit (TMU in Sugiyama 2005). The enormous Sun and Moon Pyramids were among the earliest built at the site. These structures and the Feathered Serpent Pyramid have yielded some of the most abundant and complex buried ritual offerings in all of Mesoamerica (Sugiyama 2004, 2005). The city also deployed its organizational skills in devising a system of apartment compounds to house its massive population. Furthermore, Teotihuacan was the active hub of a Mesoamerica-wide trade system, in which it played a strategic role in the movement of resources such as obsidian and Thin Orange ceramics and commanded sufficient power and resources to deposit foreign elite goods in local offerings. Foreigners drawn to the metropolis lived in special barrios, where they preserved traditions from their respective homelands (Millon 1993: 28-30). The mark of Teotihuacan culture has been found throughout Mesoamerica in elite contexts that suggest recognition of the city's prestige and varying types of interaction. In the past this material was regarded as evidence of Teotihuacan domination, however, more recently Braswell (2003a) and other have employed a more nuanced approach to Teotihuacan relations abroad.

The Teotihuacan art style was different from any of the other art styles in Mesoamerica. Pasztory (1992: 288-289) has referred to this intellectualization process in Teotihuacan art as "abstraction" in the "way of rendering images . . . [it] is ornamental and symbolic and . . . the aim of the artist is not to recreate a perceptual equivalent of the natural world." In fact, she posits the Teotihuacan style as a deliberate response to and rejection of extant Olmec, Izapa, Maya, and Monte Albán traditions. The all-encompassing

organizational ethos embedded in Teotihuacan society was applied to patterns of standardization in diverse media throughout the city. The Teotihuacan architectural hallmark was the *talud-tablero* system of building articulation with a framed rectangular *tablero* panel positioned over a sloped *talud*. Sculpture was less abundant than mural painting, but displayed similar style values. Human figures tended to be blocky, geometric, with an oversized head and squat proportions that convey no true sense of the human body and no sense of individuality. Greater importance is given to the insignia covering the figure. Iconic forms such as the Old Fire God brazier, lapidary masks, moldmade terracotta figurines, and incense burners with mix-and-match moldmade ornaments were repeated with minor variations to suggest an overall impression of uniformity. This quality of sameness also applies to murals that often depict processions of figures or emblems with minor variations arranged in standardized repetition. No attention is given to the human body and there is no attempt to directly engage the viewer. Whether the subject is human, animal, or supernatural, the focus is on the detailed signs and insignia covering the figures, which serve as anonymous structures to sustain the details.

These two almost diametrically opposed cultures and their collateral styles formed the Classic period backdrop for the emergence of other power centers in the Epiclassic period. There is a growing body of recent evidence that suggests that the political-ceremonial core of Teotihuacan was already abandoned and in ruins by the Epiclassic (Cowgill 2013; Gómez Chávez and Cabrera Castro 2006).[10] By this time, the prestige of Teotihuacan would have been severely compromised. Therefore, an overt rejection of Teotihuacan traditions and styles would not be surprising. Nevertheless, some of the

[10] I thank Emily Umberger for bringing these sources to my attention.

characteristics of its style may have been so deeply embedded that it would have been impossible to completely reject its stylistic and iconographic systems in their entirety. This dissertation will address the response of Cacaxtla and Xochicalco especially to earlier Teotihuacan and to coeval Maya traditions that would have formed the context surrounding these Epiclassic centers.

The pristine condition and vibrant palette of the murals from Cacaxtla (fig. 4)—rediscovered in the central Mexican state of Tlaxcala 1975—captivated public and academic attention and triggered renewed interest in the Epiclassic period.[11] The eclectic nature of the murals in what was identified from the start as the Maya style,[12] which was known from faraway southern Mexico, Guatemala, and Honduras, presented an enigma that attracted considerable scholarly attention. Since then many art historians have undertaken detailed examinations of the style and iconography of the murals, recently including the excellent dissertations by Claudia Brittenham (2008) and Andrew Finegold (2012). Although the overall dimensions of the site are not yet known, it appears to have been relatively modest in scale (fig. 5) when compared to Xochicalco. Many of the excavations at Cacaxtla to date have been directly or indirectly[13] connected to the site's murals (at last count, a corpus of seven). However, additional archaeological evidence has been uncovered that could aid in understanding the site and its relationship to Teotihuacan and to coeval developments in other parts of Mesoamerica.

[11] Three of the six articles on Central Mexico in the 1989 Dumbarton Oaks volume on the Epiclassic deal prominently with the Cacaxtla murals.

[12] The popular press immediately reported on the Maya characteristics of the Cacaxtla murals (*Excelsior*, October 30, 1975).

[13] This refers to both the excavation of murals and the enormous roof built over the entire hill to protect them from the elements.

To be able to understand Cacaxtla, which was my initial interest, a different way of viewing the material—a broader perspective—was necessary to gain insight into the larger context of the Epiclassic phenomenon. Some 212 kilometers[14] southwest of Cacaxtla and in the state of Morelos, Xochicalco was the obvious choice for comparative purposes. An Epiclassic center sprawling over several hilltops (fig. 6), it has repeatedly been connected in the literature to the Maya world. The Feathered Serpent Pyramid (fig. 7), in particular, has elicited comments on its eclectic nature and the appearance of Maya features since the nineteenth century.[15] Interpretations of the site have ranged from Xochicalco being the recipient of migrations in which new signs symbolized new peoples;[16] the passive recipient of Maya, Teotihuacan, Nahua, Mixtec and Zapotec influences;[17] to military-commercial powerhouse exerting its influence in the Central Highlands, Gulf of Mexico, Balsas River basin, Oaxaca, and even the Maya rainforest.[18] Over the course of the last fifteen years, numerous publications and unpublished excavation reports on Xochicalco have increased current understanding of some of the city's distinctive features and practices. However, the nature of its monumental artworks is only summarily understood, especially many of the monuments discovered in the last twenty years.

[14] This is by modern highway; the journey in ancient times would have had to skirt the volcanic mass of Popocatépetl and Iztaccíhuatl that lie between Cacaxtla in the Puebla-Tlaxcala Valley and the Valley of Morelos.

[15] In 1887 Alfredo Chavero in *México a través de los siglos*, vol. 1 (pp. 256-259 reproduced in De la Fuente et al. 1995: 309-310) said of Xochicalco, "These ruins obviously give us extremely important ethnographic information: its construction, the position and attire of its carved figures, and the diverse symbols and hieroglyphs were clearly related to those of Zaachila, Palenque, and Copán. We have, thus, the uninterrupted chain of the migrations of the race of the south [i.e., Oaxaca and the Maya region], expressing itself and surprising us with their titanic and colossal monuments" (author's translation).

[16] Chavero 1887.

[17] Litvak King 1970, 1972.

[18] Wimer 1995: 22, 26.

Cacaxtla and Xochicalco pose special challenges for researchers today. Historical documents offer little clarification of the two centers; thus interpretation must rely primarily on the materials recovered by archaeologists at the two sites. The arts at the two centers also defy neatly defined cultural or stylistic categories. Instead, they stand out for the diversity, adaptation, and transformation of known styles and objects in various media. Despite any superficial similarities that might exist between these two cities, what emerges from a comparison is a surprising mosaic of contrasts that suggest different processes were at work. Based on current archaeological information, it is unclear if these two coeval centers were in direct contact or not, although at minimum mutual awareness was the most likely scenario. Be that as it may, of greatest interest for present purposes are the diverse strategies devised by these two cities in the quest to express a distinctive political identity through innovation and the appropriation, adaptation, and deployment of elements of non-local inspiration. This is the subject of this dissertation.

§

The dramatic political, economic, social, and religious realignments of Epiclassic period Mesoamerica have been read in shifts in settlement patterns, ceramic types, obsidian distribution patterns, and in art styles in public monuments at the centers that rose in importance to fill the power vacuum left by the great metropolis. While settlement patterns and ceramics can be said to "reflect" aspects of such cultural changes, the same cannot be said of monumental public artworks (e.g., architecture, sculpture, and painting). Their efficacy was integrally tied to their engagement with the diverse audiences around them in the form of ritual performances, an approach explored by Megan O'Neil (2012: 27) at the Maya city of Piedras Negras. At the same time, by considering the stellar art forms from each site—relief sculpture for Xochicalco and mural painting for Cacaxtla—within a

broader context of visual culture from each center brings out different processes and choices that shaped monumental artworks. Portable objects (e.g., lapidary goods, shell pieces, obsidian, and more elaborate ceramic objects) appeared to operate on another level of meaning, on a more human scale that implied the manipulation of these prestige goods or ritual pieces in diverse contexts, sometimes in ways different from their use in earlier times. All of these visual components were not a mere backdrop for the actions of human actors; instead they played an active role in shaping what transpired around them. Therefore, in these and monumental cultural artifacts, meaning was not passively "reflected," rather it was charged with a deliberate purpose: to convey a range of overt and underlying messages aimed at shaping the thoughts and feelings of the audiences of a given time.[19] At the same time, portable elite and ritual goods today evoke other aspects of the city's life. They reveal another level of intentionality by informing us about local or distant contacts through material, style, and iconography, as well as how these pieces were used to fulfill the differing needs of these two sites.

Through time visual arts have served as a means of identity for the citizens of a polity for purposes of both cohesion and to mark boundaries separating insiders from outsiders, as discussed by Esther Pasztory (1989) in her inquiry into ethnic styles. In the present case examining two centers considered hallmarks of Epiclassic development provides an opportunity to highlight different approaches to identity formation in times of change. However, references to Cacaxtla and Xochicalco commonly mention them as manifestations of a single phenomenon,[20] thereby glossing over the different strategies and

[19] cf. Kubler 1973; Winter 1981, 1985.

[20] For example López Austin and López Luján 1999: 75ff, 143; Coggins 2002: 171; Taube 2003: 312.

needs of the two centers. This tendency to lump the two cities together stems from what has been perceived as the highly visible use of the Maya style in public monuments at two more or less coeval centers. In both cases the arts have often been interpreted as evidence of the presence of non-local peoples. While non-local presence is a definite possibility, it is not the only possible scenario. For example, concerning the phenomenon of quoting or citing a non-local style in monumental arts, Pasztory (1989) emphasizes the active role of the center deploying the non-local style, instead of regarding artworks as an inert recipient to outside forces. Closer examination of the monuments at Cacaxtla and Xochicalco that are said to attest to Maya "influence" raises other questions concerning what constitutes Maya or Teotihuacan "style" and/or "iconography."[21] Sometimes it is not as clear as one would imagine. Aspects such as context, in particular, have not been sufficiently examined. In addition, artists using local idioms can adopt non-local elements for diverse purposes, sometimes at odds or at least with different nuances than in their original context, within the framework of a larger and new historical and cultural context that shape meaning. Evidence suggests that the process of stylistic and iconographic reconfiguration is a more complex, hybrid story than has been acknowledged to date. My aim here is to shed greater light on the solutions developed at these two centers in response to the changing times.

Clearly the highly visible public artworks, emblems of status, and ritual items will address the concerns of the powers that be, and these often have little to do with the realities of meeting the needs of day-to-day life. Elite monuments and status markers arise from ideational, idealized, and aspirational dimensions, while the bulk of a society's consumption results from the reality of what is feasible, in other words what is possible in

[21] Brittenham (2008) has also addressed this notion for Cacaxtla.

economic, political, and social terms. The fact that actual trading partners often have little impact on a culture's public monuments should not surprise us. However, when dealing with archaeological materials, especially in Mesoamerica, where textual information is by and large restricted to later sixteenth-century Spanish chronicles, or is propagandistic in content (e.g., Maya hieroglyphic monumental and funerary inscriptions), the tendency has been to read Epiclassic material remains in a literal way or along the lines of what little can be gleaned from ethnohistorical sources from much later times five hundred or more years later.[22] In an effort to grasp the nature of cultures extinct for more than a millennium, vague visual similarities have led to the interpretation of direct cultural interactions.[23] How often have monuments been read as if passive pictorial documents recording or reflecting the past, rather than as preplanned programs intended to shape an audience's outlook?[24] This has particularly been the case of discussions of the Epiclassic, a time of political fragmentation, shifting relations between city-states, and innovation, in which all too often monuments have been regarded as evidence of "influence" in an attempt to reconstruct patterns of cultural interaction.[25]

Another aspect of how our etic or outsider perspective colors what we regard as worthy of investigation and how this in turn colors research is the fact that it is often the particularly spectacular monuments of a civilization, which are in reality atypical or

[22] For example Vázquez Rodríguez-Saro 1984; González Crespo, Garza Tarazona, et al. 1995; McVicker 1985; Foncerrada de Molina 1993.

[23] See Abascal et al. 1976; Sáenz 1975.

[24] Exceptions to this approach include discussion of the subtlety and complexity of visual arts (Pasztory 1984; Merriam 1971); self-serving political ends in Mesoamerica (Townsend 1979); and outright political manipulation (Umberger 1987) and Borowicz (2003).

[25] Litvak King 1972; Foncerrada de Molina 1980.

unusual, that are precisely the ones that draw our attention and that go on to become hallmarks or emblems of cities or cultures. It would appear that what scholars today regard as iconic monuments were readily visible for a relatively short period of time. For example, Teotihuacan's sculpture-encased Temple of Quetzalcoatl, built around AD 150-200 or AD 250-300,[26] shortly thereafter was seen as iconoclastic and, unfinished, it was largely obscured by a sculpture-free pyramidal structure (called the Adosada) in front of it (AD 400).[27] Although the people of Teotihuacan left the sides of the Temple of Quetzalcoatl visible, thereby allowing it to assert its continued existence through time, they also reused some of the cut blocks of masonry in other constructions,[28] suggesting at least a degree of desecration as a motive. Similar processes of iconoclasm can also be seen at Cacaxtla and Xochicalco. Cacaxtla's dynamic, polychrome murals were carefully covered by a layer of sifted earth and buried by subsequent construction (see chapter 6), and therefore would not have been visible for more than the actual use-life of the structures bearing them. At the same time Xochicalco's iconic Feathered Serpent Pyramid could not have dated to the early phases of the site's relatively short life (AD 650-900), based on evidence of two earlier structures devoid of sculpture within it (González Crespo, Garza Tarazona, et al. 2008). It therefore could not have stood as an emblem of the city in earlier times, but only in late phases (see chapter 5).

Although the term Mesoamerica was devised to convey the cultural affinities of this

[26] Sugiyama (2005: 39) for the former date and Millon (1992: 397) for the latter.

[27] George Cowgill cited in Millon 1992: 397. See also W. J. T. Mitchell's (2005: 131-143) discussion of concealment.

[28] For example, one of the stone slabs from the Temple of Quetzalcoatl reused as a tomb jamb in the Oaxaca Barrio in Teotihuacan is sometimes referred to as a "stela," a freestanding upright stone, which was recarved with a Zapotec glyph (Cabrera Castro 1993: 271; Coggins 1992: 152).

broad area of Middle America,[29] it does not mean that all of the ethnically and linguistically diverse cultures throughout the region and through time shared all of the same beliefs, values, symbol systems, and meanings. Rendering the history of the centers that arose there with the broad brush of generalizations has led to a linear reconstruction of historical processes that cannot reasonably be applied to the complexity of human existence, even less when dealing with the different ethnic groups in diverse geographic settings that arose in Mesoamerica. The method at the heart of such an approach is still the one that pervades and dominates Mesoamerican studies, as research often projects understanding of later civilizations, particularly the Aztecs (ca. 1300-1521), which are privileged by the existence of European texts beginning at the time of the sixteenth-century Spanish conquest, onto earlier cultures, sometimes even as far back as the ninth-century-B.C. Olmecs.[30] Despite the valid critiques raised by George Kubler (1977) sowing distrust in such broad continuities, the fields of archaeology and art history dealing with Middle America have remained remarkably static in their insistence on continuity, or as Coggins succinctly puts it, "archaeologists argue for continuity as the working hypothesis in explanation" (2002: 42). As expeditious as they might be, these approaches have paved the way for dubious assumptions emphasizing continuity over change that become perpetuated and unquestioned in the literature. This does not mean that ethnohistorical sources are to be disregarded in their entirety, but rather they should be approached with caution, particularly if they can be backed by historical linguistic and archaeological evidence (Smith 1984). The question remains to what extent ethnohistorical sources can be applied to much earlier times.

[29] Kirchhoff 1943.

[30] For example Joralemon 1971; Taube 2005.

Mesoamerica has commonly been divided into the Northern Highlands and the Southern Lowlands as an intellectual tool to comprehend the geographic diversity of the cultural region. As early as the 1960s and 1970s scholars such as Lee Parsons (1964) and Esther Pasztory (1978) began to study the evidence of highland-lowland interaction particularly between Teotihuacan and coastal and Maya lowlands, which was often characterized as the result of militaristic or commercial expansion. The topic has continued to be a focus of interest to the present and is relevant to the subject of highland centers such as Cacaxtla and Xochicalco and their relationship with the distant Maya lowlands. Recently the subject of interaction has been approached anew with models that reveal a wide range of different responses in the Maya region to Teotihuacan and that emphasize the matter of scale. Instead of regarding all the evidence of Maya-Central Mexican interaction on equal terms, Geoffrey Braswell (2003a: 17ff) proposes the operative framework is really whether the evidence pertains to in-group versus between-group displays of identity. He characterizes the former as a hidden manifestation more likely to reflect ethnicity and therefore migration than the latter, which is public and pertains to external domains more likely to be manipulated as a result of other agendas. At the same time, he points out that mortuary customs tend to be poor indicators for migration, because archaeological evidence displays highly variable responses of people when they are far from their homeland. Significantly, he identifies the strongest case for actual migration between Teotihuacan and the Maya lowlands as having occurred in Central Escuintla on the Pacific Coast of Guatemala, and the weakest for Kaminaljuyú, Copán, and Tikal, with Altun Ha and Oxkintok possibly suggesting a unique event or indirect ties, respectively. This approach clearly acknowledges the programmatic nature of public monuments, while viewing other more portable artifacts as more indicative of the nature of interaction, a perspective that fits

in well with the following discussion.[31] However, in many cases today we can only surmise the original function and use of pieces by hazarding guesses based on contextual or distributional evidence, but in many cases in Cacaxtla and Xochicalco the original placement and use of pieces are not clear.

Throughout these approaches to interaction, the human bearers of change remain a silent and elusive presence. They are implicit in all discussions of interaction, although we can only speculate about their possible identities, perhaps rulers, ambassadors, wives, merchants or more specifically traders or prospectors specializing in certain raw materials, spies, itinerant artists, artists commissioned for a specific task, displaced peoples, migrants, and even insatiable and curious travelers like Herodotus, Marco Polo, and Ibn Batutta. These latter are mentioned by Pasztory (2005: 75) in her discussion of the interconnected nature of the Old World. Given the ample evidence of the long-standing, deeply-rooted quest for luxury materials (especially jade , but also turquoise, feathers, shells, amber, and the clays to make Maya blue and Maya green to name only a few), clearly human agents traveled considerable distances in the pursuit of highly prized status markers for elite ostentation. It would seem that interconnectedness was not limited to the Old World, although clearly its meaning differed from the way we use it today in our technologically-based interconnectedness that makes actual travel unnecessary. Apparently far-flung contacts and interconnectedness characterized Mesoamerica for centuries. Classic period Teotihuacan and Maya centers were active participants in a two-way interaction that was mutually beneficial in the maintenance of political power through the use of non-local status markers (as will be discussed in chapter 7). It was not a tidy world with clearly

[31] Unfortunately, in most cases the contextual evidence is not sufficiently clear based on information available to date to apply similar methods to Cacaxtla and Xochicalco.

defined boundaries delimiting independent city-states or kingdoms, but more of an organic entity with permeable borders allowing a degree of human entry and departure for diverse purposes. The Epiclassic has been noted as a time of population movements[32] and the evidence from Cacaxtla and Xochicalco reinforces this notion, as will be explored in chapters 2 to 6.

Also relevant to the discussion is the question of change and how it can be understood. Scholars, whether art historians, historians, or archaeologists, regard change as a meaningful trait in art and material culture. Its meaning can be interpreted in myriad ways. Artistic innovation for different purposes perhaps connected with meeting a patron's wishes or an artist's expressive need, enhancing appeal on a competitive market, addressing a different social sector than usual, to mention only a few. Alternatively, Simon During (1993: 134) noted, "Foucault argues that material changes cannot be used to explain changes in subjectivity" and instead emphasizes shifts in the ideational realm of discourses and values that enabled the endpoint—the material change—to come about. Therefore, Foucault would have us look less at the change itself and what it might mean, than to look at an earlier moment, to explore the changes in discourse that fostered or even enabled the change to come about. What changes in thoughts and values in the cultural surroundings encouraged and then permitted the innovation and change that can be seen in Epiclassic Xochicalco and Cacaxtla?

At some times probably more than others in ancient societies, a premium would have been placed on change, particularly in times of new political entities. The forging of a political identity as a recurrent historical process is evident in the birth of new nations, and

[32] Diehl and Berlo 1989: 4; Manzanilla 2005.

is one that often involves a complex acceptance of what came before, as well as a concomitant rejection, and a quest to bring together disparate elements in a new way able to reconcile different factors into a unified identity. The case offered by Mexico in particular, with its ancient roots, its openness to the outside (whether Europe, the United States, or Asia) in different ways and at different times, serves as a model for processes in earlier times.[33] Evidence suggests there was ample knowledge in New Spain (Mexico under Spanish domination) of events transpiring in both Europe and in Asia, as the country stood at the crossroads of maritime trade networks linking Europe and the Far East through the China Galleon[34] and as artists were aware of the debates in artistic circles in Europe at the time, an awareness that indigenous artists subtly incorporated into their artistic practice.[35] Later, in the nineteenth century, when Mexico was born as a nation, it sought to differentiate itself from its former status as a Spanish dependency. It turned, in part, to a vision of its own ancient indigenous roots, which were beginning to be explored in expeditions to all corners of the country to uncover traces of the ancient past combined with elements from more recent visual discourse on French freedom and liberation.[36] In the Epiclassic period, a similar ethos of openness to outside ideas and experimentation clearly arose from the absence of prominent local traditions at Cacaxtla and Xochicalco, as well as a need to establish visual identities.[37] Faced with an array of potential cosmopolitan references from the world around them and preceding them, each center adopted a different

[33] García Canclini 2005.

[34] Miguel Ángel Fernández 1998.

[35] Magaloni 2014.

[36] María Fernández 1993.

[37] See also Pasztory 1989.

strategy through public monumental artworks to convey its identity in times of commercial and political competition and changing alliances.

Potential catalysts of change in Mesoamerica could have been highly diverse. As mentioned, some scholars advocate the large-scale migration of peoples (García Cook 1981; Mastache and Cobean 1989; Bove and Medrano Busto 2003), and others advocate a small-scale movement of specialized groups such as itinerant artisans or merchants (Hirth, Flenniken and Andrews 2000, 2: 144; Brittenham 2008), or limited interaction between the elites of different centers (Marcus 1989; Braswell 20003b; Iglesias Ponce de León 2003). In contrast, others emphasize the movement of goods, along with merchants (Foncerrada de Molina 1993; Litvak King 1972). More recently, the process of the local adoption of non-local traits in the Maya region, for example, by peoples whose artistic choices were informed by their awareness of what was happening elsewhere in Mesoamerica is increasingly acknowledged (Sharer 2003; Borowicz 2003). This idea is by no means intended to deny the possibility of migration, which may have been part of the scenario, but rather deems it necessary to see migration in a different light. Braswell (2003a: 18) proposes a more nuanced vision of migration and ethnicity by pointing out that "the effects of separation from the homeland on the identity of colonists" countered the "colonialist models [of] . . . [a] biologically rooted notion of ethnicity." Significantly he observes, "Migration often *entails* a change in identity." No doubt diverse scenarios shaped the actual nature of changes through time based on choices deployed by individual participants. Nevertheless, I would propose that by examining some specific cases, an articulation of diverse mechanisms can be proposed in the cases of Cacaxtla and Xochicalco.

How could the different actors in the process be impacted and participate in this network of potential change? Clearly different participants would bring to bear different

skills and interests to the process, as Baxandall (1984: 197) has pointed out: "Cultures do not impose uniform cognitive and reflective equipment on individuals. People differ in occupational experiences. . . . At any time painters have special occupational ways of seeing too, and these are obviously powerfully in play in pictures." Therefore, that an artist's eye would perceive aspects of artworks, for example, that an ordinary viewer would not perceive makes perfect sense. Physiologically, that part of the brain is already more developed and sensitized through greater use of the pathways connecting visual and motor skills required for making things by hand. Memory results from neurotransmitters passing from neuron to neuron over the synaptic cleft when both neurons are active at the same time. Repeated use strengthens channels and connections allowing for better long-term memory.[38] Technological style resides in learning motor skills, the type of memory known as procedural memory, much of which is considered unconscious, because it is acquired by repetitive practice or the repetition of skills.[39] It comes as no surprise that artists and artisans, whether experts in building, carving, or painting on different scales, would have greater ability than the average viewer to recall details of visual works.[40] There are cases in which memory, sometimes of the elite more than the artist, came to play a special role in the transmission of forms.[41] Furthermore, the variable interests of the beholder, a concept that introduces the emotional component, would then impact the nature of the memory

[38] "Biological underpinnings at the cellular level" Wikipedia article on "Long-term memory." Consulted August 2013 at http://en.wikipedia.org/wiki/Long-term_memory

[39] Alper 1988.

[40] Ibid.; Pearce 1988; Kutnick 1988.

[41] Küchler (Melion and Küchler 1991) describes the New Ireland Malangan carver as "simply the means to its production," while it is the "elder, having last seen the sculpted image during its acquisition by his kin group, [who] tells the sculptor what he is supposed to carve."

stored as a seed for potential future use, perhaps even innovation in the future.[42]

No doubt, some spectators in ancient times could have been in a position to have had direct visual experience of works from faraway lands, although many would not. Relevant to this idea is Baxandall's (1984: 107) emphasis on the role of cultural difference in perception between the participants in an era and we as observers looking back onto those times: "Living in a culture, growing up and learning to survive in it, involves us in a special perceptual training. It endows us with habits and skills of discrimination that affect the way we deal with the new data that sensation offers the mind. And because the trick of pictures . . . puts a premium on expectation and visual inference, it is sensitive to otherwise marginal differences in the beholder's equipment." He refers to this variability in perception as our "cognitive style" and observes that "each of us has had different experience, and so each of us has slightly different knowledge and skills of interpretation. Everyone, in fact, processes the data from the eye with different equipment" (Baxandall 1988: 29-30). Visual acuity and understanding of non-local features was probably a variable experience dependent on the diverse experience of beholders in Mesoamerica as well. Unfortunately, there are no documents to shed light on the perceptions and expectations of ancient viewers. We can only surmise that those closest to the pieces, in other words the actual makers, would have had greater awareness and certainly sensitivity to these differences, but other viewers who had not traveled extensively or had not had access to portable materials bearing diverse imagery would not have been in the same position to develop this sensitivity. These comments are relevant to the discussion of possible mechanisms of transmission of diverse elements of style and iconography that will be discussed in the context of Cacaxtla and Xochicalco, particularly concerning the

[42] Alper 1988.

development of local versions of object types known from different parts of Mesoamerica.

In the course of doing research for this project, it became apparent that the idea of a single "origin" or "source" was often an abstraction beyond the ken of research into the past, as critiqued by Michel Foucault (1977) in his discussion of genealogies. Instead, the question of "source" is addressed in different ways, sometimes material, at others stylistic (both visual and technological), or even iconographic. It is not a matter of identifying external "influences," as critiqued by Baxandall (1985: 59-62), but rather of identifying focuses of interest to discern potential underlying choices and motivations that may have been at play. However, in the present study "source" does not necessarily refer to the actual point of origin of a piece, motif, theme, or style, but rather to a network of conceptual ties that connect a piece with a culture, area, or center on the basis of visual similarities; this level of perception operates on multiple levels, involving insider-outsider, as well as artist-viewer-patron. In the event the original goods could not be secured by the ancient rulers of Xochicalco and Cacaxtla, an alternative strategy was to produce local versions of iconic elite object types, based on visual and perhaps other forms of memory (e.g., verbal, emotional, imaginative, aspirational) that triggered a creative process that combined visual translation and reinterpretation.

Prestige was one of these underlying aspirational drives that promoted the development of monumental and luxurious portable artworks. It can be gauged both in terms of scarcity or difficulty of acquisition to more intangible, culturally imposed values, always based on the notion of exclusion. For something to be prestigious, obviously not everyone can have it. Sometimes prestige items have an inherent worth based on the value of the materials from which they are made (e.g., greenstone in ancient times, perhaps diamonds or gold today). Prestige always entails otherness for its exclusive nature. As an

emanation of something alien/other to oneself, it by necessity involves stereotypes, which in turn are a blend of our perceptions, what we have learned, what we dream or aspire to in a cultural construction. In Mesoamerica, Teotihuacan was a prestigious city, even an emblem of rulership. After its decline, although it apparently remained the largest populated center in the Basin of Mexico[43] and continued to be involved in craft activities,[44] it clearly was no longer surrounded by the same aura of prestige as in preceding centuries, particularly in the Central Highlands.[45] In contrast, to what extent could the Mayas have been regarded as the prestigious "Old World" of American antiquity? Even though Miguel Covarrubias and others have cited Olmecs as the "mother culture" of all subsequent developments in Mesoamerica, the Mayas still surpassed them in overt visual expressions of splendor. Colossal masonry constructions, sculpture, vibrant mural painting, as well as personal emblems of status crafted from jade made ancient Maya cities as early as the Preclassic or Formative period models of grandeur that outstripped that of the Olmecs.[46] Given the lack of masonry architecture, great Olmec centers may not have been known in Epiclassic times. By this time Maya courtly life set the pace for elegance, luxury, and the ostentatious display of power. The degree of understanding of the different aspects of Maya civilization might have varied in different areas of Mesoamerica, but it must have been based in part on stereotypes; it is not hard to believe that Maya city-states were long regarded with awe in other areas of Mesoamerica. Why the suddenly prominent interest in

[43] Sanders, Parsons, and Santley 1979.

[44] Rattray 1980; Nichols, Neff and Cowgill 2013: 63.

[45] Diehl 1989.

[46] In contrast, Olmec vestiges suggest they elected stone sculpture and later jade as their preeminent media to express their might. However, much of the jade was buried in tombs or cached deposits, and thus would not have been visible.

publicly displaying Maya imagery and status symbols in the Epiclassic? Part of the explanation is related to the decline of Teotihuacan's own prestige, at a time when Maya city-states seemed to be thriving, although they too would soon see an end to their millennial glory.

The identification of these references to the style and iconography of past or coeval centers and cultures draws on earlier art historical and anthropological method in an interdisciplinary mix. As such, this approach implies a risk, according to Ellen Handler Spitz (1995: 551-552) because, "It means embracing, provisionally, a viewpoint that prizes speculation, overdetermination, and attention to private feelings that may indeed spin off and abandon or overshadow the very object with which the inquiry began. It means forsaking, temporarily, a familiar methodology," for therein lies the power of works of art. The present study examines the visual culture of two coeval centers to explore the construction of identity in Epiclassic times of change and uses contextual information and comparisons as a springboard for further enquiry. At the same time, it privileges the visual, precisely because "Like language, it [visuality] is a medium in which politics (and identification, desire, and sociability) are conducted" (Mitchell 1995: 542), making it a rich field for scrutiny. Conceptually, my approach is indebted to nineteenth-century Giovanni Morelli's methodology of focusing on what seem to be inconsequential details of representation as clues to identifying authorship in painting (Ginzburg 1980). However, he refers to the hands of individual artists, while I employ the term to refer to a "cultural hand."[47] In other words, certain details of production, particularly details of imagery, figuration, or embellishment, were the result of highly personal decisions—versus codified

[47] I thank Diana Fane for noting this important distinction.

solutions—on the part of the maker. As such, they have the potential to distinguish between different artists or artisans, as well as the ways they rendered familiar subject matter and resolved details of unfamiliar subject matter. More recently in anthropological studies, researchers have employed the notion of the "technological style"[48] of artifacts is referred to in the present discussion that will refer to "homologies" (local copies or iterations) versus "identities" (actual imported pieces)[49] as expressions of non-local interaction.

Some of the interpretations in the following are inspired by the work of W. J. T. Mitchell (2005: 10), when he states: "We need to reckon with not just the meaning of images but their silence, their reticence, their wildness and nonsensical obduracy. . . To ask, what do pictures want? is not just to attribute to them life and power and desire, but also to raise the question of what it is they lack, what they do not possess, what cannot be attributed to them." His point is well taken, particularly when faced with artworks and pieces that lack any textual references to help us understand their original cultural context, ruler-patrons' impact, artists' interests, the public's response. Interpretation must rely on contextual information, comparison of pieces, projections of what is known from historical Aztec or Maya times back to earlier times, ethnographic analogy, or draw on universals along the lines of Mircea Eliade's comparative studies of religion.

Chapter 1 of this dissertation surveys the historical sources that refer to the two sites through time and how they have shaped the study of these two sites. The earliest references to Xochicalco and Cacaxtla are brief sixteenth-century references culled from Aztec visions of a distant past that shed little light on the archaeological remains that have been unearthed

[48] "Technological style" refers to social and cultural processes embedded through tradition in the production of utilitarian material goods, although it is most often applied to pre-state societies (Stark 1999). However, its debt to Morelli's earlier work has not been addressed.

[49] See Ball 1983.

there. Several historical sources name Cacaxtla in connection with the Olmeca-Xicalcanca, a poorly understood group, which has colored much of the subsequent literature.[50] In the following three centuries, Cacaxtla remained hidden, buried under vegetation and cornfields, forgotten until the accidental discovery of the murals. In contrast, enough of the Feathered Serpent Pyramid at Xochicalco remained intact to attract visitors—some with scientific aims and others spurred by the adventure of exploration and discovery—who wrote and illustrated their impressions of Xochicalco, but their sometimes fanciful accounts shed little light on the city's original inhabitants. José Antonio de Alzate (1791) marveled, "This extremely beautiful architecture . . .can be compared to the pyramids of Egypt for their solid construction" and he describes the Feathered Serpent Pyramid "beautifully worked with Mexican hieroglyphs" and where "some dancers in relief are found," while illustrating a five-tiered pyramid that bears little resemblance to the actual monument (fig. 8). More than a century later, Guillermo Dupaix (1805-1808)[51] displays a similar lack of understanding of the same reliefs which are said to represent a "variety of objects, such as hieroglyphs, men, animals, plants, and others that are not known," accompanied by an equally bizarre illustration (see chapter 1). Despite these recurrent references to Xochicalco in historical accounts, it would be fair to say that both cities remained invisible over the years—Cacaxtla literally and Xochicalco figuratively—as each writer imposed his vision and interpretation onto the archaeological vestiges.

The following chapters focus on diverse material remains, ranging from the monumental (architecture, sculpture in the round, bas-reliefs, murals) to the portable

[50] When combined with the Maya-Mexican content of the site's murals, information on the Olmeca-Xicalanca has served to shift attention to the role of this group in Cacaxtla and away from other mechanisms of explanation.

[51] Reproduced in De la Fuente, González Crespo and Garza Tarazona (1985: 299-301).

(worked lapidary, obsidian, shell, and ceramic materials). They are organized along the lines of media both to facilitate reader consultation and understanding, as well as to bring to the fore differences in the nature of certain materials. Dividing the archaeological remains into public-monumental (chapters 2 to 6), portable elite-ritual artifacts (chapter 7), and utilitarian materials (chapter 8) is intended to bring into sharper focus the inherent differences in intentionality that can be gleaned by examining this material today. The local portable remains from each site are intended to form a larger context in which to view the monuments, framing them in a broader context. The discussion of monuments focuses on comparisons that have been drawn with earlier works (from Teotihuacan or the region of Tlaxcala) and coeval pieces from other parts of Mesoamerica (the Maya region, Veracruz, Oaxaca) and reappraise the evidence in the literature of non-local interaction to offer an alternative reading. Chapter 7 reviews a selection of elite and ritual portable remains that have received relatively little attention to date. It takes into consideration contextual archaeological evidence for the original use of these remains. Then chapter 8 contains an overview of utilitarian ceramics and obsidian to round out the panorama of the two centers, but does not attempt to offer alternative readings of the archaeological materials.

My intention is to explore the active role of images and their effects on beholders in Cacaxtla and Xochicalco in the changing times of the Epiclassic. At the same time, it intends to delve into the world of portable elite and ritual remains to determine the extent of ties or disparities. Although this dissertation offers an interpretation of certain details of style and iconography, the main purpose is to frame the major artworks from these two centers in a broader context of developments at each center as a whole to offer a different perspective that posits other ways of understanding the concerns and desires of the rulers and artists in these two Epiclassic cities.

Chapter 1

Setting and Background

The comparison of Cacaxtla and Xochicalco brings to the fore obvious similarities and contrasts framing problematical issues regarding both sites and useful models from one site that may sometimes be applied to the other. The following comments address questions arising from the different categories of information available on the two sites and problems shared in the study of both sites. For example, considerable excavations and regional surface surveys have yielded considerable archaeological information on Xochicalco; in contrast relatively little archaeological work has been conducted at Cacaxtla, where much work remains to be done in the future. Perhaps precisely as a result of this relative dearth of archaeological information on Cacaxtla, most studies rely to different extents on ethnohistorical sources dating to more than six centuries after the center was abandoned. In the case of Xochicalco, ethnohistorical references are exceedingly rare and have not featured prominently in interpretations of the city.

Cacaxtla

Site and Environs

The archaeological site of Cacaxtla has been controversial and enigmatic ever since the accidental rediscovery in 1975 of spectacular, life-sized murals, which had been deliberately buried in the distant pre-Hispanic past (fig. 4). Located in southwestern

Tlaxcala (fig. 2), Mexico,[52] Cacaxtla is near the town of San Miguel del Milagro in the municipality of Nativitas (fig. 9). The etymology of the site's name is believed to be related to *cacaxtli*, the Nahuatl name for the framework that merchants used to carry their wares (López de Molina and Molina Feal 1986: 17).[53] Occupied from Preclassic to Postclassic times (circa 800 BC to AD 1100),[54] the site's apogee is often dated to the Late Classic or Epiclassic period (circa 700 to 900),[55] although others have suggested earlier occupation based on evidence of earlier construction stages that have not yet been explored.[56]

Cacaxtla's spatially and geographically strategic location suggests a concern for defense and communication. Even though the excavated portion is only a small percentage of the original settlement, during the Middle and Late Classic Periods, it is believed that settlement covered an extensive territory in the form of an arc or horseshoe from Xochitécatl, Cacaxtla, Atlachino, present-day San Miguel del Milagro, its southern slope and northeast to Tepemberne.[57] The highest eminences in this area (fig. 9), Xochitécatl and

[52] Coordinates: latitude 19 13'50" and longitude 98 20'19".

[53] The authors question the antiquity of this name; however, its validity might be corroborated by the depiction of such a merchant's bundle in the Red Temple murals (see fig. X). However, the bundle is shown in a context suggesting it was not actually a place sign, but is associated with a deity standing beside it. Other researchers have interpreted the repeated heart and blood motifs on the clothing and insignia of the victorious warriors in the Building B battle murals (fig.) as a place name, especially given the detail of the teeth, *tlantli* in Nahuatl, holding the sign, which might represent *-tlan*, a locative for place glyphs in later times (Berlo 1989: 28). In the literature the site has also been known as "La Frontera" (Molina Feal 1980: 43) and "T-280" by the Fundación Alemana para Investigaciones Científicas (Abascal et al. 1976).

[54] Abascal et al. 1976: 7, 11, 15, 17; López de Molina 1979: 146.

[55] López de Molina and Molina Feal 1980: 8.

[56] Santana 1990c; Brittenham 2008.

[57] López de Molina and Molina Feal 1986: 18. Remnants of terraces, areas of cultivation, residential zones and other settlements dot the nearby slopes, hills and plains (Molina Feal 1978: 56) and remains of structures identified as houses were found on the terrace to the southeast of the hill (López de Molina and Molina Feal 1977-78). Pre-Hispanic remains, including small mounds and surface materials from nearby hills, such as Xochitecatl, Atoyatenco, Atlachino and San Miguel are believed to be coeval with Cacaxtla, perhaps originally constituting smaller centers or barrios forming part of Cacaxtla itself (López de Molina and Molina Feal 1986: 18).

Cacaxtla were apparently the major political-religious seats of power, with residential zones in the immediate perimeter, surrounded by agricultural zones on the plains.[58] Initial excavations focused primarily on the hilltop center, while more recently archaeologists have worked at residential areas near the site to understand how the rest of the population lived.[59]

The overall dimensions of the city-state of Cacaxtla and its relationship with the nearby hill of Xochitécatl—with its pyramidal platforms and spacious plazas that yielded an abundance of female terracotta figurines unlike materials from Cacaxtla—are controversial.[60]. Daniel Molina (personal communication, September 1984) suggests that the settlement of Cacaxtla by the Olmeca-Xicalanca explains the differences between this site and Xochitécatl, while Serra Puche and Lazcano Arce (2011: 164) propose the two centers formed a single complex in which each hill served different functions: Cacaxtla was a palatial-administrative center, while Xochitécatl served a ceremonial-commercial purpose.[61] The marked differences between Cacaxtla and Xochitécatl have led to the tendency to view Xochitécatl as the result of local developments and Cacaxtla in cosmopolitan terms. Resolution of this matter is beyond the scope of the present study,

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[58] Ibid. The precise chronological placement of Xochitecatl is not clear. Spranz (1973, 1978) has suggested a Late Classic to Early Postclassic date, while Serra Puche and Beautelspacher (1994: 60) propose AD 600-800 (Late Classic) as the site's culmination.

[59] Serra Puche and Lazcano Arce 2011.

[60] Molina Feal 1980: 43. Serra Puche and Lazcano Arce (2011: 37-45) have proposed Xochitécatl-Cacaxtla was part of a series of related centers within a 98 square kilometer zone that included in addition to Xochitécatl-Cacaxtla, three first level hilltop sites (Tetlatlahuca, Tecajete, and Mixco Viejo), five small secondary sites on slopes and valley floors (El Milagro, La Cruz, San Vicente, Loma Cocómitl and El Santuario), in addition to five residential zones for farmers and craftsmen (Santa Inés, Loma La Mina I, Loma La Mina II, Plataforma Oeste Xochitecatl, and Nativitas I, II, and III.

[61] Furthermore, Xochitécatl's Preclassic or Formative period occupation, abandonment, and major reoccupation during the Epiclassic has been extended to Cacaxtla and is suggested to have been linked to major eruptions of the volcano Popocatépetl (Siebe et al. 1996; Serra Puche 2005: 341).

which focuses on Cacaxtla.

The hill itself is largely composed of artificial fill and shows considerable evidence of other human modifications.[62] Gorges and ravines were intentionally deepened as defensive pits surrounded the hill of Cacaxtla, while tall, sloping walls (*taludes*), constructed around the southern, eastern and western sides of the hill, are believed to have functioned as additional fortifications.[63] The hilltop location provided a wide vista of areas of access to the site, while small pyramid platforms toward the east perhaps controlled passage both to and from the hill.[64]

Standing at the northern edge of the Puebla-Tlaxcala Valley and the southeastern Central Highlands in an area with mild climate and access to diverse resources,[65] the site is believed to have played an important role in interaction between Central Mexico and areas further south and east (fig. 10). Natural invasion and communication routes enter the Tlaxcala region from the south and southwest;[66] however, specific political threats have not yet been identified. Cacaxtla's locale was a zone of passage between Cholula, an important ceremonial and commercial center in Puebla, and central Tlaxcala.[67] The area has also been called a "natural corridor" linking the Central Highlands with Oaxaca, the Gulf Coast and the southern Maya lowlands.[68]

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[62] López de Molina and Molina Feal 1977-78: "Nomenclatura."

[63] Molina Feal 1980: 43.

[64] Abascal et al. 1976: 17.

[65] See Appendix B for further details.

[66] Armillas 1946: 141-142.

[67] López de Molina 1980b: 296.

[68] Armillas 1946: 144, footnote 12.

The archaeological zone of Cacaxtla itself consists of three groups: the "Little Hills" (Los Cerritos), the core known as the Great Platform (Gran Basamento) and the Plaza of the Three Pyramids (Plaza de los Tres Pirámides) (fig. 11). The area referred to as the "Little Hills" marks the eastern approach to the site where the path to Cerro Cacaxtla is flanked by two small pyramidal mounds, only one of which has been excavated and is known as Mound B. Other points of access to the site have not yet been determined.

The most extensively excavated part of the site, the Gran Basamento or Great Platform in particular went through numerous phases of rebuilding that have complicated its excavation and reconstruction (fig. 12). Lacking any evidence of a grid plan governing its organization, Cacaxtla's oldest structures known are said to be predominantly in the southern part of the Great Platform while the later structures dominate the north.[69] Although only one mound (Mound Y) on the Great Platform is believed to be relatively late in date, the northern sector is presumed to have been primarily ceremonial as opposed to residential, based on the large public plaza, the mural painting and stucco-covered clay sculpture on building exteriors. All seven of the murals discovered to date are from the Gran Basamento (fig. 12): Buildings A and B; the Room of the Stairway; the Venus Temple; the Red Temple; a substructure under the Great Plaza; a fragment from Pozo (Pit) 11-A that was reburied. The southern half of the site largely consists of an unexcavated mound Group II (Conjunto II) and the Palace. It is believed to have been residential, based on a conglomeration of small, long, multi-doored chambers, some arranged around patios or plazas. Burials of sacrificed infants have been found in northern and southern sectors. The Great Platform is surrounded by a series of deep pits and trenches, late additions

[69] This generalized architectural chronology is based purely on vertical depths and has been questioned by archaeologist Saburo Sugiyama, who completed a more accurate map of the central zone in 1985.

cutting into earlier floors and constructions, which have been identified as defensive works.[70] The Plaza of the Three Pyramids stands at the southern end of the site and consists of three large mounds, which have not yet been excavated (fig. 11).

Chronology

The chronological sequence at Cacaxtla is only summarily known. Preclassic settlements were found on the plains east and west of the site.[71] Small settlements began during Tlaxcala's Texcoloc Phase (ca. 800-300 BC) and continued into the Tenanyecac or Early Classic Phase (AD 100-650) during which the nearby hill of Xochitecatl was believed to have been a major urban center.[72] The hilltop site of Cacaxtla, however, was occupied primarily from Middle or Late Classic to Early Postclassic times, circa AD 600 to 1100.[73] Most sources agree that Cacaxtla was at least partially contemporaneous with Teotihuacan, the great metropolis that influenced much of Classic period Mesoamerica, although these levels of the site have not yet been excavated. Ties with Teotihuacan are supported by early ceramics and certain iconographic similarities at Cacaxtla; however, López de Molina (1981: 171) believes Abascal (et al. 1976: 49) has overemphasized the link between Teotihuacan and Cacaxtla.

Many aspects of Cacaxtla's chronology are disputed. Most investigators identify only one phase for the site, although subtle internal changes in ceramics and architecture are said to support at least two phases.[74] Based on their excavations, Diana López de

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[70] Armillas 1946.

[71] López de Molina 1980b: 296.

[72] Abascal et al. 1976: 7, 11, 15.

[73] López de Molina 1979: 146; Serra Puche and Lazcano Arce 2005: 293.

Molina and Daniel Molina Feal, support Armillas's reconstruction of two phases; the first, Late Teotihuacan in date, and the second, the construction of the fortifications. However, evidence of multiple floors uncovered when pits were dug for the supports to hold the colossal roof covering the Great Platform suggests a longer, more complex development.[75]

The site's apogee is generally dated from AD 650 to 850, the Epiclassic period.[76] Evidence includes carbon-14 dates, sixteenth-century Spanish chronicles, stylistic analyses of the murals, and cross-cultural comparisons of excavated materials. Radiocarbon dates generally cluster around AD 650 to 800,[77] although Andrés Santana (1990c) based on ceramics, Espinoza García and Ortega Ortíz (1985-1987) on stratigraphic and architectural remains, and Brittenham (2008) on the basis of recalibrated dates have good reason to suggest a longer sequence that reached back earlier in the Classic period. According to chronicles, the Olmeca and Xicalanca, an elusive group of disputed origins, are said to have invaded the region, some say around AD 800.[78] The overall style and certain iconographic details from the site's renowned murals share traits with dated monuments in the southern lowland Maya region from about the seventh to ninth centuries. Ceramic resemblances appear to fall into two phases: from AD 400 to 600 and from 600 to 800.[79] Thus, much of the evidence clusters around AD 700 to 850 for the site's florescence.[80]

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[74] López de Molina 1981: 170.

[75] Espinoza García and Ortega Ortíz 1985-1987.

[76] López de Molina 1981: 170; Armillas 1946: 141.

[77] López de Molina and Molina Feal 1986: 509.

[78] Jiménez Moreno 1966: 67.

[79] Molina Feal 1977: 3.

The dating of Cacaxtla's defensive works is also disputed. García Cook (1981: 269) places the site's defensive pits date to the Early Texcalac Phase, circa AD 650, which he identifies with the beginning of Olmeca-Xicalanca occupation of the site and its apogee.[81] However, López de Molina (1981: 171) believes defenses date to the Early Postclassic phase (ca. AD 850) at the end of Olmeca-Xicalanca presence. Armillas (1946: 141) proposed two hypotheses to explain the addition of fortifications at Cacaxtla. He attributed the pits to the Olmeca-Xicalanca, who made Cacaxtla their capital after their expulsion from Cholula or to the Tlaxcalteca reoccupation of the site and their fortification against the Mexica.[82] The dramatic drop in Early Postclassic materials suggested the site declined in importance during this time.[83] The population perhaps shifted to the east to San Miguel del Milagro or the lands south and southwest of Nativitas.[84] However, Cacaxtla itself was not completely abandoned.[85] If the fortifications do indeed date to this period, perhaps they mark a greater need for self-defense resulting from a decline in Cacaxtla's political authority.[86] Nevertheless, the hilltop location overlooking the valleys below expressed an ongoing concern for defense.

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[80] Abascal (et al. 1976) alone advocates a Middle Classic florescence and abandonment of the site by 850. Brittenham (2008: 239) recalibrates C-14 dates and suggests an Early Classic occupation not identified in the literature.

[81] In one of the pits there is clear evidence that these cut through earlier construction and therefore, probably did postdate the site's apogee (Armillas 1946: 141).

[82] There is little evidence of Late Postclassic occupation or re-use of Cacaxtla (López de Molina 1977-78: 4). Armillas (1946: 141) himself also favors the former, rather than the latter, interpretation. Additional support could be the figurine with a horizontal handle that resembles a Postclassic type from Cholula (Müller 1978: 150, lám 16, 152) that I photographed in the Cacaxtla storeroom. Cholula figurines from this period depict Tlaloc, Tezcatlipoca, and Xipe; the Cacaxtla specimen is half Storm God and half Xipe.

[83] López de Molina 1980b: 296.

[84] López de Molina 1981: 172; 1979: 146.

[85] López de Molina 1981: 171.

[86] cf. Palerm 1954.

Ethnohistory

Ethnohistorical texts have played a major role in the interpretation of Cacaxtla. Interestingly, the site is not specifically mentioned by name in conjunction with any of its descriptions. Muñoz Camargo (1966: 20-23) and Torquemada (1975: 353-354) identify and describe an unnamed site in the area of Natividad (Nativitas) as the capital of the Olmecas and Xicalancas that has come to be identified with Cacaxtla. This has led to considerable speculation on the role of the Olmeca and Xicalanca in the Central Highlands.

Methodological problems often arise in the application of ethnohistorical documents to the archaeological past. Advocates of cultural discontinuity or disjunction, such as George Kubler (1977), view the historical validity of late texts as suspect and attempt to avoid relying heavily on the chroniclers. More recently, Michael Smith (2007: 592) has uncategorically rejected ethnohistorical accounts describing the Olmeca-Xicalanca by stating, "I give no credence whatsoever to accounts of migrations by the 'Olmeca-Xicallanca' or the 'Nonoalca' . . . in fact I question the empirical existence of groups of people with these labels outside of the ideology of conquest-era elites." At the other end of the scale, proponents of cultural continuity view Mesoamerican cultures as forming a continuum in which late ethnohistorical materials from one area can be applied to phenomena centuries earlier in another region.[87] This latter approach tends to negate the historical and cultural specificity of any period and de-emphasizes the identification of change through time. An intermediate or moderate approach might be the judicious acceptance of ethnohistorical texts used with a critical eye and on a case-sensitive basis.[88]

[87] For example, Coe (1973) and Taube (1988) cited in Quilter (1996).

To date, ethnohistorical information on Cacaxtla has not been viewed critically. Fundamental issues especially concerning the identity and nature of the Olmeca-Xicalancas and their achievements have not been adequately addressed. These issues and the broader question of the degree to which ethnohistorical information affords a better understanding the cultural remains of Cacaxtla and details on the available sources can be consulted in the Appendix A.

Diego Muñoz Camargo (1966 [1892], 1981), the sixteenth-century Tlaxcalan mestizo, wrote the *Historia de Tlaxcala*, the principal source on the Olmeca-Xicalancas. Although he does not mention the site of Cacaxtla by name, he describes Olmeca-Xicalanca migrations to a series of settlements more or less in the vicinity of the site. Furthermore, his description of the site's defensive works appears to coincide with the Cacaxtla ruins. However, that is more or less where clarity ends.

Stemming from the diversity of references to the Olmecas and Xicalancas in the chronicles, considerable confusion surrounds the identity of this group, their origin, history, cultural characteristics, and ethnic and linguistic affiliations. They are often mentioned in conjunction with other ethnic groups; however, the names of other groups do not overlap and the nature of their relationship with these peoples is unclear.[89] From the perspective of Central Mexico, their origin has been identified as from north, south, east, and west. Their history, distinctive cultural features, and ethnicity are equally contradictory.

Ethnohistorical texts provide a bewildering array of conflicting information on

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[88] As discussed by Quilter (1996). Davies (1977: 14ff, 25, 49, 93ff) also writes of the transformation of history into an abstraction or an allegory and deals with the problem of balancing archaeological and ethnohistorical data.

[89] The disparity of information on the groups connected with the Olmeca-Xicalanca contrasts with the remarkable uniformity and order of the four groups meticulously analyzed by Michael Smith (1984: 179) in sources on the Aztlan migration.

Cacaxtla and the Olmeca-Xicalanca. It appears reasonable and correct to identify the present-day archaeological zone of Cacaxtla as the unnamed capital of the Olmeca-Xicalanca of the chronicles at some point in their history. However, the identity, cultural characteristics and historical role of this group in the Puebla-Tlaxcala area are still murky at best, as a result of the diverse descriptions in the written sources. These differences may have temporal or geographical explanations; but at present there is not enough textual evidence available to determine the reasons for variations in the chroniclers' accounts. For now, the Olmeca-Xicalanca names a group that belongs to the realm of mythology more than history. The characteristics of material culture that might attest to the presence of this group remain to be defined by future archaeological research.

Archaeological Evidence of the Olmeca Xicalanca

Specific material traits identifying the Olmeca-Xicalanca have been elusive in the archaeological record. López de Molina and Molina Feal (1986: 69) suggest Coyotlatelco-type ceramics (red on buff/brown wares) may be one of the cultural markers of Olmeca-Xicalanca presence. This connection had been proposed by others prior to excavations at the site.[90] A simple type of Coyotlatelco ware is characteristic of Cacaxtla and will be discussed in chapter 7 on utilitarian materials from the site.

Coyotlatelco ware represents a dramatic change in ceramics, presenting different ritual and utilitarian vessel forms and pastes, a shift traditionally identified with the arrival of non-local groups.[91] It first appears on the outskirts of Teotihuacan as early as the Xolalpan period (AD 350-550) and some archaeologists believe it grew out of styles that existed at Teotihuacan, although it became a hallmark of post-Teotihuacan phases

[90] Chadwick 1966: 10; Davies 1977: 113, 116.

[91] Moragas Segura 2004: 37.

(Oxtotipac and Xometla) at the metropolis.[92] In Central Mexico it is regarded as evidence of the presence of outsiders, perhaps from the north, such as the Bajío or Tula areas, where evidence of earlier development of this ware has been found, or else it has been linked to the Olmeca-Xicalanca.[93] Cyphers (2000, 2) emphasizes the distinction between the simple decoration of Coyotlatelco A and the more intricate Coyotlatelco B. On the one hand, Coyotlatelco B appears in areas that had the closest ties with the once-great metropolis of Teotihuacan and is restricted to the Basin of Mexico, Teotenango and the Valley of Toluca, the Tula region, and northern and western Tlaxcala.[94] On the other hand, Coyotlatelco A has been identified in the Puebla-Tlaxcala valley, western Morelos, and other areas not within the former Teotihuacan sphere of influence.[95] Interestingly, Cyphers (2000, 2: 15-16) notes the greatest similarities between Cacaxtla and Xochicalco Coyotlatelco A, which she attributes to itinerant merchants bringing wares to urban markets, perhaps Olmeca-Xicalanca.

Ángel García Cook (1978; 1981; García Cook and Merino C. 1979) has written about the existence and activities of the Olmeca-Xicalanca in the Puebla-Tlaxcala region. However, when queried about the nature of material evidence for such reconstructions, García Cook firmly maintained that there was little doubt of the presence and movements of this group, but admitted that archaeologically they are not well defined (personal

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[92] Cyphers 2000, 2: 12-13.

[93] Ibid.; Chadwick 1966.

[94] Dumond and Muller 1972: 1211-1212; Cyphers and Hirth 2000, 2: 126; Cyphers 2000, 2: 13.

[95] Dumond and Muller 1972: 1211; Cyphers 2000, 2: 13. This is not to say that Coyotlatelco A is limited only to Cacaxtla and Xochicalco, but rather that many studies to date have not made a clear distinction between the two types, which requires reassessment.

communication 1984). He identified three ceramic types, appearing either together or in isolation, as diagnostic traits for the group. These types are:

1) highly polished red ware (Mixtec associations)

2) fine paste wares (Southern Veracruz or Tabasco relations)

3) red on buff (Coyotlatelco type ware)

How and why these ceramic types, either together or in isolation, would represent an ethnic group requires greater attention.

Other ceramic types or artistic styles have been proposed as evidence of Olmeca-Xicalanca presence. For example, others have suggested that Cholulteca I ceramics at Cholula represent Olmeca-Xicalanca intrusion at the site this time.[96] Chadwick (1966: 2-4, 9, 10, 16-18) hypothesizes that the Olmeca-Xicalanca or their ancestors may have been associated with the manufacture and distribution of Thin Orange ware, the ubiquitous Classic period trade ceramic commonly linked with Teotihuacan and its sphere of influence, but evidence for this theory is lacking.[97] Nicholson (1982) proposes a connection between the Olmeca-Xicalanca and the predominantly Maya-style of the murals at Cacaxtla, the centuries-later, nearby center of Tizatlán with murals of a markedly different style labeled "Mixteca-Puebla," and to a style of polychrome ceramics related to the latter murals and generally associated with Cholula. On the other hand, Santana Sandoval (1990c: 82, 84) identifies Thin Orange, Coyotlatelco, and Tenanyecac phase wares as diagnostic markers for the Olmeca-Xicalanca and concludes the Olmeca-Xicalanca were not

[96] Jiménez Moreno 1942: 128; Davies 1977: 90-91, 115.

[97] Cyphers (2000, 2: 12, 15-16) also touches on the idea that this ceramic type may have been an ethnic indicator of Olmeca-Xicalanca presence at Xochicalco. She also cogently identifies the pitfalls of equating ceramic assemblages with historical sociocultural entities. It is worth bearing in mind that Xochicalco is not linked to the Olmeca-Xicalanca as often as Cacaxtla, because ethnohistorical sources do not identify Xochicalco with this group.

responsible for building Cacaxtla and painting its murals, but rather provoked its abandonment with their arrival. Marie Areti Hers (1987) offers a thorough critique of the Olmeca-Xicalanca problem at Cacaxtla.

While ethnohistorical sources seemed to date Olmeca Xicalanca presence to between the ninth and thirteenth centuries, archaeological sources often tend to place them in the Puebla-Tlaxcala area at an earlier date, ca. AD 300.[98] Chadwick (1966) suggests the Olmeca-Xicalanca may have been present at Teotihuacan since ca. AD 150-400, while Davies (1977: 90-91) pushes the dates even further back, perhaps predating Teotihuacan's rise. Davies (1977: 90-91, 113, 120) also identifies the Olmeca-Xicalancas as the people who remained in the area after population dispersed from Teotihuacan in the Epiclassic. In contrast, Santana (1990c) proposes a tenth-century date. These disparate interpretations illustrate some of the difficulties of dealing with the Olmeca-Xicalancas. Hopefully future work can shed light on the presence of this group, which at present remains little more than a label or name that does little to enhance our understanding of Cacaxtla and the Epiclassic period as a whole.

Historical Awareness of the Site

Cacaxtla remained largely invisible after its abandonment, which probably took place sometime in the Early Postclassic. The outlines of its mounds and defensive ditches would have been vaguely discernible, but the site's more enigmatic remains were soon overridden by encroaching vegetation, agricultural fields, and later construction by local residents. It is not known to have been an important site that was re-used, revered, re-occupied, or even visited by later pre-Hispanic peoples.

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[98] García Cook 1981: 269.

A brief reference to the nearby town of San Miguel del Milagro appears in a seventeenth-century account by Fray Francisco de Florencia describing the apparition of Archangel St. Michael there.[99] He recounts the story of how the saint appeared to a young Indian, Diego Lázaro, and told him of a miraculous spring with curative powers that sprang from between two hills.

The site did not draw the attraction of later seventeenth- to nineteenth-century travelers and it is only mentioned in passing if at all. Eduard Seler (1960 II: 264) visited the nearby hill of Xochtecatl (*sic* Xochitécatl) in the early 1900s and was informed that the remains of the sanctuary on top were known as the "Palace of King Cacaxtle," an apparent conflation of various local oral traditions.

Excavations and Studies

Although only a small portion of Cacaxtla has been excavated, it has received considerable attention from archaeologists and art historians alike. Pedro Armillas (1941; 1946) described surface remains in the area in the 1940s and was the first to identify Cacaxtla with the unnamed Olmeca-Xicalanca capital described by the chroniclers. In 1973, Rafael Abascal (1973) reported a rudimentary monolith found south of the site that he interpreted as a prototype for a Toltec *atlante* or supporting figure. It was not until 1975 that looters accidentally uncovered the polychrome murals and Cacaxtla skyrocketed to fame and became a major focus of tourism and state pride for the small central Mexican state of Tlaxcala.

INAH (Instituto Nacional de Antropología e Historia) archaeologists Diana López de Molina and Daniel Molina Feal directed four seasons of excavations and consolidation

[99] López de Molina and Molina Feal 1977: "Proyecto de Investigaciones," October 24, 1975 letter; see also Báez Macías 1979: 39ff on the apparition.

at Cacaxtla. [100] They uncovered different epochs of construction at the ceremonial center, dug test pits in the center, in peripheral areas and on nearby terraced hillsides, and made surface collections of the immediate area, published in several co-authored studies.[101] Molina Feal's articles (1977, 1978) document the excavations and deal with problems of chronology and his thesis (1980) focuses primarily on restoration and conservation at this center and Yohualichan, an archaeological site in Veracruz that resembles better-known El Tajín. López de Molina explores (1977a and b, 1978, 1979, 1980, 1981) the relationship between Cacaxtla and other parts of Mesoamerica based on archaeological and ethnohistorical evidence with well-articulated methodological concerns and a holistic approach, while relying on ethnohistorical accounts on the Olmeca-Xicalancas.

Three of the seven known murals from the site to date—Building A, Building B, and the Room of the Stairway (figs. 13-20 and chapter 6)—were excavated by the Molinas. What is remarkable about the Cacaxtla murals is the prominent use of the non-local Maya style far away from the Maya homeland. The Building A murals, which were first found by looters, portray an eagle warrior and a jaguar warrior on a portico framed by serpents and a watery band with corn plants growing from a cave emblem framing the doorway. At some point the corn-cave emblem was covered by a relief sculpture. Each of the jambs displays a male figure in eclectic attire and standing on watery borders (see figs. 2, 13, 14).[102] Another mural on the back wall inside Building A is in poor condition and appears to show a process of figures on a blue, tangled serpentine border (fig. 15). The site's largest mural covers the lower platform of Building B and depicts a bloody conflict between victorious

[100] López de Molina and Molina Feal 1977, 1977-78, 1978-79.

[101] López de Molina and Molina Feal 1976, 1980, 1986.

[102] Abascal et al. 1976.

warriors wearing feline accoutrements versus defeated, disemboweled, dismembered warriors wearing showy bird headdresses, greenstone ornaments, and blue feathers (see figs. 19-20).[103] Flanking a doorway with a small stairway, the Room of the Stairway mural depicts two figures walking toward the door (fig. 17-18). A simple line in contrast to the more elaborate borders of the other murals frames the figures, which are on a noticeably smaller scale than the site's other murals. The murals are said to be painted on mud, [104]which explains the poor condition.

Although not part of the excavation team, Emma Herrera Gutiérrez (n.d.) wrote a study on technical aspects of the murals and their restoration based on fieldwork during the Molinas' excavation seasons. More recent works by Diana Magaloni Kerpel (1994) and Magaloni and Lupone (1990) contain more updated technical studies of the murals.

In 1972, shortly before the rediscovery of Cacaxtla, the Proyecto Puebla-Tlaxcala, jointly sponsored by the Fundación Alemana para la Investigación Científica and INAH, initiated a survey of the Puebla and Tlaxcala area that focused on a few particular sites (García Cook 1976: 49) with work continuing throughout the 1970s. The FAIC later published the series *Comunicaciones* with a supplement on the archaeology of southwestern Tlaxcala based on surface surveys and include the Building A murals, comparing stylistic and iconographic aspects of the Cacaxtla murals with spatially and temporally dispersed sites and cultures, such as the southern Maya region, Veracruz, and Chichén Itzá.

In 1985-1986 Andrés Santana and Rosalba Degaldillo Torres conducted excavations

[103] López de Molina 1977b; López de Molina and Molina Feal 1980; Foncerrada de Molina 1978b, 1982; Lombardo de Ruiz 1986.

[104] López de Molina and Molina Feal 1980: 47-48.

on the southeastern slope of the Great Platform. They uncovered a residential area and dug test pits on summit in the unexcavated mound known as Group II, where they found the Venus Temple murals. This structure consists of a small room with two piers, each with a standing, blue-skinned female and male anthropomorphic figure wearing a feline pelt skirt and a prominent five-lobed emblem identified as a Venus symbol (fig. 21 and chapter 6).[105] The male figure also has a prominent scorpion tail, while the female is broken off just above her exposed breast and both figures stand over a watery band.

In 1986 INAH undertook a major conservation project to cover the entire excavated portion of the hill with an enormous roof. Archaeologists from Salvamento (the Salvage Archaeology Department) under the direction of Pedro Ortega supervised the works, which consisted of digging twenty-eight huge pits—fourteen on an axis east of the hill and fourteen on the west—to position massive metal supports to sustain the roof.[106] In the course of work, several unusual finds came to light, including a life-sized polychrome clay sculpture of a striding male figure similar to the figures in the Building B battle murals (fig. 22);[107] granaries similar to ones still used in the countryside today;[108] free-standing stone sculpture (fig. 23);[109] and mural fragments in situ. A mural depicting a leg pierced by an arrow in a medallion was found in Pit 11-A on the east side of the Gran Basamento, but was reburied for reasons of conservation (fig. 24 and chapter 6)

In 1988 to 1990 the excavation of other important murals was completed as INAH

[105] Baus de Czitrom 1990; Moreno Juárez 2004.

[106] Espinoza García and Ortega Ortíz 1985-1987.

[107] Published in Sánchez de Real 1987 and discussed in chapter 3.

[108] Ramírez Acevedo 1987.

[109] Sánchez de Real 1987.

archaeologists Andrés Santana and Rosalba Delgadillo extended excavations in the Group II area working in conjunction with Sergio Vergara, who re-designed the public walkways throughout the site to make other areas accessible.[110] Delgadillo Torres and Santana Sandoval (1990, 1991) reported that Cacaxtla sacrificial burials predominantly contained the sacrificial remains of newborns, occasionally with associated materials (*tecali* vessel fragments, beads, dogs) deposited randomly, as if hastily tossed in. Roberto Jiménez Ovando (1988) reported on a sacrificial deposit on the west slope of the hill containing a clay roof ornament sculpture of the Storm God (fig. 25 and see chapter 3). Other major discoveries included the Red Temple murals, which were first detected in 1984, but were not completely excavated until 1989 given their fragile condition (fig. 26).[111] Named after the deep red background of the murals, they cover the walls of a corridor flanking a stairway. They depict an odd series of plants sprouting cacao pods and others with human heads conflated with corn, oversized toads, a Maya deity with his *cacaxtli* (carrying device), a hybrid feline-turtle all framed by a feathered serpent and watery border. At the south end of the Red Temple mural, the rise and tread of the step were also painted with prisoner figures and glyphs, respectively (fig. 27). Originally the corridor did not have a stairway and was painted with a simpler composition that apparently consisted of a feathered serpent on top of a watery band border with a plain field or else the painting might have been unfinished (fig. 28). Only a section of the mural has been excavated and it was covered by the stairway and the Red Temple murals.[112] (See chapter 6.)

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[110] Santana Sandoval and Delgadillo Torres 1990; Vergara B. and Santana Sandoval 1990; Santana Sandoval 1990a-f; and Santana Sandoval, Vergara B. and Delgadillo Torres 1990.

[111] Peláez Bonilla and Torres Martínez 1990: 83.

[112] In chapter 5 this mural is referred to as the mural under the Great Plaza.

Apart from archaeological reports, numerous publications deal with the problems raised by Cacaxtla and its murals. How and why would a Central Mexican center have so many strong southern Maya components? Because the murals are as striking in beauty as they are anomalous in style and iconography, they have received the greatest amount of attention in the interpretation of the site. Scholars have focused on aspects of the style and iconography of the best preserved murals from Buildings A and B and have often sought to connect the murals to the Olmeca-Xicalanca.

Some studies have focused on stylistic concerns, such as Sonia Lombardo de Ruiz's (1979) meticulous formal analysis to define the position of Cacaxtla's murals within the context of Mesoamerican mural painting. Stanley Walling's (1982) detailed formal analysis of the Building A murals leads him to attribute the paintings to artists trained in the Maya tradition and he hypothesizes the presence of two different hands representing two chronological phases. Similarly, Jacinto Quirarte (1983) discusses the identification of artists' hands and proposes the Cacaxtla artists were Maya vase painters, based on conceptual, formal and iconographic similarities between the two media. Donald Robertson (1985) also discusses the matter of hands and concludes the artists must have been Maya. He goes a step further by examining possible mechanisms for interaction between Central Mexican ruler-patrons and itinerant Maya artists based on comparisons from other parts of the world.

Straddling stylistic and iconographic concerns, George Kubler (1980) identifies at least four different "hands" in the murals of Building B; however, he adopts a unique approach by focusing on the function of the murals. He differentiates between processes of eclecticism and syncretism, and synchronic and diachronic subtypes of these processes, to explain the anomalies of style and iconography represented in the paintings. Seeking Old

World parallels, he suggests possible ideological reasons of unification for the artistic eclecticism found at Cacaxtla. Oriana Baddeley (1983) also considers the possibility of the conscious and deliberate adoption of aspects of foreign styles and symbolic systems for specific political purposes by comparing processes of non-local stylistic adoption at Cacaxtla and Santa Rita (a later site in Quintana Roo). Richard Townsend (n.d.) also explores the political role of the Cacaxtla murals, but in relation to nature. He examines man's relationship to landscape and the way this is used to served political ends at such sites as Tezcotzingo, Aztec King Nezahualpilli's pleasure retreat; Xochicalco as another Epiclassic "eclectic" center, as well as at Cacaxtla itself.

Many scholars have focused on iconography and the interpretation of particular symbolic complexes. Marta Foncerrada de Molina (1976, 1977, 1978a and b, 1979, 1980, 1982, 1987) identifies sources of foreign influences at Cacaxtla and attempts to explain the peculiar mixture of diverse traits at the site. She regards Cacaxtla's origin to be firmly rooted in the tradition of Teotihuacan mural painting with strong Maya and Gulf Coast influences transported by the Olmeca-Xicalanca to the center. She also discusses specific problems of the meaning of aspects of the murals, such as glyphs or particular symbols (Foncerrada de Molina 1977, 1982).

Carolyn Baus de Czitrom (1986) and Janet Berlo (1989b) have studied Cacaxtla's writing system. Baus (1986) catalogues the smallest constituent parts forming each glyph and seeks meanings for each element, often following Alfonso Caso's interpretations. Berlo's study (1989b) involves a broader comparative context, including Teotihuacan glyphs, Epiclassic writing systems (e.g. Xochicalco, Cacaxtla, Teotenango and other sites) and Aztec writing. She identifies a basic continuity from Classic to Late Postclassic times in underlying organizational principles and in concerns for what merited commemoration

with dates.

James Langley (1981) studies the murals of Building B and traces the origins of a few selected motifs, both Teotihuacan and Maya. As an explanation for the overwhelming eclecticism of the murals, he explicitly proposes the possible identification of the Olmeca-Xicalanca with the Putun Itza discussed by J. Eric S. Thompson (1970), an idea also hinted at by Foncerrada de Molina (1978: 146ff) and Guevara Hernández (1991). Ellen Taylor Baird (1989) studies a selected motif from Cacaxtla, the star, traces the visual contexts in which it appears at Teotihuacan, and then examines the Maya region to make symbolic comparisons based on similarities in costume details and context. She proposes that similar concerns, combining warfare, sacrifice and astronomical phenomena, were involved in the Maya region and perhaps at Teotihuacan and Cacaxtla as well.

A number of scholars have interpreted the murals in terms of structuralist dialectics as summarized in Table 1 below. Annie Dorsinfang-Smets and Michel Graulich (1981; Graulich 1983, 1990) analyze the murals of Buildings A and B and suggest that the type of dichotomies represented in the Late Postclassic Aztec Templo Mayor have roots further back in Cacaxtla and even Teotihuacan. Although at times the interpretations seem to force the material to conform to structuralist thought, there is no doubt the visuals place a strong emphasis on pairing opposites. Hasso von Winning (1985) criticized some of the details of Graulich's work, although he generally agrees with the fundamental concept of duality. Don McVicker (1985) also views the murals in terms of a similar, but slightly different dialectic. Emphasizing Building A, he identifies slightly different oppositions and sometimes his reasoning is not as clear as that of Graulich. Sonia Lombardo de Ruiz (1986a-b) has also employed a system of dialectics with political, symbolic, and agricultural dimensions, based on a detailed, complex formal analysis of the Building A

and B murals with a heavy reliance on ethnohistorical texts. She also proposes a chronological sequence for the paintings spanning AD 550 (Building of the Stairway) to AD 800 (fragments of painted clay from the building on top of Building A) (ibid.: 244).

Table 1: Structuralist dichotomies in the study of Cacaxtla murals.

Graulich (1983, 1990)	McVicker (1985)	Lombardo de Ruiz (1986 a,b)
jaguar – eagle		jaguar - eagle (power symbols)
earth - sky/sun	earth – sky	earth - sky/rains (power realms)
night – day	night – day	
summer - winter		
rainy season - dry season		irrigation agriculture rainfed agriculture (subsistence base)
Evening Star - Morning Star		
flint – obsidian		
young corn - ripe corn		
descending - emerging movement		
tlalchiah - aquiach (ruler titles)		*tlalchiach - aquiach* (ruler titles)
internal - external affairs (e.g. war)		
autochthons (Mexicans) - foreign invaders (Mayas)		
	earth water - rain (sky) water	
	fresh mountain water - salty sea water	

	stability - change	
	Tezcatlipoca - Quetzalcoatl	

These same murals have been cited to discuss a variety of other topics. For example, Eduardo Corona Sánchez (1986) surveys examples of human sacrifice from pre-Hispanic murals and codices, ethnohistorical sources and archaeological contexts, while Jeanne Gillespie (1989) deals with the historical-mythical basis of the murals in a general discussion of the Cacaxtla symbol system. Sharisse D. McCafferty and Geoffrey G. McCafferty (1994) discuss the costume elements of the defeated captains in the Building B murals and propose the leaders of the vanquished warriors represent captive women, rather than men, who may have introduced a new dynasty at Cacaxtla.[113]

In a different vein, biologist Oscar Polaco (1986) identifies the animal species represented in the murals of Buildings A and B. Although some faunal types were locally available, most species were non-local ones, associated with both Pacific and Gulf coasts, as well as with the faraway jungle lowlands to the south and southeast. The implications and significance of the depiction of such particular types of wildlife has still not been explored.

More recently Andrew Finegold (2012) and Claudia Brittenham (2008) have written dissertations dealing with Cacaxtla. Finegold examines the narrativity of the murals within the context of socio-political changes in Epiclassic Mesoamerica and the rise of militarism at this and other coeval and later cities. Brittenham critically reviews available archaeological evidence of vertical relations of finds at Cacaxtla and recalibrates the

[113] However, given the shortness of the attire, it would seem unlikely that the two figures with short skirts and triangular mantles resembling female *quechquemitl* truly represent women. A comparison with contemporary garb for Maya elite women shows a tendency for greater coverage of the body, particularly the legs, than men.

radiocarbon dates to propose a new chronology. She also brilliantly identifies with greater precision the presence of different hands in the murals and suggests the presence of a workshop, possibly with multiple generations of artists. By studying ritual deposits of mural painting and sculpture Brittenham (2009) explores the materiality of painting and its special role at the site, as well as the daring, experimental approach to time in the Building B battle murals (Brittenham 2011).

In the context of the multivolume publication project on Mesoamerican mural painting originated by art historian Beatriz de la Fuente in the Instituto de Investigaciones Estéticas at the Universidad Nacional Autónoma de México, two volumes of lavishly illustrated studies of Cacaxtla mural painting was published in 2013. Its fifteen articles explore the site's architectural sequence (Lucet 2013), archaeoastronomical meaning (Galindo Trejo 2013), the materiality of colors used in the murals (Magaloni, Brittenham, Baglioni, and Bernini 2013), the mural painters (Brittenham 2013), flora and fauna in the murals (Navarijo Ornelas 2013; Guerrero Martínez 2013; Michener 2013), as well as diverse iconographic studies (Helmke and Nielsen 2013a, 2013b; Martin 2013; Domíngez and Urcid 2013; Urcid and Domínguez; Uriarte Castañeda and Velásquez García 2013; and Moreno Guzmán 2013), and the conservation history of the site (González Hurtado 2013).

The majority of studies on Cacaxtla have dealt with matters of symbolism or foreign contacts, both of which have been primarily based on the site's murals. As pointed out by López de Molina (1980: 295), the murals have sometimes been viewed as the "key" to the site; however, in some ways they have created more problems than solutions in the study of Cacaxtla. Similarly, many authors have relied on sixteenth-century documentary references to a poorly understood group known as the Olmeca-Xicalanca to explain the apparently intrusive nature of the Maya style prominently displayed in the murals. However, the role

of the Olmeca-Xicalanca in relation to the murals has been proposed as patron (Foncerrada de Molina 1987), artist (Foncerrada de Molina 1987; while others identify the painters as Mayas, e.g. Robertson 1980, Quirarte 1983), as the group that expels the original inhabitants who authored the paintings (Santana Sandoval 1990e); as the victors in the battle scene (Foncerrada de Molina 1982), as well as the vanquished in the same scene (Graulich 1980). This convenient "explanation" actually clarifies sorely little about the site and serves as an intellectual crutch by creating an illusion of understanding. What is needed is less reliance on ethnohistory and more scrutiny of the archaeological materials and their contexts. A comprehensive and intensive settlement pattern study and surface survey, as well as several more seasons of excavations aimed at addressing specific issues will help to solve many of Cacaxtla's apparent enigmas.

Xochicalco

Site and Environs

The city of Xochicalco stands on a group of six hills[114] connected by a road network in the western Valley of Morelos (figs. 29, 30).[115] Its name means "Place of the House of Flowers" in Nahuatl (*xochitl* = flower; *calli* = house; *-co* = locative).[116] Unlike Cacaxtla, Xochicalco is believed to have been a short-lived center with occupation largely circumscribed to the Epiclassic Period (AD 650-900) or the Gobernador phase in the local

[114] Although archaeological remains have been found on numerous hills in the surrounding area, Hirth (2000: 13) identifies the site of Xochicalco with six hills: Cerro Xochicalco, Cerro Coatzin (or Cerro de La Bodega), Loma Larga, Cerro Temascal, Cerro de La Silla, and Cerro La Fosa.

[115] Hirth 1984: 579.

[116] Robelo 1980, 2: 803-804.

chronology.[117] Settlement sprawled over an area of 4 km^2, approximately 31 percent of which was believed to have been administrative or ceremonial in nature.[118] Massive manpower was invested in the ceremonial-administrative portion of the city, which required artificially leveling the bedrock of the summit of Xochicalco Hill, filling natural depressions and other earthworks, and building platforms, extensive residential terraces, causeways, and fortifications including ramparts, ditches, moats and walls,[119] as well as urban infrastructure for water catchment, channeling, drainage, and storage in cisterns and dams.[120] The rapid growth and urban development of Cerro Xochicalco, with a concomitant lack of evidence of declining population at earlier nearby settlements, has been interpreted as the result of migration and local relocation organized by a regional coalition of polities.[121]

The reasons for Xochicalco's sudden, explosive development on this particular series of inhospitable hilltops in western Morelos are not entirely clear (see Appendix B). Its elevated location and extensive terracing, ditches and apparently complex internal vertical hierarchy indicate defense was a major concern.[122] Given widespread consensus that the Epiclassic was a time of population shifts,[123] well-defended cities would have been

[117] Hirth 1984: 580; 1983: 295ff, 348; 2000: 68ff.

[118] Hirth 1984: 580-581; 2000:68-69. These figures vary. Other publications cite a maximum area of 2.24 km^2 and 38 percent elite-ceremonial architecture (Hirth 1983: 297, 350, 357).

[119] Hirth 1983: 261-262, 267-268, 270, 301; 1984: 581; 2000a: 218ff.

[120] González Crespo, Garza Tarazona, and Molina Montes 1994: 43, 74.

[121] Hirth 2000a: 9, 87.

[122] The principal defensive systems included walls, trenches, pits and ramparts, concentrated mainly on Cerro Xochicalco and Cerro de la Bodega, while points of access to the site were protected by adjacent platforms (Hirth 1983: 332-336).

[123] Hirth 2000a: 3-5; Cyphers 2000, 2: 16.

attractive to populations seeking safety from hostile, marauding bands or from conflicts between rising city-states. The site is located in one of the state's poorest agricultural regions with thin, rocky soil.[124] Although local agricultural potential was low compared with the fertile Cuernavaca Valley nearby, the prior absence of dense occupation in the area and the regions' marginality to Teotihuacan control might have been factors in site selection.[125] Furthermore, the site's marginal location in terms of agricultural productivity and proximity to resources also suggests its very survival must have depended on strongly centralized political control sustained by tribute collected from its hinterland[126] that may have been stored in the site's granaries and cave network.[127]

The abundance of non-local traits and artifacts identified at Xochicalco has led to speculation regarding the site's extensive contacts in terms of trade, warfare, and inter-elite interaction. Its location may have served a commercially strategic purpose, facilitating communication to the north with the Toluca Basin, to the south with Guerrero and the Balsas River Basin,[128] the Gulf Coast via the Valley of Puebla,[129] and perhaps further south with Oaxaca[130] or the Mixteca.[131] However, only a small number of the site's inhabitants were involved in craft production as suggested by evidence of flaked-stone tool

[124] Hirth 1984: 579, 586.

[125] Hirth 1983: 22, 352-354; 1984: 586.

[126] Hirth 2000a: 19, 24, 27, 246ff.

[127] Garza Tarazona and González Crespo 1995: 122, 124, 118; Hirth 2000a: 73-74.

[128] Hirth 1983; 16; 2000: 10; Litvak King 1970: 139.

[129] Hirth 2000a: 19

[130] Litvak King 1972: 71-72.

[131] Hirth 2000a: 10.

production.[132] It is unclear what other goods the center would have contributed in a large-scale trade network, although cotton has been suggested to have been an important commodity grown and processed at Xochicalco.[133] By shifting attention away from trade to political organization, Hirth (2000: 244ff) identifies competition in a system that had to rely on tribute in goods and labor together with the rise of warrior societies explains Xochicalco's role in Western Morelos and its connection with militaristic imagery in Late Teotihuacan and Epiclassic contexts. At the same time, the striking diversity of non-local traits in public art and architecture said to combine "Mayan, Oaxacan, and Central Mexican" features in a way that suggests not migration, but rather choices made by the elite to reinforce their social and political status suggesting inter-elite interaction.[134]

The Xochicalco region and western Morelos in general were not part of the Teotihuacan and Valley of Mexico sphere of influence.[135] Although natural communication routes between both eastern and western Morelos and the valley of Mexico existed, routes into western Morelos were narrow, high-altitude passes often through areas with little pre-Hispanic occupation, while eastern routes were wide, natural passes (fig. 10),[136] which explains the greater evidence of Teotihuacan interaction with eastern than western Morelos. Communication with southern Puebla and the Gulf Coast was most probably through eastern Morelos, the area of a natural corridor with Formative (Preclassic, 900-500 BC) origins.

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[132] Hirth 2000a: 9.

[133] Litvak King 1970: 139; Hirth and Angulo 1981: 145.

[134] Hirth 2000a:264-266.

[135] Hirth and Angulo 1981.

[136] Ibid.: 138ff.

In contrast to the metropolis of Teotihuacan constructed without obvious defensive works in a valley surrounded by hills, Xochicalco was built on hilltops with a core zone that reflected a concern for protection and communication. The result of thorough planning, Cerro Xochicalco was composed of three vertical components: 1) the summit houses ceremonial and elite residential architecture; 2) the intermediary slopes have large residential terraces and small groups of domestic platforms surrounding the hill and 3) the base and lower slopes of the hill have a variety of defensive fortifications, including pits, walls and steep terraces.[137] The highest elevation on the North Hill housed the Main Plaza, which housed the Feathered Serpent Pyramid, Xochicalco's most iconic building (figs. 31, 6-7). Many of the other major monuments from the site were found in the structures located in this central core of the site (fig. 31). Paved streets afforded access between the different levels, while causeways link Cerro Xochicalco with Cerro de la Bodega and other parts of the site and the surrounding countryside.[138]

Chronology

Hirth (2000: 60) identifies two obstacles that have traditionally hindered the development of a Xochicalco chronology: 1) its distinctive regional pottery has little ties to better known sequences; 2) the absence of deeply stratified deposits to establish a developmental sequence. Nevertheless, efforts began with the first chronology for Xochicalco, based primarily on comparative ceramic analyses. Eduardo Noguera (1945, 1947: 152) devised a provisional chronology spanning Preclassic to Early Postclassic periods by studying sherds recovered from stratigraphic pits. His temporal scheme received

[137] Hirth 1983: 296.

[138] Hirth 1984: 582; 1983: 324-330; Hirth, Hirth and Pauer 2000:236-237.

the support of Ignacio Marquina and Wigberto Jiménez Moreno until Alfonso Caso proposed that Xochicalco's apogee post-dated the fall of Teotihuacan.[139] César Sáenz (1963: 23; 1964: 16, 19) dated the city's iconic Feathered Serpent Pyramid and El Cementerio ceramics based on stylistic comparisons to the Late Classic (ca. AD 500-750) to Protopostclassic (AD 750-900) periods. Sáenz (1963: 12) dug trenches to determine whether the Feathered Serpent Pyramid was constructed over an earlier structure and found only two construction stages. Carbon samples were collected for radiocarbon analysis; however, results were never received (César Sáenz, personal communication 1984).

Jaime Litvak King (1974) used settlement pattern studies, tes1t pit excavations, and stylistic analysis to develop a six-phase chronology spanning Preclassic to Early Postclassic times.[140] Through an examination of stylistic similarities in ceramics, sculpture, glyphs, architecture and urban planning between Xochicalco and different Classic period Mesoamerican prototypes, Litvak King (1970: 140; 1972: 167ff) dated Xochicalco's rise to the Classic, contemporary with Teotihuacan III (A. D. 200-650) or IV (AD 650-750).[141] He spearheaded the idea that Xochicalco was a rival of Teotihuacan, along with Cholula, El Tajín, and Tula, in the competition for resources and control of trade routes. Litvak's Phase 6 is equivalent to the Early Postclassic when Xochicalco almost completely disappears as an important site and is replaced by Miacatlan.

Based on intensive surface survey and selective excavations in a large-scale regional

[139] Litvak King 1970: 131.

[140] From the Preclassic Litvak King (1974: 9-10) identifies two small towns—one west of the Malinche and the other southeast of the main ballcourt—which fuse into a larger site in the Early Classic with coeval growth on the hill of La Maqueta. Phases 2 through 5 constitute the Classic period, during which Xochicalco and Miacatlan, a site to the southwest, undergo parallel development, growing in size and power (Litvak King 1987: 200; Litvak King 1974: 1).

[141] Nowadays the end of Teotihuacan is dated to 650 instead of 750 (cf. Cowgill 2008).

project (Proyecto Coatlan), Kenneth Hirth and Jorge Angulo also arrived at a six-phase chronology for Xochicalco, but with slightly different temporal correlations.[142] With dates anchored by C-14 results[143] and comparative ceramic analyses, Hirth reaches the revolutionary conclusion that Xochicalco is a short-lived, single-phase site.[144] Xochicalco's Epiclassic period or Gobernador phase (AD 650-900) witnesses the center's explosive growth to its maximum extent and peak in prosperity.[145] Most of the visible architecture dates to this period, when there is a dramatic fourfold increase in the number of residents at the site resulting from resettlement, perhaps resulting from a regional coalition of political centers.[146] The city met a violent end. Shattered sumptuary and ceremonial objects and evidence of fires set in the city's core apparently cast from the higher reaches of the city and found at the base of contention walls suggest an internal revolt.[147] Human skeletons were found in structures near the ceremonial-elite core in what might have been administrative posts controlling access to restricted areas attest to the rapid abandonment of

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[142] This difference in chronologies can be explained at least in part by several factors. Litvak King assumes Teotihuacan traits are contemporaneous with Teotihuacan, rather than viewing them as disjunctions representing possible continuities, holdovers, heirlooms, or instances of provincial retention. Furthermore, Litvak King's survey covered a larger area in more general terms, while Hirth and Angulo focused on a small region more intensively.

[143] Hirth 1983: 69.

[144] Hirth maintains there are no large regional administrative centers for the Classic Period (AD 200-650), and Tlacuatzingo is the only site with public architecture dating to this phase (ibid.: 292; 1984: 580). The only parts of Cerro Xochicalco that reveal even scant traces of Classic period (Hirth's Fogón phase) occupation are the Southern and Northern hills, and the base (Hirth 1983: 289-292; 2000: 60, 65-68). At this time population tripled and shifted away from fertile alluvial zones to higher altitudes, apparently related to a shift from irrigation to a commitment to temporal or rainfed agriculture (Hirth 1983: 292; 2000: 96).

[145] Hirth 1983: 295; 2000: 60-61, 68ff.

[146] Hirth 1983: 296, 337; 1984: 580, 581; 2000: 87.

[147] Garza Tarazona and González Crespo 1995: 100; González Crespo, Garza Tarazona, and Molina Montes 1994: 86.

the site.[148] At the same time, complete utilitarian artifacts strewn on household floors, as well as ceremonial and ornamental items left in situ in residential complexes, which suggests the residents made a hasty departure.[149]

By the Early Postclassic or the Humo phase (AD 900-1250), for reasons not yet fully understood, Xochicalco's large Epiclassic population disappeared or dispersed, as the site shrank to a mere 16 hectares.[150] During the Late Postclassic or Temazcalli/ Cuauhnahuac phase (AD 1250-1420), six isolated settlements were occupied, but there was very little re-use of Cerro Xochicalco itself.[151] Nevertheless, evidence suggests the ancient city was known and visited by later groups.[152]

Today Hirth's chronology is widely accepted, although González Crespo, Garza Tarazona, Palavicini Beltrán, and Claudia Alvarado (2008) have recently published additional carbon-14 dates that largely corroborate and slightly refine Hirth's chronology by expanding the limits of the city's height to AD 650/700 to 900/1000.

Ethnohistory

Direct references to Xochicalco in ethnohistorical sources are surprisingly rare and seem to fall into two categories: historical and mythical. References in the first category are perhaps more telling of the Mexicas (the contemporaries of these sources) than of the site's

[148] González Crespo, Garza Tarazona, and Molina Montes 1994: 54.

[149] Garza Tarazona and González Crespo 1995; Hirth 2000a: 97.

[150] Hirth 1983: 339; 2000: 61, 87-91.

[151] Hirth (1983: 343-344; 2000: 61, 91-94). Although Hirth (1983: 344) clearly states the former Epiclassic ceremonial zone was not reoccupied, he adds that some temple mounds were re-used and new structures built on the hilltop, but significantly not at the summit of the former core, but rather two small structures flanking the site's tallest structure (Hirth 2000a:73, 91; M. Smith 2000).

[152] Sáenz (1962: 56; 1967: 16.

original Epiclassic population.[153] In his Prologue to Book 1 on The Gods in the *Florentine Codex*, Fray Bernardino de Sahagún (1982: 48) writes of the antiquity of the Mexicans and makes a passing reference to a great building called "Xuchicalco" near Cuernavaca: "There are large vestiges of the antiquities of this people as they nowadays appear in Tula, Tollantzinco, and a structure called Xochicalco, which is near Quauhnauac. In almost this whole land there are vestiges and traces of buildings and very ancient jewels." Other references to a place called "Suchicalco" in the same work[154] appear to name an Aztec temple, perhaps in Tenochtitlan, or a barrio in Tlatelolco.[155] Miguel León-Portilla (1995: 42-52) suggests this repetition is intended to connect both locations to the mythical Tamoanchan, the eternal paradise of the "supreme lord of duality."

The only other ethnohistorical reference to Xochicalco comes from Fernando de Alva Ixtlilxochitl's (1952 1: 38) *Obras Históricas*, which is believed to have been written in the early seventeenth century. An unnamed ancient palace made of large dressed stone blocks in a city in Cuauhnahuac mentioned in passing has identified with Xochicalco. Alva Ixtlilxochitl states: "In Tula they made some palaces all of stone worked with figures and people where there were all of their calamities, wars and persecutions, triumphs, achievements and prosperity: in Cuauhnahuac another palace with a city that used to be ancient, a palace worked entirely with large pieces of cut stone without mud, plaster,

[153] I say surprisingly given the evidence for Aztec knowledge and admiration of the site, as suggested by the greenstone plaque excavated by Leopoldo Batres the Templo Mayor, the Great Temple, alluding to the Feathered Serpent Pyramid, an example of Mexica archaizing and references to the past (Umberger 1987).

[154] Sahagún 1981, Book 2, Appendix: 189, 191; 1975, Book 12, Chapter 36: 107.

[155] Alluding to important people, places, and styles from the past was the Mexicas' way of bolstering their authority as newcomers (see Umberger 1981, 1986). For an alternative reading of Mexica endeavors to shape their historical identity, see López Austin 1994: 67ff.

beams, or wood, only large stones stuck together."[156]

Other sources link Xochicalco with the mythical paradise of Tamoanchan. The *Histoyre du Mechique*,[157] attributed to sixteenth-century chronicler Fray Andrés de Olmos, describes the creation of man in a "new" cavern in Tamoanchan in the province of Cuernavaca: "The name of this first man is not known, but they say that he was created in a new cave in Tamoanchan in the province of Cuernavaca, which is Cuauhnahuac, in the Marquesate of the Marquis del Valle" (author's translation). Román Piña Chan[158] also identifies Tamoanchan with Xochicalco, an interpretation that is rejected by Davies (1977: 67, 74), who views Tamoanchan as a shifting concept and not a historical referent, just as Quetzalcoatl and Tollan were notions of deity and sacred place that grew, evolved, and were applied to different men and different locations through time. In contrast, Jiménez Moreno (1942: 129-136) proposes Tamoanchan was not merely mythical, but rather historical. He identifies the mythical Tamoanchan with the region spanning the southern Gulf Coast northward to the Huaxteca and identifies Morelos as the highland area with climate and flora most similar to that of the Gulf Coast.[159] However, he also points out the aura of Tamoanchan is linked to Amecameca. Addressing this bewildering discrepancy, López Austin (1994: 45-71) cogently discusses the complexity of distinguishing myth and

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[156] Author's translation. Alva Ixtlilxochitl appears to be referring to Feathered Serpent Pyramid at Xochicalco. Hirth (1984: 586; 2000, 1: 29) notes that Cuauhnahuac refers to the area around the city of Cuernavaca (Gerhard 1972: 95), although its actual boundaries no doubt shifted through time. The Aztec town of Teopanzolco stands within Cuernavaca today. However, the reference to large-scale masonry more probably refers to Xochicalco than to Teopanzolco. In the eighteenth century Mariano Veytia (cited in Litvak King 1971: 102), perhaps based on Ixtlilxochitl, provides a similar description of an unnamed site.

[157] Garibay 1965: 106; Jiménez Moreno 1942: 133.

[158] Cited in López Austin 1994: 54-59, 69-71.

[159] Although the Cuernavaca area is still impressively verdant, conjuring up the image of a tropical paradise appropriate for Tamoanchan, it is worth recalling that the hills of Xochicalco are and were as not lush and fertile as the valleys below (Hirth 1983: 22).

history, suggesting there may have been three historical locations identified with Tamoanchan, perhaps including Xochicalco. He ultimately explains the existence of multiple Tamoanchans by the fact that the divine world served as the archetype for the foundation of cities on the earthly plane, which was then mediated in the chronicles in response to diverse underlying agendas in the colonial period. Tamoanchan's identification with such diverse regions would seem to the name was invoked by the Nahuas as a metaphorical and honorific title, more than strictly as a reference to a specific place.[160]

These few and minor references explain little of Xochicalco and its original inhabitants. The comparison with Cacaxtla begs the question: why was so little said of Xochicalco and its people and so much said of Cacaxtla and the elusive Olmeca-Xicalanca? Even if we look beyond the possibly underlying interests of the early colonial sources—such as Sahagún's interest in recording aspects of Aztec culture not only for the conversion of the indigenous population, but also to highlight their civilization and humanity, and Alva Ixtlilxóchitl's nativistic interests in recording worthy examples of indigenous culture[161]—clearly Xochicalco did not feature as prominently in the indigenous imagination as Cacaxtla. Any attempted reconstruction of the organization, significance and population of Xochicalco must therefore rely on the analysis and interpretation of archaeological and art historical data.

Historical Awareness of the Site

The rarity of ethnohistorical references to Xochicalco is more than made up for in

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[160] In the case of Xochicalco, the Mexicas' reverence for the site is also evident in Aztec imitations or revivals of Xochicalco sculptural styles in metropolitan monuments and a jade plaque (Umberger 1987: 32-34; 1981: 94-95, 219-223).

[161] Hirth 2000a: 29.

the abundance of accounts written by visitors to the site. Little Postclassic occupation and the unsuitability of the area for intensive agriculture have meant that much of the standing Epiclassic architecture was not destroyed or covered by subsequent construction or agricultural fields, but remained in fairly good condition for later peoples to see. Litvak King (1971) and Hirth (2000: 28-39) have written exhaustive syntheses on visitors' accounts and research on the Xochicalco area describing the sixteenth to twentieth century, while taking into account the historical context of the times. This section summarizes the major sources on Xochicalco.

After the two ethnohistorical references mentioned in the previous section, there are no published references to Xochicalco until the late eighteenth century.[162] After visiting the site in 1777 and 1784, the multifaceted scholar José Antonio Alzate y Ramírez (1791: 9-17) described the defensive pits and terraces, as well as the underground tunnels, interpreted as housing, and speculated briefly on the natives' knowledge of astronomy. He marveled at the Feathered Serpent Pyramid and condemned local sugar hacienda owners as avaricious for removing stones from the site. Mexican hieroglyphs, figures and dancers were said to be represented in the reliefs, and appeared fancifully stylized in the engravings accompanying his account (figs. 8 and 32). A far cry from the original, one of them shows seated figures with elaborate headdresses that appear to be recoiling in terror from monstrous dragons with rearing heads on the lower platform (fig. 32).[163] His fanciful illustrations are more of a

[162] Litvak King 1971: 101-103.

[163] Alzate (1791: 14) is the only writer to mention a *Mapa geográfica* owned by the nearby town of Tetlama that shows two armed warriors at Xochicalco. Based on his discussion, this map does not seem to resemble the *Tetlama Lienzo* discussed by O'Mack (n.d.). According to Alzate, one figure in the map is labeled "Xochicatli," which Alzate translates as "stone of Cerro Xochicalco," while the other is glossed "Xocatetli," translated as "Vessel or gourd vessel." Whether the two warriors represent opposing forces, the confrontation of two different towns, or whether they may have alluded to a type of dual leadership as described in the

reflection of their time than an accurate record of the site's major monuments, reiterating the site's invisibility through time.

Pedro José Márquez (1972) penned a similar account in Italian, from around the same time, largely based on Alzate. However, Márquez reveals his greater knowledge of Mesoamerican monuments by comparing Xochicalco with El Tajín,[164] in what went on to become a repeated tendency to compare the site's monuments to those from other parts of Mesoamerica.

In the nineteenth century, a number of Europeans and some Americans either visited the site and published their impressions, or based their writings on the earlier work of Alzate or Márquez. What is surprising is how differently these travelers, including Guillermo Dupaix, Carlos Nebel, Renato de Perdreauville, Count Jean Frédéric Maximilian Waldeck, and Brantz Mayer, among others,[165] perceived and recorded what their eyes told them they were seeing, exemplifying Baxandall's (1988: 29) identification of different ways data from the eyes is perceived with different equipment. Although antiquarian Guillermo Dupaix visited the site on his own initiative in 1803/1804 and on an official expedition in 1805, his illustration of the Feathered Serpent Pyramid repeats the same misunderstandings as Alzate's and Márquez's drawings, despite claims on the correctness of his drawings and his rigorous methods (fig. 33).[166] On the other hand, Alexander von Humboldt never actually visited the site, but his 1810 *Vue des Cordillères et monuments*

Historia Tolteca-Chichimeca for the Olmeca-Xicalanca, is tantalizing, but impossible to resolve based on information currently available.

[164] Litvak King 1971: 104.

[165] Ibid.: 105-108.

[166] Estrada de Gerlero (1994: 194, 198). She (ibid.: 196) notes personnel changes in Dupaix's team in about 1805, which might have contributed to the quality of his illustrations.

des peuples indigènes de l'Amérique /1816 *Vistas de las cordilleras y monumentos indígenas de América* included a more accurate drawing of this monument that correctly identified the pyramid's salient features (fig. 34), even though he claimed to have used Francisco Agüeda's drawings from Alzate's expedition.[167] He was also the first to attempt a description of the subject matter of the reliefs and his vision offers the most accurate of early visitors. Alzate only described "dancers in mid-relief" and the later Dupaix referred to "men, animals, plants, and others" and confused the feathered serpent with "a sort of continuous and dominating garland slithering on the surface of its three sides."[168] Only von Humboldt, perhaps with more of a natural scientist's eye, discussed "figures of men seated with crossed legs in the style of Asian peoples," while the serpents are described as "crocodile heads that spurt water," based on the drawings (ibid.: 26-27). About two decades later, the flights of fancy in Karl Nebel's images (fig. 35) contrast with Waldeck's contemporary watercolor. Although closer in appearance to the actual monument, the latter image is still tinged with a romantic flavor, as the monument emerges from a frame of fantastic lush vegetation with the clarity of the buttery smooth carved surfaces of the monument (fig. 36). Suffice it to say that by the late nineteenth century, Xochicalco had become a veritable attraction for scholars and tourists, including royalty such as Empress Carlota.[169]

However, the most important nineteenth-century visitors were without doubt Antonio Peñafiel and Eduard Seler, who undertook a joint expedition to the site in 1887. In a sense, they were the first to make Xochicalco visible for a wider public worldwide by

[167] González Crespo, Garza Tarazona and Molina Montes 1994: 21, 23, 26-27.

[168] Ibid.: 26, 28.

[169] Litvak King 1971: 107 citing Robelo.

publishing their detailed descriptions and copious drawings and photographs of the Feathered Serpent Pyramid (figs. 36, 37).[170] Their work stands out for providing the first accurate renderings of monuments from Xochicalco, essential for the study of the site. Their visual recordings are also significant for they were done prior to Leopoldo Batres's 1909-1910 consolidation and reconstruction of the Feathered Serpent Pyramid. Although both sources are of immeasurable value, Peñafiel's work tends to be more generalized and descriptive than analytical in nature, while Seler's accounts are more detailed and his drawings more accurate. Peñafiel was the first to interpret the Feathered Serpent Pyramid as a monument commemorating an astrological meeting to realign two different calendrical systems,[171] an idea reiterated in twentieth century literature. Seler (1960 II: 160-161) makes astute stylistic comparisons with other known monuments, especially from the Xico-Chalco region. Based on ceramic similarities he posits commercial ties with the Valley of Mexico.[172] He attempts to interpret the imagery in Xochicalco monuments; however, his analysis is based on ethnohistorical documents on the Aztecs and his conclusions, such as many of Xochicalco's monuments are dedicated to various forms of the earth goddess (Xochiquetzal and Chicomecoatl), are open to question.[173]

In the early twentieth century, Adela Breton's publication (1906) based on work she carried out at the site in 1894, 1897 and 1905, is also of great importance as a visual and descriptive document of the Feathered Serpent Pyramid prior to Batres's work. She comments on similarities in Xochicalco architecture and iconography and Monte Albán and

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[170] Peñafiel 1890 II: lám. 170-211; III: 32-45; Seler 1960 II: 128-167.

[171] Hirth 2000a, 1: 38.

[172] Seler 1909:28 in ibid.

[173] Seler 1960, II.: 156-157.

Chichén Itzá.[174] Another publication of interest for the period is a privately printed unscientific description by Francisco Abadiano mentioned by Hirth (2000: 39). Abadiano was perhaps the first to claim the Toltecs or Quiche Maya built the Feathered Serpent Pyramid in honor of Quetzalcoatl and correlated the site with Chicomoztoc from descriptions in the chronicles, before identifying ties to Asia.

In summary, Xochicalco has been well known through time as an ancient fortified site said to have crystallized architectural and sculptural elements from diverse parts of Mesoamerica. The original inhabitants of the site are credited with a relatively high degree of sophistication, not only for the quality of their construction, but also for evidence of their calendrical and astronomical knowledge.

Excavations and Studies

Xochicalco has been the focus of extensive archaeological research for more than a century, during which research techniques and interests have changed through time. The initial curiosity to discover monumental antiquities and treasures and to restore them to their original grandeur has gradually shifted to a greater interest in stratigraphic excavations, typologies and chronologies, and more recently, in broader research techniques aimed at determining the extent and significance of a site based on the study of visible surface remains (architectural and ceramic) over large areas, as well as in excavations focused on resolving specific research issues.[175]

As Inspector of Archaeological Monuments of the Republic under President Porfirio Díaz, Leopoldo Batres (1912) worked on the reconstruction of the Feathered Serpent

[174] Hirth 2000a, 1: 39.

[175] For a more in-depth discussion of this subject, see Hirth (2000: 39-47).

Pyramid. Unfortunately his written accounts do not detail how he went about reconstructing the relief fragments. Based on a detailed comparison of drawings from Seler (1960) and Peñafiel (1890), and on-site comparison, Virginia Smith (2000c) has detected several inaccuracies in Batres's reconstruction.

In the late 1920s, Alfonso Caso (1929) carried out small scale investigations on the Western Hill of Cerro Xochicalco and in the region (fig. 31). He uncovered the main ballcourt, and found a ballcourt ring and part of the Malinche Sculpture (figs. 39 40). He also mentions other ruins found in the vicinity at Xochitepec, Miacatlan and Tetecala.[176]

Formal excavation seasons were begun in 1934 under the direction of Eduardo Noguera, who continued work from 1941 to 1960 in eleven field seasons.[177] Noguera (1945, 1947, 1948-49, 1961a, 1961b) explored new areas of the site, such as the underground tunnels, the sweatbath and the Palacio (Building B), and developed a ceramic typology and chronology for Xochicalco based on materials gathered from stratigraphic pits.[178] In addition, T. D. Stewart (1956) studied skeletal remains recovered during Noguera's 1945 excavation of the Cementerio area, a refuse-burial zone, identifying different types of cranial deformation and tooth mutilation.

Around 1950, settlement pattern studies, recording visible architectural remains over a wide region, were carried out by Pedro Armillas (1948),[179] William Sanders (1952), and Florencia Muller.[180] Armillas (1948) was primarily interested in comparing

[176] Litvak King 1971: 112.

[177] Litvak King 1971: 113-115; Hirth 2000a, 1: 41.

[178] Noguera 1945, 1947.

[179] Litvak King 1971: 114.

[180] The latter cited in Hirth 2000a: 42.

Xochicalco's fortifications with defensive systems known from other sites in Mexico. Sanders (1952) studied the settlement pattern around Cerro Xochicalco and the nearby hills primarily to demonstrate that the site was not merely ceremonial in nature, but rather was an urban center. He noted that the majority of Xochicalco residents would have been non-agricultural, economic, religious or political specialists and that it must have been necessary to rely on a much larger rural population to sustain the site. Muller identified ties with the Valley of Mexico in late Teotihuacan and Tula-Mazapan phases.[181]

From 1962 to 1970, César Sáenz (1961, 1962a, 1962b, 1963a, 1963b, 1964, 1966, 1967, 1968, 1975) took over as director of INAH excavations. Sáenz carried out more extensive research and reconstruction in the ceremonial core of Xochicalco, while also excavating stratigraphic pits in habitation and refuse-burial zones (Sáenz 1964: 14-19). Within the ceremonial core, he often dug trenches through elite structures to determine construction history, as well as to gather stratigraphic data in the form of ceramics found in fill to be correlated with known ceramic typologies. He excavated at or restored most of the site's best known structures, including the Feathered Serpent Pyramid, Structure A (or the Temple of the Stelae), Chamber of the Offerings, Structure C, Shrine of the Two-Glyph Stela, and Structures D and E (fig. 31). During his work in the ceremonial zone, Sáenz uncovered a number of important monuments, including the three stelae (found buried in a pit in Structure A) (fig. 41), the Two-Glyph Stela (fig. 42), the New Fire Stone (fig. 43), and the Three Rabbit Stone (fig. 44). During these seasons, Edwin Littmann (1962) took samples of floors and plasters at the Feathered Serpent Pyramid to elucidate construction techniques.

In the mid-1960s Pedro Armillas and Jaime Litvak King (1971: 116-117) directed

[181] Cited in Hirth 2000a, 1: 42.

archaeological settlement pattern studies in the Xochicalco region along with selective test pit excavations. Based on these investigations and a rigorous reassessment of all published works, Litvak King (1970a, 1970b, 1972, 1974) attempted to define Xochicalco's role in western Morelos and Mesoamerica more clearly. He proposed that Xochicalco may have played an active role in the Classic Period and that, as a rival of Teotihuacan, it may have contributed to the final demise of the great metropolis.

During the 1970s Kenneth Hirth and Jorge Angulo focused on two study areas—the Rio Amatzinac Valley in eastern Morelos and the Coatlan del Rio region in western Morelos—to trace cultural growth and development in Morelos through surface survey and settlement pattern studies, and selective excavations. The two areas had completely different relations with Teotihuacan; the east was closely related throughout time and might have been under Teotihuacan administrative control, while the west was only marginally connected to the metropolis)[182].

In a more focused study starting in 1978, Kenneth Hirth's Xochicalco Mapping Project (Proyecto Cartográfico Xochicalco) defined the site's perimeters, mapped all of the structures, the complex defensive systems, and the extensive road network, and investigated specific residential zones with areas for economic specialization, such as obsidian workshops.[183] The broad scope and meticulous research techniques of this project have resulted in refining local ceramic chronologies[184] as well as regional chronologies.[185]

In 1985, archaeologists from the Centro Regional of INAH of Morelos in

[182] Hirth and Angulo 1981; Angulo and Hirth 1981; Hirth 1978.

[183] Hirth 1983: 297ff, 313-315, 324-337; 2000a, b, c; Hirth, Flenniken and Andrews 2000; Hirth and Robinson 2000.

[184] Cyphers Guillen 1980; Hirth and Cyphers 1988; Cyphers and Hirth 2000; Cyphers 2000; M. Smith 2000.

[185] Hirth 1983: 278-345.

Cuernavaca under the direction of Norberto González Crespo and Silvia Garza Tarazona excavated one of the residential terraces of Cerro Xochicalco. The large number of molds found suggests it may have been an area of economic specialization, although no other ceramic workshops have yet been identified at the site. Excavations of another residential area near one of the major entrances to the city focused on mechanisms of controlling access to the site.[186]

In 1992 Norberto González Crespo and Silvia Garza Tarazona headed excavations in the government-sponsored "Special Archaeological Projects" aimed at expanding this site (plus thirteen others) for tourism.[187] They uncovered the remaining structures in the Ceremonial Plaza (the Acropolis, other buildings in the Central Plaza, two ballcourts) and residential areas,[188] as well as vast amounts of material including stone sculpture, large-scale ceramic sculpture, polychrome mural painting, ceramics, lapidary work, and other finds, much of which has been put on display in an impressive site museum built expressly for the collection, inaugurated in 1996.

In addition to this archaeological work, Xochicalco scholarship is comprised of three main types of analysis: discussion of foreign elements, the iconography of monuments, and archaeoastronomy. The abundance of traits apparently non-local in origin has long been noted at Xochicalco, ever since Márquez[189] compared the Feathered Serpent Pyramid with buildings at El Tajín in the early nineteenth century, and it is a topic that has continued to intrigue researchers. Litvak King (1970, 1972) has traced Xochicalco's Classic

[186] González Crespo, Garza Tarazona et al. 1995.

[187] González Crespo 1993; González Crespo, Garza Tarazona, and Molina Montes 1994: 90-92; De la Fuente et al. 1995.

[188] González Crespo, Garza Tarazona et al. 1995.

[189] Litvak King 1971: 104.

Period connections with diverse regions of Mesoamerica, including Teotihuacan, Monte Alban, Veracruz, and the Maya region based on similarities in architecture, sculpture, glyphs and ceramics primarily to date the site, as opposed to tracing its network of non-local contacts. Donavan Senter (1981) lists similarities between Xochicalco and Teotihuacan ceramics, while Ismael Vázquez Rodríguez-Saro (1984) offers a checklist of Maya traits at Xochicalco. To explain the presence of traits and artifacts associated with Veracruz and other regions of Mesoamerica, Román Piña Chán (1989) proposes a migration from El Tajín to Xochicalco, although he does not question the issue of chronological relations between the sites and regions in question. In most instances, authors assume some kind of contact or "influence," but what remains unexplained is how and why traits would be assimilated into Xochicalco monumental or portable artifacts. Visual fusion is presumed to be an automatic, unconscious process, and the issue of receptivity to non-local stimuli remains unexplored. Also questionable are the identification of what constitutes a non-local trait and the determination of its source of origin.

Iconographic studies have most frequently been directed at specific monuments or Xochicalco's glyphic system. Based on monuments, Sáenz (1961; 1962a; 1968) concludes the site was the location of the first annual New Fire ceremony, held in conjunction with an astronomical-calendrical meeting, commemorated on the Feathered Serpent Pyramid.[190] In contrast, Hirth (1989) and Janet Berlo (1989b) identify the Feathered Serpent Pyramid as a conquest monument, recording towns bound in tribute to Xochicalco. Esther Pasztory's (1976) study of the three Xochicalco stelae attempts to place them within a Middle Classic Mesoamerican tradition of deity triads linked to cyclic solar, maize and calendrical symbolism. While Sáenz (1961) identified the major deities represented on the stelae as

[190] Sáenz 1967: 21; 1961: 62; 1962a: 79.

Tlaloc and two Quetzalcoatls or Tlahuizcalpantecuhtlis (Venus as Morning Star), Pasztory (1976: 187) reinterprets these as Tlaloc, an earth goddess, and a sun god. Virginia Smith (personal communication 1985, 2000a and b; Smith and Hirth 2000) emphasized the political content of the sculptures associated with the ceremonial center and reconstructed a dynastic history based on images and inscriptions, while interpreting Venus symbolism in Xochicalco monuments.

Related to iconographic analysis are studies of the city's glyphic system. Alfonso Caso (1967) was the first researcher to present a glyph-by-glyph study of Xochicalco's writing system. He assumes that the majority of glyphs are calendrical, related to the Aztec calendar, and speculates on the meaning of glyphs that are clearly non-calendrical. Janet Berlo's (1989b) study of Epiclassic writing systems and their Teotihuacan roots reassesses Caso's list and augments it with glyphs from Cacaxtla, Teotenango, and other sites. She proposes continuity in underlying structuring principles from Teotihuacan to Aztec times, and on this basis, suggests readings from numerous Epiclassic place name glyphs. Escalona Robles (1953) tried to propose a different system of correlations of Maya and Christian calendars, shifting all years 260 years later than the most commonly used correlation (known as Goodman-Martínez -Thompson), based on comparisons of Xochicalco's glyphs with those from other regions.

The last category of studies devoted to Xochicalco deal with the site's astronomical significance. Such speculation, which began at least as early as Alzate's eighteenth century visit to the site, is now supported by works on Xochicalco's observatory, an underground chamber that is flooded by sunlight entering through a vertical channel on the day of the

summer solstice,[191] as well as on the astronomically significant orientations of other structures[192] marking equinoxes or the summer solstice.[193] The utility of such astronomical observations has been linked to signaling changes in seasons in the agricultural calendar based on solar phenomena. In contrast, Arnold Lebeuf (1995) has proposed the observatory was used for lunar observations, essential in predicting solar eclipses. On the other hand, Ruben Morante (1993 cited in De la Fuente, Arellano, et al. 1995: 160) has proposed observations using natural markers on the horizon such as hills; artificial constructs such as buildings or ballcourts in conjunction with horizon markers, as well as the underground observatory for sighting astronomical phenomena.

Certain thematic threads have continued through the writings on Xochicalco. Recurrent interest has been expressed in the site's fortifications, its astronomical and calendrical significance and its non-local traits. Due to the paucity of ethnohistorical data on the site, interpretations have been based largely on archaeological, art historical and astronomical analyses. Although unanswered questions regarding the site still remain, what is known about Xochicalco is considerable.

Discussion

The most obvious difference between data available on the two sites is the wealth of archaeological information on Xochicalco and the lack of ethnohistorical documentation, and almost the exact opposite situation for Cacaxtla. A major problem in Cacaxtla research has been the heavy reliance on sixteenth century documents and the frequent attempt to correlate archaeological and ethnohistorical data without first evaluating each on its own

[191] Aveni 1980: 43; Anderson 1981; Broda 1986: 92.

[192] Anderson 1981: 24; Stanislaw Iwaniszewski, personal communication 1985.

[193] Ponce de Leon 1983; Tichy 1976: 8; Aveni 1980: 20, 237, 315; Morante, 1990.

merits.[194] In spite of the scantiness of clear archaeological evidence of the Olmeca-Xicalcanca, many investigators persist in identifying Cacaxtla as the capital of this mysterious group, while imposing proposed cultural characteristics, as described in texts dating to more than half a millennium later, onto the material remains in order to create the semblance of a comprehensible culture.[195] The result is a kind of circular logic with fundamental weaknesses: 1) there is scant archaeological evidence of the Olmeca-Xicalanca; 2) in lieu of archaeological evidence, ethnohistorical sources identify Cacaxtla as the Olmeca-Xicalanca capital at some point in time; 3) all Cacaxtla material remains become evidence of Olmeca-Xicalanca presence, independently of chronological factors. This perpetuates a cycle aimed at creating the illusion of clarity where it does not exist. I do not propose a complete rejection of later textual sources, but at least a more skeptical and independent evaluation of material and textual evidence to test whether the bits and pieces of respective data seem to pertain to the same puzzle, or whether they perhaps shed light on different matters.

Given the more abundant archaeological information on Xochicalco, comparisons may help to define Cacaxtla in relative terms based on its degree of similarity with other contemporary Central Highlands sites. What is known about Xochicalco may be used as a model to be compared to contrasted with Cacaxtla as more archaeological data becomes available, thereby generating more ideas about how the site may have functioned.

For example, the extension of Xochicalco at its height is proposed to have been around 4 km^2, with elite and domestic settlement covering Cerro Xochicalco and seven

[194] The latter approach has been advocated by both archaeologists, such as Michael Smith (1987), as well as by art historians, such as Esther Pasztory (1987).

[195] Such as García Cook 1981: 269; López de Molina and Molina Feal 1986; Lombardo de Ruiz 1986.

neighboring hills, which share certain ceramic and architectural traits suggesting contemporaneity. At this time, Xochicalco was the only truly urban center in the region.[196] Although the total area of Cacaxtla's Epiclassic settlement has yet to be defined, its size and pre-eminence in its region does not seem to have been equal to that to Xochicalco. This is further suggested by the proximity of Cerro Xochitecatl, the neighboring hill to the west, so near yet so different from Cacaxtla.

Each site's power and authority is reflected not only by its size, but also in the amount of planning and labor invested in its construction. The Epiclassic construction of Xochicalco would have required phenomenal manpower to artificially level and join hills, to build the large residential terraces, defensive works and road systems, and to cut and carve stones for the masonry, the quality of which has been commented on since the early seventeenth century by Ixtlilxóchitl (1952[I]I: 38) and to the present.[197] Furthermore, the hierarchical organization of the site reinforces the notion of a powerful or compelling source of central authority directing these massive undertakings. Even though considerable manpower must have been necessary to artificially modify Cerro Cacaxtla, the amount needed does not seem comparable to that indicated by the magnitude of Xochicalco. There is little to indicate that urbanization at Cacaxtla was as complex and carefully planned as it was at Xochicalco, where the major site components seemed to be part of a master plan.[198] What is found at Cacaxtla is evidence of frequent, perhaps ongoing vertical accretion involving repair and reconstruction, some of which appears to be haphazard. In some parts of the site, a series of four or more floors, all believed to date to the Classic Period, have

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[196] Hirth 1984: 581.

[197] Sáenz 1962: 8; 1967: 9.

[198] Hirth 1983: 297, 300-301; 1984: 581-582.

been uncovered, while rebuilding practices seem random, as rooms are shut off, stairs seem to lead to nowhere, walls are partially destroyed and built up again, and interior spaces are filled and covered. This vertical agglomeration on the hill with structure upon structure seems to indicate a lack of a vision of the whole, the lack of a master plan, as well as constraints on building horizontally, and hence the need to build upward. The quantity of constructions at Cacaxtla suggests that the inhabitants must have been almost constantly busy, building, tearing down, filling and rebuilding.

The nature of the media of public monuments at the two sites also reflects different investments of labor and expense. Architecture and stone sculpture, covered with stucco and pigments, were the principal vehicles of elite visual communication at Xochicalco. In contrast, at Cacaxtla, stone sculpture is rare, and mural painting and clay sculpture predominate, while stone-covered buildings give way to adobe constructions apparently in later phases.[199] Mural painting and earthen sculpture may have been a more economical means of communication than the more time-consuming process of sculpting stone.

Implications regarding the potential political role of each site within its respective region can be extracted in general terms from a comparison of local geographies and resources. Xochicalco was located in an agriculturally poor zone. The probability of low agricultural productivity along with the enormous size of the urban cluster, inhabited by religious, political, and economic specialists, suggest that Xochicalco must have relied on a rural hinterland, a system of conquered tributaries as Hirth (1984) and Sanders (1952) have proposed, or perhaps intensive commerce to feed the site's population.[200] So far it is

[199] See López de Molina 1980: 296. Evidence of adobe construction has been found in the elite core of Xochicalco as well, but it is rare (Sáenz 1966: 24).

unclear why Xochicalco, an apparently large, powerful, relatively wealthy center, arose in an agriculturally poor zone. Its rapid, explosive growth might suggest the site may have been located specifically in a zone not previously densely populated nor dominated by Teotihuacan in earlier times,[201] yet at the same time, its participation in important trade routes and easy access to the resources of nearby, more diversified areas may have balanced the decision.[202] Cacaxtla, on the other hand, was located in a potentially rich agricultural zone. Although the site could have depended on a rural population or a group of tribute-bound towns, it would have had the potential of self-sufficiency for basic subsistence needs. One might suppose greater development for Cacaxtla based on its agricultural potential and its key location on trade routes; however, it seems to have been a relatively "poor" site in terms of prestige materials and items uncovered to date.

Other questions that require reassessment relate to the role of artworks at Cacaxtla and Xochicalco. The general tendency is to view monuments as somehow inherently truthful, accurate, even historical reflections of the past to be understood in literal terms, rather than as pre-planned, visual statements designed to have a specific impact. Furthermore public monuments and portable objects are often viewed as equals to monuments in tracing non-local contacts of a site if both types of artifacts are presumed to passively reflect patterns of interaction. However, if public monuments are viewed as pre-programmed communicators, can the same be generalized for all artifacts, whether prestige items marking status or utilitarian obsidian implements and household ceramics? Probably

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[200] A similar problem has been pointed out in connection with Teotihuacan (Millon 1981: 219); however, Teotihuacan was known to have controlled the distribution of several major trade goods, including obsidian and Thin Orange Ware. Other than cotton, no such commercial item of high demand has yet been linked with Xochicalco.

[201] See also. Hirth 1984: 586; 1983: 352-354.

[202] Litvak King 1974: 13-14.

not. While some portable evidence of trade may indeed "reflect" a site's non-local interaction, its monumental artworks more actively shape and project the image that a polity chooses and are thus not of the same character as utilitarian trade goods. Different types of artifacts—public artworks and utilitarian implements, as well as portable personal prestige items—are essential in order to understand what was going on at Cacaxtla and Xochicalco, but the diverse types of evidence must be weighed according to different scales.

A related problem is that processes of assimilation or adoption of foreign traits, both stylistic and thematic, in artworks are assumed to be automatic, while a complicated series of decisions and acts are involved.[203] Reasons for varying degrees of receptivity should be questioned, rather than simply assumed to be the case.

Following the approach advocated by Kubler (1980) and Baddeley (1983) who regard the adoption of stylistic and iconographic traits as indicators of deliberate ideological and political choices, the specific mechanisms can only be hypothesized, as Robertson discusses (1985). Nevertheless, the choices made and the relationship between public monumental artworks and other pieces can illuminate some of the concerns, intentions, and motivations underlying the production of the diversity of visual culture by the people of Cacaxtla and Xochicalco.

[203] See Wobst 1977.

Public Proclamation and Aspiration in Monumental Arts

Chapter 2: Architecture as an Expression of Might

Chapters 2 through 6 offer a vision of the monumental arts at Cacaxtla and Xochicalco in terms of architecture, sculpture, and mural painting as preplanned programs aimed at expressing the cities' identity and conveying an image of its power. This chapter refers to how architecture in terms of the sheer scale of the architectural organization of space can have a profound effect on a viewer. In the case of Cacaxtla, a colossal modern-day roof has been built over the site to protect the murals from further deterioration (fig. 45, 47). The sheltered center seems dwarfed by the taller, nearby hill of Xochitécatl (fig. 45), which accommodates pyramidal platforms and spacious plazas. It would be fair to say Cacaxtla must have been known for its exquisite architectural decoration—its colorful murals—more than for its monumental architecture for at least part of its long history. Even a cursory glance at Xochicalco from the air (fig. 46) makes it clear that its sprawling architectural spaces could not be contained by any modern-day roofing system. It was built on a scale intended to impress; it was architecture showing off its strength—implied by the manpower to build it—before the wide eyes of dwarfed viewers. In contrast, from the start, Cacaxtla was built on a more human scale (fig. 47). It too sought to impress, but through smaller-scale, polychrome clay sculpture and mural painting.

The following discussion explores non-local interaction by focusing on highly visible, large-scale monuments and smaller scale elite and non-elite goods at two centers that flourished in the Epiclassic. It highlights a basic, albeit not new, tenet regarding the

inherently different function of diverse classes of material remains. Kubler (1973) aptly and succinctly reminds us that "art does not reflect life" by pointing out that artworks cannot record more than they are "programmed to register."[204] The purposeful nature of artworks is explored by Pasztory (1989: 36-37) who discusses forces that shape the development of art styles as a means of representing ethnicity and establishing difference vis-à-vis a visual identity for inter-group as well as intragroup interaction, an identity of real or fictitious historical dimensions, often arising in the context of competition between groups.

The creative adaptation of non-local traits is a hallmark of the centers[205] that emerged during this period after the decline of Teotihuacan and late phase expressions of Classic Maya centers. This chapter reviews evidence of the use of non-local features in monumental architecture assumed to be public-oriented more than for personal use based on their location or dimensions. Monuments from Cacaxtla and Xochicalco are prime examples of pre-programmed visual statements formulated in the quest for identity in a context of competing city-states during a time of social and political change. Initial discussion is organized along media categories—architecture, sculpture, mural painting—not to suggest any internal hierarchy of significance, but rather to facilitate organization and potential access for consultation to diverse bodies of information. Discussion opens with an overview of the identification of non-local traits that takes into accounts Teotihuacan traits known from the past and contemporary traits from the Maya region, to conclude with a reassessment of prior interpretations.

Implicit in the discussion of these diverse characteristics is an intention to invoke

[204] See also Miller and Tilley (1984); Winter (1981, 1985); although the roots of the idea can perhaps be traced to Erwin Panofsky's 1938 observation that "'man-made objects with aesthetic intention' are a separate class from those 'with utilitarian intention'" (quoted in Reese 1995: 544).

[205] Other Epiclassic centers identified as manifesting an eclectic blend of non-local traits in some monuments include Teotenango, Tula, Chichén Itzá, Huapalcalco, Tlalpizáhuac, Cholula, and El Tajín.

cultural contacts stemming from increased Epiclassic interaction involving a transfer of a characteristic and a willingness to accept a non-local trait. The mechanism could have been through the actual movement of people whether migrating elite, large-scale population movements, or traveling artists; more sporadic inter-elite or inter-community interaction, such as through intermarriage or gift exchange; ongoing commercial relations to secure necessary or luxury non-local goods presumed to foster conditions for the fluid exchange of elements of local visual systems; or the movement of ideas carried by individuals in the form of memory, objects, or mnemonic devices, or even word of mouth. Several of these interpretations have been dismissed in the past, given the difficulty of identifying evidence for such ephemeral acts and processes. However, I would suggest that by reassessing visible traits in architecture, sculpture, and painting, perhaps some of these ideas could be resurrected and perhaps refined by assessing the nature and degree of similarity. Is the relationship conceptual lacking a visual parallel or does the resemblance include sufficient details to imply a more direct connection?

Cacaxtla Architecture

Cacaxtla was set in a rich agricultural area, still intensively cultivated today, and strategically located on a natural corridor linking the Gulf Coast to the Valley of Mexico.[206] The numerous phases of superimposed construction make it difficult to determine if the city was ever structured according to a master plan. Furthermore, only a small portion of the architecture built on Cacaxtla Hill has been excavated to date, so only a fragment of the city can be discussed. The Gran Basamento, today identified as the site's core, included buildings raised on low platforms and the only pyramidal platform structures were not built

[206] López de Molina and Molina Feal 1980.

on the hilltop, but rather on the lower slopes or in the valley below. The twin pyramidal structures known as Los Cerritos stand at the eastern base of the hill (Figure 48), while the Three Pyramid Plaza stands to the south (figs. 11-12). The visible architecture on the Gran Basamento primarily consists of long range-type rooms or smaller rooms with pillars at the entrance facing open plazas (fig. 49). The northern portion of the Gran Basamento houses the site's largest open space, the North Plaza, and Building B elevated on a tall sloping platform (*talud*), which suggest a public orientation, while smaller rooms facing plazas or patios in the southern portion resemble the layout of domestic areas in structures resembling palaces.[207] Specialized constructions included granaries and perhaps a ballcourt.[208] In contrast, nearby Cerro Xochitécatl housed large-scale pyramidal platform structures facing spacious open plazas built on the hilltop.[209] Another difference between the two hills is that the Gran Basamento is described as an "artificial hill" composed of superimposed structures, whereas the neighboring complex was built direct directly on the volcano (Lucet 2013: 25). Both hills were surrounded by residential structures on the neighboring slopes and recently it has been proposed that Xochitecatl-Cacaxtla formed an administrative and ceremonial complex in which Cacaxtla was the residence and decision-making space for ruling groups, while Xochitécatl was an area for free access for collective

[207] This generalization applies to structures that have been dubbed "palaces" throughout Mesoamerica at centers such as Palenque (Martin and Grube 2008: 164), Xochicalco (González Crespo, Garza Tarazona, Alvarado León 1993-1994:18), and Monte Albán and Mitla (Bernal 1985:52-53, 90-91), but is not intended to imply any specific connections with these other cities. Teotihuacan palaces are omitted from this list based on the absence of range-type structures. More recent studies of chemical residues on floors at Cacaxtla have have led some researchers to maintain that this part of the city was not residential, but instead was a production area where organic materials were worked (Beatriz Palavicini cited in *El Universal* 2009).

[208] No walls of an actual ballcourt have been found, but its presence can be inferred from a plain stone ballcourt ring found at the site.

[209] However, Xochitécatl architecture, sculpture, and small-scale remains differ radically from what has been found at Cacaxtla and are beyond the scope of the present inquiry. For further information on Xochitécatl, see Serra Puche and Lazcano Arce (2011) and Serra Puche (2005).

ceremonies and for exchange of goods, akin to a marketplace.[210]

Architecturally all posited similarities between architecture in Cacaxtla and other Mesoamerican sites could be described as generalized resemblances of a structural, morphological, functional, or decorative nature. Structurally, a minor comparison has been drawn between the construction method for the sloping *talud*-molding at Cacaxtla and Tlalpizáhuac, an Epiclassic-Early Postclassic center in the State of Mexico; at both sites walls were first built and the sloping *talud*-molding was added on.[211] The same author also cites similar construction techniques for lower wall articulation known as *guardapolvos* for interiors at Tlalpizáhuac and Cacaxtla.[212]

Morphologically, the general organization of porticoed rooms arranged around patios has been compared with Teotihuacan in generalized terms (fig. 12),[213] although Cacaxtla's rooms are often multi-entrance range type structures, while those at Teotihuacan are generally not long and have fewer doorways (fig. 50). Instead, the Cacaxtla long range-type rooms with multi-doored entrances, such as Building A, have been compared with Palenque dynastic temples (fig. 51).[214] In this context, it is worth noting a significant different: Maya examples are generally raised on a pyramidal platform, while at Cacaxtla these long rooms lack pyramidal bases.

As for functional similarities, Andrew D. Somerville (personal communication

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[210] Serra Puche and Lazcano Arce 2011: 160, 165.

[211] Tovalín Ahumada 1998: 173.

[212] It should be noted that Tovalín Ahumada (1998: 170-171) also notes similarities between Tlalpizáhuac and with Cholula, Tula, and Xochicalco, while acknowledging the dangers of associating specific traits with other cultures. Given the author interest in the possible role of the Olmeca-Xicalanca at Tlalpizáhuac he seeks points of comparisons with Cacaxtla.

[213] Tovalín 1998: 170-171.

[214] Kubler 1980: 163.

August 2012) raised the question of whether the small compartmentalized room known as the Conejeras ("Rabbit Hutches"; fig. 52) at Cacaxtla could have been cages for macaws or other bird species, based on archaeological evidence of similar compartments that had perches and housed scarlet macaws bred in Late Postclassic Paquimé (AD 1200-1450) in northwestern Mexico (fig. 53).[215]

Most of the architectural similarities posited to date deal with ornamental, rather than structural or technical aspects and fall into five categories: *talud-tablero* building profile, rhomboid bas relief, *clavo* ornamentation, and the use of roof ornaments known as *almenas*. An early architectural profile at Cacaxtla bears a more of a resemblance to Teotihuacan *talud-tablero* proportions than the later characteristic profile (figs. 54, 55).[216] However, the early Cacaxtla *talud-tablero* deviates from the Teotihuacan model and instead is closer to Cholula examples (fig. 56, types 1 cf. 2). In contrast, later *talud-tablero* forms at Cacaxtla are even more removed in the attempt to establish difference through the use of a tall *talud* platform and a *tablero* containing overlapping panels. However, later architectural profiles at Cacaxtla on Buildings B and F (fig. 55)[217] intentionally deviate from the early norm, by employing more elongated proportions and by treating the *tablero* area not as a surface for figurative decoration, but instead as a space containing overlapping panels. This later version of the *talud-tablero* compares to the relief panels of Building B at Tula (fig. 56, type 10),[218] Maya and El Tajín recessed building articulation or niches (fig. 56, type

[215] See Somerville, Nelson, and Knudson (2010). I thank Andrew Somerville for bringing this to my attention.

[216] Brittenham 2008: 342, fig. 24.

[217] López de Molina and Molina Feal 1980: 11-12.

[218] Kubler 1980: 163.

8),[219] as well as the system of slightly recessed *tablero* panels on some buildings at Xochicalco.[220]

Otherwise architectural ornamentation at Cacaxtla displays diversity more than repeated patterns. Geometric bas-relief lattice or rhomboid decoration appears in Cacaxtla in the Celosía (fig. 57) and the Patio of the Rhombuses. This geometric patterning has also been compared with Maya and El Tajín prototypes (fig. 58).[221] However, given the different way they are used in all of these cases—as a screen and panel decoration at Cacaxtla and covering a building platform at El Tajín—the sporadic appearance of these geometric motifs at Cacaxtla raises the question of whether by employing this design, it was linked to any site in particular. Instead, it might have been employed as an alternative to Teotihuacan solutions at a time when the metropolis had lost its aura of prestige and thus would not have been desirable for emulation.

Another form of architectural ornamentation at Cacaxtla is the inlaid band of disk-shaped *chalchihuitl* (jade bead emblems) on the pillars of Building E in Cacaxtla (fig. 59a). Santana (2011: 35) suggests a similar purpose for long pieces of stone—referred to as *clavos* (fig. 59b)—found at Cacaxtla and carved with a disk on the ends. More than a hundred stone cylinders found at Xochicalco are described as having one end carved with a relief circle and these were perhaps embedded as decorative features in the upper part of masonry temples.[222] Tovalín (1998: 171, 173) also interprets a large number of these *clavos*

[219] López de Molina 1977a: 9.

[220] González Crespo, Garza Tarazona, Alvarado León et al. 1993-1994: 35, 38, 326.

[221] López de Molina 1977a: 8-9 although specific Maya buildings with this decoration are not cited; cf. Brueggemann 1992: 92-93. Perhaps the connection is with Puuc style geometric mosaic work, such as the west building of the Nunnery Quadrangle, Uxmal.

[222] Smith and Hirth (2000, 2: 50).

with red, yellow, and greenish-blue paint in the fill of rooms at Tlalpizáhuac, a site near Chalco, as part of an ornamental roof frieze. A similar system of ornamentation that consisted of disks tenoned along the midline of *tablero* surfaces have been reported at La Organera-Xochipala and other sites in Guerrero.[223] Therefore, bands of sculptural *chalchihuitl* may have been widely used in the Central Highlands.

Ornaments tenoned along rooflines were known as *almenas*. The group of sculptures from Cacaxtla known as the Once Señores (Eleven Lords) might have originally served as roof ornaments (fig. 60); these figures will be discussed in more detail in chapter 3 on sculpture.[224] The scale and the rectangular flange at the base resembles those of pieces identified as roof ornaments from Teotihuacan (fig. 61), although the Cacaxtla pieces are more three-dimensional than the flat slabs known from Teotihuacan. What is described as a "partial *almena* in the shape of a Xi-glyph"[225] resembles actual *almenas* from Tlalpizáhuac,[226] although it appears to be painted and not a three-dimensional architectural element. In the Southern and Northern Maya lowlands, roof ornamentation tended to greater verticality and scale.

Viewing these diverse and scattered architectural traits by region shows little support to connect Cacaxtla with any specific region. Traits links to Teotihuacan (rooms arranged around patios; *talud-tablero* profile) are either too vague to constitute confirmation of a direct connection or are sufficiently derivative to suggest difference more than similarity. The comparisons made with the Maya region cite details removed from a

[223] Reyna Robles 2006: 112.

[224] These sculptures were found buried out of context, so their original location is unknown (Morales Gómez 1999).

[225] Helmke and Nielsen 2013: 386, fig. 2-l.

[226] Tovalín et al. 1992: 58, 61, 62.

larger context; therefore, they do not constitute convincing evidence that the Cacaxtla builders were recreating a Maya-style palace fashioned after that of Palenque or another Maya city. In morphological terms, Cacaxtla architecture bears some resemblance to structures at Xochicalco (long rooms with multiple entrances). However, no additional evidence supports the same ethnicity or any deliberate effort of one to emulate the other; instead, the use of long, range-type structures permitted the entrance of more light to buildings, and thus may have responded primarily to considerations of usage. Furthermore, Xochicalco architecture and urban planning display much greater complexity than what has been uncovered at Cacaxtla to date, as will be discussed below. Although lattice or rhomboid designs also appear in the Maya region and in El Tajín, it is unclear that their use in Cacaxtla constitutes deliberate references to these areas. Cacaxtla architecture lacks substantial evidence supporting the actual movement of people bearing a tradition recreating their homeland or culture. The non-local traits that have been identified to date are sporadic and sufficiently non-specific to cast doubt on any claims that architecture was designed to proclaim specific connections with other parts of Mesoamerica. It would seem solely the morphological comparison of the Conejeras with macaw cages at later Paquimé provides a tantalizing parallel that these structures might have served to house a species valued at Cacaxtla, given the longstanding appreciation for brightly colored tropical bird feathers in Mesoamerica as depicted in monuments from Izapa, Maya, and Teotihuacan context to the Late Postclassic Aztecs.

Xochicalco Architecture

In contrast to Cacaxtla, Xochicalco was established in an agriculturally poor area, perhaps chosen precisely for the lack of prior occupation in an area not dominated by

strong Teotihuacan interaction.[227] It was a sprawling city that covered the three lobes of Xochicalco Hill, with residential and other construction types dotting five neighboring hills (fig. 29),[228] which required massive earthworks to level the hills and highly centralized planning from its inception.[229] The city's architecture comprises the following functional categories: pyramidal platform structures (i.e., temples), palatial buildings, other residential and possibly service-related constructions, and specialized constructions, including ballcourts, granaries, sweatbaths, access control posts, tunnels, altars, and modified caves.

In the literature morphological, functional, and decorative categories dominate comparisons of Xochicalco architecture with that of other areas or sites, and general features of the city by comparing it to Teotihuacan as well as the Maya region. Litvak King (1970: 138-140) cites urban planning based on major streets or avenues as benchmarks identifying Teotihuacan and Xochicalco as Classic period cities (figs. 62 cf. 63). However, its hilltop location precluded a grid-pattern layout like that of Teotihuacan, which was set in a valley apparently free of defensive concerns.[230] Therefore, the overall effect of the cities' organization evokes more differences than similarities. Caves were important features in the city planning at both Xochicalco and Teotihuacan. The selection of the location of Teotihuacan was in part determined by the caves in the area, one of which was incorporated into the core of the city's largest pyramid,[231] while others were used as observatories.[232]

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[227] Hirth 1983: 22, 352-354; 1984: 586; Hirth and Angulo 1981.

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[228] Hirth 2000a: 13-17.

[229] Garza Tarazona and González Crespo 2004.

[230] Armillas 1948.

[231] Heyden 1975.

[232] Soruco 1991.

Xochicalco too had its own cave for astronomical purposes,[233] although it does not appear to have played a major role in determining the location of specific structures on the ground level. In addition, Robb (2007: 216) has noted that the spatial layout of structures in the Xochicalco ceremonial plaza indicated a "direct familiarity" with the layout of the Ciudadela at Teotihuacan (figs. 65, 67). Nevertheless, morphological and functional differences between the two areas outweigh the conceptual similarities in the spatial layout of structures in these two areas.

Other general parallels have been posited between Xochicalco and Maya architecture, such as the idea of the city core as an acropolis with restricted access and vertical orientation (figs. 66 cf. 67).[234] Although a number of Maya cities—such as Tikal, Calakmul, Toniná, Copán, among others—housed "acropolises," they differ considerably from constructions in Xochicalco. In the Maya region these structures are elevated on tall platforms containing pyramidal structures, residences, ample courtyards, and dynastic burials suggesting occupation by noble lineages (figs. 67-68), while in Xochicalco, the Acropolis is raised on a low platform and is more like a palace containing a multi-room, multi-patio conglomerate of spaces arranged around plazas with direct access to the Great Plaza, but without pyramids and evidence of dynastic burials (fig. 66). Although they both probably housed the elite of the respective cities, the conception of space and layout differ considerably.

Morphological and functional comparisons have often focused on structural resemblances in the Maya region. Litvak King (1972: 62) notes that *temascals* are present

[233] Broda 1986; Leubeuf 1995; Molina and Kowalski 1999: 146.

[234] Litvak King 1970: 138; Molina and Kowalski 1999: 150.

both in Xochicalco and the Maya region. He also cites ballcourt plan and elevation resemblances with the Maya region, as well as with Yucuñudahui in Oaxaca and Tula.[235] At the same time, Hirth (2000a, 1: 76) cites "dimensional and organizational similarities" in plans and elevations for the Xochicalco West Ballcourt—X10-I in Hirth's nomenclature and also known as the South Ballcourt (fig. 69)—with those of ballcourts at Tula, Teotenango, and Copán (e.g., fig. 70). There is no clear evidence to suggest any of these structures might have been a model for later constructions. Instead these similarities may have responded to functional or other needs.[236] On more speculative grounds, Litvak King (1972: 62-63) suggests the South Ballcourt at Xochicalco might have had tribunes or small temples on upper part of lateral platforms similar to those at Copán, Chichén Itzá, and Uxmal.[237] This propensity to seek comparisons particularly with Maya architecture may in part have been triggered by the highly visible "Maya" traits on the Feathered Serpent Pyramid that have continued to fuel the quest for connections with the Maya region, without regard for the larger context for architectural similarity.

Other morphological or functional parallels have been drawn with other regions of Mesoamerica. The distribution of spaces in Structure A or the Temple of the Stelae (Hirth's X1-4 or INAH's G-8) with its vestibule, patio, and pyramidal structure in the back is compared to Monte Albán System IV and Mound M (figs. 71 cf. 72, 73). Unlike the Monte

[235] Litvak King 1972: 63.

[236] Given the symbolic component of dimensions at Teotihuacan with evidence of the Teotihuacan Measurement Unit (Sugiyama 2005: 40ff), the possibility exists that the dimensions of ballcourts may have also held a symbolic component as well, but to date I am unaware of any further studies of this kind.

[237] Less specific are Litvak King's (1972: 62-63) comparisons with Cobá (which like Xochicalco has a ballcourt ring), Copán (where macaw head sculptures have been found and will be discussed in the sculpture section in chapter 3 below), Guaytán (similar ballcourt), Piedras Negras (similar profile although a less slanted *talud*), as well as ballcourts at Yaxchilán, Piedras Negras, Calakmul, Río Bec, Uxul, and Becán.

Albán structures, at Xochicalco there is no sunken courtyard; instead the front stairway leads to a higher level framed by rooms on all sides, while at System IV and Mound M, the sunken courtyard is bordered by the enclosure's wall on two sides. However, these resemblances do not clearly express any sort of architectural emulation.

A number of other so-called Maya traits at Xochicalco are suggested to have reached the site through West Mexico-Guerrero.[238] These include Maya false arches in conjunction with fine orange ceramics, which have been amply identified with Guerrero.[239] A corbelled vault over a drainage canal passing under the East Platform Mound is said to be "very similar in construction to that used in Guerrero and the Maya region (Schmidt 1977)."[240] Similarly Litvak King (1970: 137) mentions the use of the false arch in underground chambers in Xochicalco, which he compares to Oztotitlán (Guerrero) as the western-most occurrence of this Classic Maya trait, despite the early evidence of the use of the false arch in Guerrero[241] and the overall lack of other Maya cultural traits for that region. Given the extensive evidence of architectural sophistication and construction that suggests awareness of engineering issues at Xochicalco,[242] the idea of independent invention seems more likely than the movement of isolated traits through regions. What's more, the corbeled arch is used as a prominent feature of public buildings in the Maya region, while at Xochicalco it seems to have been used for its functional purposes and not

[238] Kubler 1984: 68.

[239] Schmidt 1977; Schmidt and Litvak King 1986: 39–40; Reyna Robles 2003: 19ff.

[240] González Crespo, Garza Tarazona et al. 1995:229.

[241] Reyna Robles 2003: 20.

[242] Garza Tarazona and Mayer 2005.

as a visible feature of public architecture.[243] Furthermore, the Xochicalco transport system of wide, walled walkways linking different parts of the site and continuing into the surrounding countryside[244] recalls the northern Maya lowland road systems known as *sacbeob*. While the latter linked major Maya centers to fulfill political and symbolic purposes, according to Hirth (2011: 218) at Xochicalco the system bypassed important local centers and was instead intended to convey the prestige of the ruling elite while constituting a regional symbol of the city's political and religious importance. Again, I would suggest these features met organizational and functional needs, although I acknowledge that they might also indicate awareness of similar systems used elsewhere in Mesoamerica.

Structural details have also been linked in generalized terms to the Maya region. Litvak King (1972: 63) cites the presence of benches or platforms in rooms of Building B, which he compares to Tula and to a dizzying array of Maya architectural features from disparate regions and historical periods.[245] It would seem structural elements described as benches, platforms, altars, thrones, or even sleeping platforms[246] were more likely features used for diverse purposes in different regions, but do not connote specific connections.

Decorative details of architecture are perhaps the most extensively mentioned category for comparative analysis. In fact considerable discussion has been devoted to the

[243] In all fairness, it should be acknowledged that at sites in the Central Highlands, an area prone to seismic activity, the upper parts of structures, particularly entryways, have not survived, although in the Maya region doorways, lintels, arches, roofs, ceilings, roof combs, and other features have commonly survived. However, it is often assumed that in the Central Highlands much of the upper part of buildings would have been made of wood and plant materials.

[244] Hirth 2011.

[245] Litvak King's (1972: 63) list includes platforms and altars at Piedras Negras and Copán; Uaxactún Temple E1: interior benches in San José in British Honduras; and at Copán Temple XXII; and Palenque Temple XVIII; Uxmal Las Tortugas; and the Sayil Palace.

[246] González Crespo and Garza Tarazona 1995.

articulation of building profiles, particularly the elongated *talud-tablero* with flaring cornice of the Feathered Serpent Pyramid (fig. 7), the site's most iconic albeit atypical monument. Although Litvak King has made major contributions to current understanding of Xochicalco and its relationship with Teotihuacan, he has focused on comparisons of details removed from a greater context. For instance, Litvak King (1972: 59) compares the proportions of Xochicalco's *talud-tablero* to that of buildings in Veracruz, probably El Tajín (fig. 56, 3 cf. 8). At the same time he refers to the upper flaring cornice to invoke not only Tajín II, but also Monte Albán III (fig. 56, 3 cf. 6) in order to anchor Xochicalco to the Classic period[247] before going even further afield.[248] At the same time, the everted cornice has also been regarded as a Northern Maya architectural trait, as recent researchers noted "the elegant beveled or chamfered cornice presents a certain analogy . . . with the Puuc region of Yucatán."[249] Taking a single trait—such as the flared cornice—out of context to compare it with details from structures from other cities from both earlier and later contexts is of limited value. Instead the consideration of overall context or at least a group of features are what could potentially support any interpretation.[250] Another architectural detail that perhaps formed part of building ornamentation are cylinders measuring roughly

[247] Litvak King 1970: 136-137.

[248] Litvak King (1972: 63) then goes on to compare it to the Uxmal Palace of the Governors, Temple of the Turtles, and Nunnery Quadrangle; the Sayil Palace; the Labná Arch; and the Chichén Itzá Temple of the Three Lintels as well..

[249] González Crespo, Garza Tarazona, and Molina Montes 1994: 88.

[250] Litvak King (1970: 137) also discusses other details excised from a larger context, such as comparing the *tablero cerrado,* which I believe refers to a framed rectangular panel to the Feathered Serpent Temple in Teotihuacan, Tajín II, and Classic period Monte Albán, and goes on to note it is also present in Chichén Itzá, but not at Tula. Later Litvak King (1972: 63) compared the *arranque en talud* or sloped platform of Building B to the northeast corner of the lower structure of the Cholula Pyramid and a number of buildings in Chichén Itzá—the Temple of the Warriors facades; the outer sides of the Upper Temple of the Jaguars of the Great Ballcourt, and the Temple of the Sculpted Panels, as well as in Tula. Litvak King (1972: 59) also notes that the architecture of Xochicalco Structure D is similar to that of buildings at Tajín, Tula, and Toluquilla.

20 cm, 15 cm in diameter, that have a concentric disk shape on one end of the cylinder[251] that bear a resemblance to similar pieces from Cacaxtla, where they have been dubbed *clavos* and interpreted as architectural ornaments.

A more contextual approach could be more profitable, because the characteristic building profile for stepped pyramidal structures at Xochicalco actually differs from the profile of Feathered Serpent Pyramid, which consists of a tall sloping *talud* base capped by a rectangular *tablero* and a flaring cornice (figs. 74-75, 7). The typical profile for other pyramidal structures at Xochicalco is described as a tall *talud* base and double *tablero* panels, the upper panel slightly projecting over the lower one to form a series of recessed, overlapping panels in some *tableros* forming a subtle play of receding surfaces.[252] Furthermore, although the overlapping panels in the *tablero* bears some resemblance to some *talud-tableros* in Cacaxtla (cf. fig. 54, 55), it is unclear that either center could have been regarded as the "source" or at least the center well-known for the trait.

In fact the issue of the "origin" of *talud-tablero* architectural articulation has been a matter of debate, because some authors identify Tlalancaleca, Puebla as its cradle,[253] while others identify its earliest appearance in Guerrero.[254] It remains unclear whether one can truly speak of an "origin" for this architectural feature. What is clear is that it became a hallmark of the grand metropolis of Teotihuacan, and its appearance elsewhere in Mesoamerica is often cited as evidence of emulation or contact.[255] Subsequently, the *talud-*

[251] Smith and Hirth 2000, 2: 50; Garza Tarazona and Palavicini Beltrán 1993-1994: 113.
[252] González Crespo, Garza Tarazona, Alvarado León et al. 1993-94: 37-38.

[253] García Cook 1981; Gendrop 1984.

[254] Reyna Robles 2003: 20.

[255] Coggins 1993: 142ff.

tablero underwent a metamorphosis through time and space, and became a highly visible feature of polity identity.[256] At Xochicalco the site displays different versions of the *talud-tablero*, although the most important factor is that they differ from that of Teotihuacan. At Xochicalco two earlier phases of the Feathered Serpent Pyramid lacking sculpture had a sloping base, a large *tablero* panel with overlapping panels arranged on overlapping planes conveying the impression of a small niche-like space, surmounted by a rectangular cornice (figs. 76-78).[257] Other variants at Xochicalco also involve a play of overlapping panels, but tend to lack the depth of a niche-like space, and instead begin with a deeper panel in the middle, flanked on both sides by an overlapping panel, and then a final plane of the wall itself (fig. 75). Later, the sloping base is clearly elongated and the *tablero* is not framed, but instead contains overlapping panels or else bas-relief figurative sculpture; the overlapping panels resemble the treatment of some structures at Cacaxtla (fig. 55), although it was not applied consistently or even predominantly to most buildings at both sites.

Almenas or roof ornaments are other decorative features that have served as a basis for comparison. At Xochicalco these assume the form of terracotta descending birds (fig. 79; discussed further in chapter 3). Glyphic inscriptions from the site include depictions of temples with simple stepped *almenas* on building rooflines (fig. 80), although these have not yet been found archaeologically. Similar simple stepped *almenas* have been found at Tlalpizáhuac[258] and Teotihuacan (fig. 81),[259] while more elaborate figural ones have been

[256] Kubler 1973; Pasztory 1989.

[257] Conceptually this organization of space resembles the system later used on Tula Pyramid B, except that the upper cornice and *tablero* sections are covered with bas-relief sculpture.

[258] Tovalín Ahumada et al. 1992.

[259] Gamio 1979, 2: 122ff; lám. 21; Berrin and Pasztory 1993: 70, 173.

found at Teotihuacan, where they often represent birds (fig. 61) or deities, especially Tlaloc or Tlahuizcalpantecuhtli in terracotta or alabaster[260] or even Maya-derived deities in terracotta (fig. 82). In the context of Mesoamerica the most elaborate roof ornaments come from the Southern and Northern Maya regions, where these ornaments became life-sized, three-dimensional sculptural ornaments on buildings (fig. 83). Xochicalco also employed roof ornaments that were a common feature of Mesoamerican buildings, but it devised imagery distinct from that known at other sites.

As early as the eighteenth century, visitors to the site, such as Pedro José Márquez (see chapter 1) noted similarities between Xochicalco architectural ornamentation with that of El Tajín or Veracruz in general. Implicit in such comparisons is the notion of cultural contact that could have given rise to the use of these motifs; however, chronology, possible mechanisms for adoption, or reasons for the use of these isolated elements have not been addressed. Litvak King (1970: 137) compares, in particular, the interlaced scrolls with double outlines between the seated human figures on the Xochicalco Feathered Serpent Pyramid with bands framing scenes at El Tajín (fig. 85 cf. 86). Then Román Piña Chán (1989) goes as far as to propose migration from El Tajín to Xochicalco to explain these parallels. Viewing the corpus of El Tajín architectural ornamentation and its myriad scroll designs suggests a richness and diversity not seen in Xochicalco examples; instead these are isolated traits that are not developed to the extent they are in El Tajín. The geometric interlaced zigzag separating serpents on the Feathered Serpent Pyramid (fig. 87) also bears some resemblance to lattice patterns from El Tajín (fig. 58) and those from the Patio of the

[260] Cabrera Castro et al. 1991: cover.

Rhombuses and the so-called Celosía at Cacaxtla (fig. 57). [261] However, the feasibility of tracing such a general geometric feature or a decorative detail to a single center of origin is questionable.

In the absence of evidence of distinctive construction techniques, the discussion of difference has addressed use of space and building plans, the layout of specific structures, and primarily decorative details. Maya traits predominate, but the purported similarities come from a wide area spanning Southern and Northern Maya lowlands and diverse periods. The points of Xochicalco and Maya resemblance are limited in scope and suggest other interests may have played a greater role in shaping the city. Architectural ties to Teotihuacan are difficult to detect. Instead it would seem public buildings were intended to differ from those of the fallen metropolis. Turning to other parts of Mesoamerica, comparisons with Monte Albán focus on generalized layout compared with two Zapotec buildings. They do not constitute convincing evidence of any effort to copy or emulate these structures, although admittedly there may have been awareness. Similarities with the Gulf Coast are largely restricted to the realm of architectural ornament. When these details are removed from a larger context, they do not support the interpretation of strong ties with the Veracruz region, although again there may well have been awareness of these elements. Similarly, the idea of connections with Guerrero in the form of false arches raises the question of the possibility of independent invention to resolve construction needs, although given the proximity of the area and evidence of trade interaction between Xochicalco and Guerrero, contact and awareness could have been the inspiration for the use of this

[261] Similarly, the volute or curvilinear cut shell design, which embellishes the feathered serpent's body (fig. 87) and fills the cornice above the seated figures (fig. 85), has been traced by Karl Taube (2003:291-292, fig. 11.11) to Teotihuacan, Maya, Monte Albán, Xochicalco, and Tula contexts as a wind symbol, without indicating its origin.

structural solution in Xochicalco. It seems unlikely that the false arch was derived directly from the Maya region, where it featured prominently in monumental architecture, while at Xochicalco it remained hidden from the public eye.

Xochicalco would appear to be a city that was not seeking to emulate any other center architecturally, but rather to create and invent. Hirth (2000, 1: 220ff) cites a number of the city's architectural innovations, which included a possible double temple (Structure X6-7), low *adoratorio* (shrine) platforms with a stela in the middle, and the increased use of columns and colonnades particularly in public courtyards to open up space.

Discussion

The more extensive excavation of Xochicalco affords a wider panorama of the ancient city than the fragmentary nature of archaeological knowledge of Cacaxtla, which hinders a fuller understanding of the latter center. Nevertheless, a number of significant differences are clear. Xochicalco was built in an unoccupied area inhospitable to human habitation, while Cacaxtla was in a region of land still worked by the region's inhabitants. Because Xochicalco was planned in an unoccupied zone, the city's builders were able to flaunt their architectural skills in monumental masonry construction and earthworks that covered the central hill with room to expand horizontally to adjacent elevations. Cacaxtla, in contrast, displayed evidence of repeated vertical layering of construction on a considerably smaller scale than Xochicalco. It is unclear if this process resulted from limitations that prevented the builders from extending the city to the neighboring hills, some of which display evidence of occupation.[262]

Both sites display extensive evidence of rebuilding and remodeling, perhaps

[262] Xochitécatl is the closest hill and bears evidence of considerable construction and activity as mentioned in chapters 1, 3, and 6. Traces of apparently coeval construction were also found at Tetlatlahuca, a hill southeast of Santa María Nativitas (Guevara Hernández, Contreras Martínez, and Bravo Castillo 1991).

reflecting an ongoing search for an efficacious public image as well as resolving practical needs, such as additional constructions to accommodate a growing population, more secluded or protected entryways, or spaces for work, administrative, or other functions. At Xochicalco it involved modifying extant structures, adding rooms, changing entrances, building a second story, or occasionally encasing an earlier building in a later one, largely working with the master plan that was established from the start. A process of vertical accretion was more apparent at Cacaxtla, where rooms and buildings were closed and new structures were built on top.

In the overall scheme of things, none of the individual comparisons based on public architecture at both Xochicalco and Cacaxtla can be regarded as evidence of connections that might be construed as imitation, quotation, allusion, technological style, or inherited tradition that might suggest ethnicity or migration, emulation, or even direct contact with a specific region. This in part is a result of the generalized nature of comparisons drawn to date. In many cases the actual source for a given trait is not entirely clear. Structural comparisons seem to shed light on similar functional needs, such as range-type rooms with multiple entrances providing greater accessibility to structures as well as more sunlight or the idea that the small compartments of the Conejeras at Cacaxtla might have been used as cages for some species.

Comparisons based on ornamental details predominate for discussions of both centers, but these are the least satisfactory in drawing conclusions in most cases because they appear in isolation and the source of the traits is unclear. It would seem that both centers might have drawn inspiration from what might have been known from other cities, but only in a general way, but that there was little attempt to emulate any specific center in particular. The source of architectural details such as geometric bands as compositional

dividers on the Xochicalco Feathered Serpent Pyramid and lattice-work decoration on Cacaxtla's Patio of the Altars and the Celosía is often unclear. They need not have been derived from a single visual source.

When comparing the architecture of the two sites together, what emerges is a picture showing some similarities, but more differences. As hilltop centers, they were both concerned with defense, presumably in times of instability and competition following the decline of Teotihuacan's preeminence. Xochicalco's defensive pits, walls, steep terraces linked by walled roads, as well as fortified retreats were massive, highly complex, and conceived from the city's inception, while it would seem that Cacaxtla's system of trenches, ditches, and sloping walls was smaller in scale, less sophisticated, and at least part of it late in the city's chronology (see chapter 1 on Chronology).

Perhaps the closest similarity would be the two site's approach to the Teotihuacan *talud-tablero*. Both centers chose to deviate from the canonical proportions and treatment of this architectural profile.[263] At Cacaxtla, only a small section was found in an early excavation (fig. 54), but it diverges from the Teotihuacan version in its wide slightly projecting cornice, a small *tablero,* and a shallow projecting *talud*. Given the quantity of unexcavated levels at Cacaxtla, no one knows what remains to be discovered. However, later both sites developed a variant on the Teotihuacan canon that had a tall sloping *talud* base and a small unframed *tablero* that contained receding overlapping panels in slightly different proportions. Curiously, both centers devised a *tablero* based on an interplay of overlapping panels sometimes resembling small niches.

Despite these similar processes, architecture also played a fundamentally different

[263] Only isolated cases at both sites display proportions somewhat closer to Teotihuacan's low sloping *talud* base and prominently framed rectangular *tablero* surmounting it, but are the exception and not the rule.

role at each center. At Xochicalco architecture was a means of making the new center visible on a monumental scale to attract inhabitants and workers to participate in this new endeavor to establish a new city in an uninhabited region. Crowning the hilltops, its monumental constructions could be seen from below. However, eventually sculpture became the preeminent means of expression at Xochicalco. In contrast, the longer occupation of Cacaxtla was marked by the gradual growth of the hill (fig. 88), as structures were built on top of earlier phases that gradually raised the height of the hill itself. However, the stuccoed walls of buildings did not suffice. The site's rulers sought a more dramatic solution. Apparently unable to harness the same extent of materials and manpower to construct a colossal city of stone, the Cacaxtla elite embraced mural painting and clay sculpture as its premier forms of expression presumably during its apogee. The following chapters explore the role of sculpture and painting at these two centers.

Chapter 3: Sculptural Experimentation at Cacaxtla

Most surviving Mesoamerican sculpture is made of stone, while clay or stucco sculpture, although it was probably once abundant, has only rarely survived.[264] The fragility of large-scale three dimensional clay or stucco sculpture has meant only sporadic finds have been reported from the Veracruz area,[265] southern Puebla,[266] or the Maya region.[267]

A surprising diversity of polychrome unfired clay and three-dimensional clay and stone sculpture has been found at Cacaxtla. However, unlike mural painting at the site, sculpture does not form a cohesive corpus of artistic practice. Instead, it would seem to suggest a degree of experimentation, dissatisfaction, and an ongoing quest for a more efficacious artistic solution to the city's needs to establish a visual identity. Labor-intensive stone

[264] Clay or stucco sculpture (either bas-relief or three-dimensional) have been found throughout Mesoamerica, although obviously its fragility compared to stone has meant relatively little of what must have been its original abundance has survived. A small number of fragments have been reported for Teotihuacan (Sugiyama 2005: 76ff; Berrin and Pasztory 1993: 208), while a larger number of Central Highlands examples have been found at Tetlatlahuca, Tlaxcala (Guevara Hernández, Contreras Martínez and Bravo Castillo 1991), Huapalcalco (Enriqueta Olguín, personal communication, 1988), in tombs at Monte Albán and other Zapotec sites (A. Miller 1995). Gulf Coast examples include El Zapotal (Gutiérrez Solana and Hamilton 1977) and El Tajín (Pascual Soto 2006: 20).

[265] Such as El Zapotal skeletal and female figures in Gutiérrez Solana and Hamilton (1977); El Tajín in Ladrón de Guevara (1992:122).

[266] A clay face fragment, perhaps part of an independent sculpture based on its size, on display in the Site Museum at Xochitécatl, the hill next to Cacaxtla, in October, 1996, depicts a broad, smiling head with clearly defined features unlike the facial types of much of Xochitécatl's figurine material. Instead it bears remarkable resemblance to figures from Acatlán, Puebla (Delgado 1965). However, other remains from Xochitécatl suggest highly local developments with some vague resemblances to Teotihuacan that at best might be termed Teotihuacanoid.

[267] Examples come from the Maya lowlands, for example Kaminaljuyú, Guatemala (Carlos Navarrete, 1985 public lecture), Comalcalco (Salazar Ortegón 1987), Acanceh (V. Miller 1991), Palenque (Greene Robertson 1983; Cardós de Méndez 1987: 97-121), Dzibilchaltún (Coggins 1983), and Tulum (Miller 1982), Uaxac Canal in Guatemala (Kowalski 1989: 180), as well as on in roof combs (e.g. Yaxchilán, see García Moll and Juárez Cossío 1986: 99-100).

sculpture did not feature prominently in the site's monumental arts; instead, clay pieces were clearly the most abundant, varied, finely worked, and complex (see Appendix C). With the exception of clay relief sculpture applied to wall surfaces still in situ (figs. 89, 90), other sculpture from Cacaxtla has been dismantled, broken into small pieces, and unceremoniously buried[268] or simply not found in its original location (fig. 91). Nonetheless, given the scale of these pieces it would appear fair to suggest that the finest pieces were probably made for public display. The following discussion will examine Maya, Teotihuacan, and other non-local components of Cacaxtla stone, unfired clay, and terracotta sculpture.

Numerous parallels have been drawn between Maya sculpture and Cacaxtla monuments that range from the use of monument types (a "stela"), the presence of Maya blue, generalized features (strong naturalistic modeling), compositional decisions (pose), overall impression of style, and details of iconography (especially costume). The stela is a characteristic monument type prevalent throughout Southern Maya lowland sites. Cacaxtla's monolith (fig. 93) resembles the frontal high relief figural stelae known from Toniná and Copán in conception (fig. 94), but is much more rudimentary in execution.[269] While it is impressive for its scale—about 2.50 m in height—it is less so for its execution. It conveys only a vaguely schematic idea of a monumental, standing frontal figure with a headdress, but the details are illegible. If this is indeed the intended subject matter, it would appear to conform to the site's Epiclassic versus earlier Formative phase. As such, it might have been an unsuccessful and rejected attempt at emulation of Maya forms of expressing identity and rulership.

[268] Brittenham 2009: 146, note 10.

[269] It was found on La Mesita south of the Gran Basamento (Abascal 1973).

The clay fragments of corn, flowers, and feathered serpent or chiton (fig. 91) and the fragmentary standing male figure (fig. 92) from Cacaxtla bear the distinctive blue pigment known as Maya blue, made from heating indigo with palygorskite clay from the Yucatán peninsula.[270] Evidence suggests the popularity of this Maya colorant throughout time in Mesoamerica[271] and it was even used by sixteenth-century manuscript painters in Mexico City.[272] Therefore, its presence suggests the movement of the material from the Maya region, but in itself it does not constitute evidence of the presence of Maya peoples or artists at Cacaxtla.

The clay bas-relief with traces of stucco on Building E shows a standing frontal figure flanked by vegetation and wearing an elaborate skirt and sandals with toes pointing outward (fig. 89a), a pose commonly used by rulers on public monuments in the Maya area.[273] Broken at about knee level, it is unclear whether it is a male or female. Long netted skirts are often worn by women in Maya imagery,[274] although males were also shown in female garb to underscore their role as cosmic nurturers through the act of autosacrifice.[275] It is unclear whether the cross-hatched design on the Cacaxtla skirt is intended to evoke the diamond patterns of the net skirt or whether it was, in fact, a misunderstanding of the original garment, which is clearly rendered with round and tubular beads in Maya imagery

[270] Houston et al. 2009.

[271] Reyes-Valerio 1993.

[272] Magaloni 2014.

[273] Proskouriakoff 1950: 25, 27.

[274] Bruhns 1988: 123-125.

[275] Stone 1991: 195-196.

(fig. 89b).[276] Although the relief may be compared to Maya sculpture in iconographic details, it could not be confused with it. Cross-hatching is usually reserved for the Maya mat design (called *pop*), which although associated with rulership, is not depicted as a textile design. Moreover stucco-covered clay relief is only known at the Maya site of Comalcalco, built in a stone-poor region; Maya artists generally preferred stone or stucco relief.

The Building A monochrome relief (fig. 90a-b) was affixed to cover the earth maw sprouting corn stalks on the polychrome Maya style murals on the room's portico. The style of the relief is anomalous and defies facile identification. Nonetheless, it displays a blend of Maya and Veracruz iconographic traits. Kubler (1980: 166) compared this relief with Maya Pabellon modelled pottery in style[277] and with Palenque polychrome relief sculpture. However, most parallels are drawn to iconographic rather than stylistic features. On the Building A monochrome relief a bat appears above the seated figure and on his throne. Bat iconography is recurrent in the Maya region and appears in diverse media, such as on cylindrical vessels (fig. 95) as well as in sculpture (fig. 96). Certain costume details reveal Maya parallels, although even in the Maya region they are regarded as anomalous features; for example, the prominent knotted serpent worn as a necklace by the seated figure in the Cacaxtla Building A relief (fig. 90b) compared with the knotted serpent belt on Seibal Stela 13 (fig. 97), and the collar on the sculpture dubbed "El Creador" from Xochicalco (fig. 98).[278] The use of a double-outline to emphasize contours of the figure's arms and legs in

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[276] This beaded skirt is seen at Palenque (Oval Palace: Temple XIV Tablet; Temple of the Inscriptions Pier C), Naranjo (Stela 24), and El Peru (Stela 34) (Bruhns 1988; Stone 1991).

[277][277] Pabellon pottery was a fine, luxury ware from the Terminal Classic (AD 700-900) (Werness 2003).

[278] Garza Tarazona (2010) also compared it with the Oxkintok sculpture and with Cotzumalhuapa reliefs.

the Building A relief has been compared with Veracruz stylistic traits such as in reliefs at El Tajín (fig. 86)[279] and the Xochicalco Feathered Serpent Pyramid (fig. 87).[280] Although Kubler (1980: 166) compared the pose of the seated figure with Tikal ruler portrait lintels, it would seem to have closer parallels in Veracruz than the Maya region because one leg is dangling and the other crossed so the sole of the foot faces the viewer in the Cacaxtla relief and in the seated figure to the far right in an El Tajín relief (fig. 86).

Despite the parallels with both Maya and Veracruz traits, the sculpture does not clearly conform overall to these other traditions. The fantastic creature in the headdress is visually unlike those in Maya headdresses, although it may well represent a Cauac monster based on the cluster of dots on its cheek. However, the throne creature, although referred to as a Maya Cauac monster[281] or a Witz monster,[282] lacks the diagnostic grape-like design on the cheeks, and instead has a mat or *pop* sign. What's more, the seated figure's hand position is also unusual, with one hand pointing downward and the other near the figure's mouth.[283] This non-Maya relief only covered the corn border of the murals, so it would appear the intention was not to obliterate the Maya style itself, but rather the iconography of the corn growing from the cave mouth. Instead, the corn-cave was replaced by an image that emphasized human authority or intercession in ritual activity. It appears to form part of

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[279] Abascal et al. 1976: 3.

[280] The double outline is also characteristic of Maya vase painting (e.g., Schele and Miller 1986: 40, 162, 292; Robicsek and Hales 1981).

[281] Tate 1980.

[282] Brittenham 2008: fig. 57.

[283] Instead, one of the ancillary figures on one of the polychrome urns found at Cacaxtla, discussed in chapter 6, uses this gesture.

a recurrent trend at Cacaxtla to obscure or destroy corn imagery in mural painting and sculpture, an idea that will be examined in greater detail in chapter 6 on Cacaxtla mural painting.

A final piece from Cacaxtla that should be mentioned in connection with Maya stylistic traits is the standing, life-sized three-dimensional polychrome unfired clay human figure (fig. 22).[284] It was the largest of eight fragments, mostly heads, found deposited on a fine powdery layer of sand in Pit 9-A east of Building A, but at the base of the hill (Espinoza García and Ortega Ortiz 1985-1987, 1: 191-194, 2:321-330). With elongated body proportions with emphasis on the naturalistic articulation of the body and extremities, the male figure wears a broad collar characteristic of Maya costume and a twisted belt.[285] The other features do not suggest Maya connections, and instead seem to represent a local mode of rendering physiognomy, the body, and costume. Based on this and other fragments, Cacaxtla physiognomy consists of sometimes bulging, almond-shaped eyes with a raised contour; a large and fleshy nose; a mouth with prominent lips, which are often parted to reveal T-shaped dental mutilation. The elongated corporal proportions and insignia-free areas of the body are uncommon in Epiclassic sculpture from the Central Highlands. Therefore, despite some similarities in costume details and long body proportions to Maya models, the treatment of the figure set the Cacaxtla pieces apart.

Teotihuacan sculptural connections have also been posited with Cacaxtla and are

[284] Terracotta sculpture on this scale is unusual. A number of large fired clay Xipe Totec sculptures have been attributed to different parts of Mesoamerica; the only life-sized clay sculpture from an excavation represents a bat god found with a Xipe Totec from San Mateo Tezoquipan, Chalco (González González 2011: 67, fig. 38). Another is on display in the Teotihuacan Hall, Museo Nacional de Antropología; a sculpture from Madereros, Tlalixcoyan in the Museo de Antropología de Xalapa; and another example in the Metropolitan Museum of Art. A smaller clay Xipe sculpture (84 cm) was excavated in an Early Postclassic altar at Tula (Gamboa Cabezas 2012: 54-57).

[285] Proskouriakoff 1950: 62-63; 69, D3.

pertinent in the discussion of two sculptural groups: images of the Storm God, which was known in Aztec times as Tlaloc and a group of sculptures known as the Once Señores. The Storm God was one of the three most important deities at Teotihuacan, along with the Great Goddess and the feathered serpent.[286] At Cacaxtla a number of pieces depict the head of the Storm God (see Appendix C). In the case of the stone head, it is not clear where it may have been placed and whether the small terracotta Storm God heads may have formed part of a sculptural composition or may have been Storm God vessels. However, the most complete specimen the full-length figure that forms part of a roof ornament (*almena*) standing in front of a scroll-filled backdrop with raised, double outline (fig. 25). Although Cacaxtla images share the salient features—goggles surrounding his eyes, fleshy nose, prominent, fang-like teeth, sometimes a triangular bag—of the Storm God known from Teotihuacan, the deity is reframed in slightly different terms. The standing figure holds a lightning bolt and triangular bag, but what sets the piece apart is the storm god mask spliced in the middle that opens up to reveal the human face below. The split Tlaloc mask finds its closest conceptual parallel in the idea of the theater-type censer variant excavated by Linda Manzanilla in Teotihuacan (fig. 99) showing layered insignia parting like a curtain to reveal the human figure beneath. However, the Tlaloc mask is not depicted at Teotihuacan. Instead it is an idea that was developed extensively in seventh and eighth-century Maya sculpture, where the Storm God's agricultural dimensions are overshadowed by his militaristic connotations. It is also an idea embraced at Cacaxtla in the Once Señores sculptures discussed below and mural painting, which will be seen in chapter 6.[287] Therefore, even though the idea of the Storm God may be connected to Teotihuacan, it is

[286] Millon 1993: 24.
[287] And also discussed by Palavicini (2004: 206-210).

reformulated and transformed in Cacaxtla imagery, melded with other visual traditions.

Perhaps more evocative are the group of sculptures known as the "Once Señores" (Eleven Lords), a group of standing male figures wearing elaborate headdresses and insignia (fig. 100).[288] These pieces might have been *almenas* (roof ornaments), although their original placement and function remain unclear, because they were found ritually buried (Morales Gómez 1999). Their squat proportions and iconographic details—Storm God masks, jaguar with hanging paws headdress, butterfly headdress, and disembodied hand motif—suggest a connection to Teotihuacan (cf. fig. 100). However, they betray significant differences in iconographic and stylistic details, particularly physiognomy. The faces of the Once Señores look particularly unlike the canonical Teotihuacan visage (fig. 99a), because they have almond-shaped eyes framed by a raised ridge and fleshy noses or bulging round eyes and thick rubbery fangs in the case of those with a Storm God face (fig. 100b). Several of the figures display a wide mouth showing a neat row of teeth (fig. 100a), sometimes with T-shaped dental mutilation (fig. 100c). According to Warren Barbour (personal communication January 2013), the deliberate depiction of teeth begins at Teotihuacan in late Xolalpan (AD 475-550) and becomes more frequent in early Metepec (AD 550-600), while tooth mutilation appears slightly later in Late Metepec (AD 600-650) and continues into Oxtoticpac (or Coyotlatelco; AD 650-700) on.[289] It is unclear whether the appearance of T-shaped dental mutilation in figural ceramics at Cacaxtla is a parallel development to its appearance at Teotihuacan or whether it can be dated on the basis of a chronological connection with the metropolis. Despite the iteration of some iconographic details known from Teotihuacan (particularly the representation of the jaguar headdress

[288] See also Brittenham and Nagao 2014.

[289] See also Serra Puche and Lazcano Arce 2005: 297 on T-shaped dental mutilation.

with dangling paws framing the wearer's face (fig. 100c) similar to Teotihuacan models in portable ceramics (fig. 99b), these features are combined with other traits in an odd way. Four of the figures wear these jaguar helmet masks (figs. 100 b-c), but only two have storm-god-like features (fig. 100b), but instead of goggles, the eyes are bulging pellets,[290] while the other two have normal human faces (fig. 100c).[291] It is unclear whether this departure from canons of Teotihuacan imagery is the result of a decision to introduce changes to establish visual distance from the metropolis or whether it was from a lack of close familiarity with Teotihuacan canons on the part of the artists. Despite the use of some Teotihuacan iconographic features in the Once Señores, they could not be confused with pieces from the Classic period metropolis.

However, here it is worth taking a brief detour to explore possible ties between the Once Señores and post-Teotihuacan developments in the Central Highlands. Epíclassic figurines from Chalco in the southern basin (Montoya 2008:351, 354) and brazier fragments from Xaltocan in the northern basin (Morehart, Meza Peñaloza, Serrano Sánchez, et al. 2012:435)[292] suggest an Epiclassic physiognomy distinct from the canons employed at Teotihuacan to treat the human face. Despite some deviations, it is possible to make some generalizations about the treatment of the human face at Teotihuacan that apply to lapidary sculpture, masks from censers, ceramic masks, and pottery figurines. Eyes are often gouged out almond-shaped or slightly narrower recesses with tapering ends sometimes outlined with a fine line or with a slender raised ridge. The nose often conforms

[290] Ceramic Teotihuacan Storm God vessels have a bulging pellet center, but the goggles are clearly defined (cf. Berrin and Pasztory 1993: 240-242). In the Once Señores, the outer goggle seems to be omitted.

[291] While feline imagery is linked more closely to the warfare-related Tlaloc B (Pasztory 1974), at Cacaxtla, one of these Tlaloc figures holds a lightning bolt and corn, traits in line with the agricultural Tlaloc A.

[292] I am indebted to Emily Umberger for bringing these sources to my attention.

to a triangular shape with a pronounced raised bridge beginning between the eyebrows and the tip of the nose terminates in a shallow rounded v-shape. Like the eyes, the mouth also consists of a gouged out opening between parted lips: the upper lip is generally treated as a bow-like arc with a dip in the center, whereas the lower lip is a shallow but continuous arc. Based on extant examples, both the eyes and mouth were probably inlaid to augment the impression of vitality (Berrin and Pasztory 1993: 186). The Chalco figurine material shows Classic period figurines that adhere to Teotihuacan conventions, as well as Epiclassic material that display a different treatment. The almond-shaped eyes and mouth have a raised edge, but are no longer gouged out, while the mouth reveals teeth with dental mutilation (Montoya 2008: 354). Similarly, the Xaltocan effigy, identified by the authors as Xipe Totec (Morehart, Meza Peñalosa, Serrano Sánchez et al. 2012: 435, fig. 8a) also shows a prominent ridge framing the almond-shaped eyes and open mouth displaying teeth. The physiognomy of some of the Once Señores (fig. 103c) bears a closer resemblance to the Epiclassic effigy from Xaltocan (fig. 103b) than to other known Classic period physiognomies. A similar approach to the human face is also seen in two of the so-called stelae from Xochicalco (fig. 195a-b), as will be discussed below. This distinctive approach to the human visage reinforces the idea that there were conscious efforts to break away from Teotihuacan models during the Epiclassic period throughout Central Mexico.

Returning to the Once Señores, these figures also display possible connections to Veracruz. Three of them depict a figure wearing a simple, tiered headdress composed of two blocky sections, a beaded or feathered collar, an upper garment that resembles a female *quechquemitl*, and a short skirt with trilobe blood emblems (fig.100d, 101). The facial features recall the flayed god later known by the name of Xipe Totec, a deity that appears at

Teotihuacan and earlier in the Basin of Mexico,[293] but is often represented with round openings for the two eyes and mouth, distilled into an almost shorthand as three holes and a headband (fig. 102). Nevertheless, the Cacaxtla iconography differs sufficiently to raise questions as to whether the three figures indeed refer to the same deity. In fact, these so-called Xipe figures with slit eyes, O-shaped mouth, and blocky headdress bear a closer resemblance to some of the monumental female figures from El Cocuite and nearby sites (fig. 103).[294] Another possible reference to Veracruz in the Once Señores is the scroll-like background with raised border creating the effect of a double outline. Even though volutes occur quite early at Teotihuacan, scholars have continued to advocate a Veracruz origin for these motifs based on the sheer abundance of scroll motifs (fig. 86).[295] What is interesting is that some sculpture at Cacaxtla, such as the Once Señores and the masked Storm God sculpture (fig. 25), appear on a scroll background that seems to represent an idea that appears at other centers, including Xochicalco (fig. 79). The curvilinear structure of the scrollwork might have been intended to trace the path of smoke or water vapor.

A small number of features of Cacaxtla sculpture have been compared to Zapotec glyphs from Oaxaca. A relief sculpture found on the west slope of the hill—perhaps from a *talud-tablero*[296]—shows what appears to be a place glyph that contains a star and four disks (fig. 104). However, as in the case of other Cacaxtla images, it seems to combine and transform features known from different traditions. The bar and dot number system was

[293] González González 2011: 32-33.

[294] However, the technological processes in their manufacture would appear to have differed: the Once Señores are solid terracotta, while the Zapotal figures are larger and hollow (Gutiérrez Solana and Hamilton 1977).

[295] For example, Proskouriakoff 1954; Taube 2003: 277, 314.

[296] As shown in an architectural drawing in Vergara (1990: 23).

commonly employed in Zapotec monuments[297] along with what seems to bear some resemblance to a hill glyph in Zapotec writing (fig. 105). However, the Cacaxtla glyph reformulates the features of Zapotec place glyphs, which typically consist of a stepped base or hill with upturned bands flanking the upper tier and each end terminating in a rounder version of the stepped base. At Cacaxtla this band with these rounded ends appear on top of the tiered element, but instead of turning upward at the ends, it forms a straight line. What's more, Zapotec place names do not commonly include numbers, which more commonly formed names of people. In Zapotec writing a bowl or boat-like convention indicates personal names that identify individuals (fig. 106).[298] Instead it is set in a rectangular frame with a treatment that instead resembles frames from some Teotihuacan terracotta pieces (fig. 107). The half star sign was also known at Teotihuacan (fig. 108), where it has been identified with water symbolism,[299] although later at Teotihuacan they appear in a militaristic-sacrificial context.[300] At Cacaxtla the half star appears in numerous murals where it might refer to Venus (figs. 21, 109), an identification made for the same sign on Xochicalco Stela 2 (fig. 110),[301] perhaps in conjunction with a bellicose event involving similarly garbed figures recorded in the Maya region.[302] However, the Cacaxtla relief sculpture is the only example accompanied by a number, which suggests the possibility of a

[297] Bar and dot numerals were also employed extensively by the Mayas, but given the absence of Maya glyphs: however, there are no Maya glyphs at the site.

[298] The Bazan Slab has personal names accompanied by place glyphs, but the individuals identified by the glyphs stand on top of the mountain signs. The Cacaxtla glyphs appear in the absence of human figures.

[299] Von Winning 1987, 2: 9, fig. 9.

[300] Baird 1989: 108-111.

[301] Sáenz 1964: 76; Piña Chan 1977: 35

[302] Baird 1989: 116. Details such as the use of the half star or Venus sign have also been found in Veracruz in conjunction with a feathered serpent at Maltrata, Veracruz (ibid.: 119).

different meaning.

Discussion

What can be said of Cacaxtla sculpture? Little can be said of its stone sculpture, which is sparse, not particularly developed, and apparently not one of the foremost visual arts at Cacaxtla. Apparently clay sculpture was more widespread; however, given evidence of frequent changes in visual programs through time, it may not have been a widely used or enduring tradition in the site's history. Perhaps this diversified mélange was precisely the purpose. As a result, Cacaxtla sculpture does not display an effort to imitate or emulate other known styles from Mesoamerica. Instead it shows a willingness to draw on diverse sources for iconographic content or inspiration, while employing a local style that had not yet been codified into a clearly identifiable entity. Some of the strongest quotations refer to Teotihuacan content (feathered serpent) or are elements also found both in Teotihuacan and the Southern Maya region (representations of corn, Storm God imagery). However, stylistically the connections with Teotihuacan are tenuous. There might be links to Gulf Coast sculpture in iconography (Building A monochrome relief; the Once Señores flayed deity). The ties with the Zapotec region are also limited to possible glyphic content, although, upon closer inspection, the use of bar-and-dot numerals is not unique to the Zapotec writing system. Furthermore, the cited similarities are transformed by recombination with other features and distortion (e.g., half-star sculpture).

Pertinent to the present discussion is a brief consideration of the possible sources of prominent traits in media categories. Some imagery in sculpture seems to come also from Teotihuacan sculptural or mural painting sources (feathered serpent), which was not developed extensively in the Classic period Southern Maya lowlands, although it was a

feature of what is probably Early Postclassic Northern Maya lowland imagery (Chichén Itzá, Uxmal). Whereas, other sorts of imagery cross a wide variety of media, such as Storm God faces, which appear throughout Teotihuacan (mural painting, sculpture, as well as smaller-scale ceramics, figurines), while the Storm God-jaguar combination of the Once Señores in particular is known from a Thin-Orange ceramic vessel, in other words a potentially portable object.

Although Cacaxtla sculpture bears similarities to other visual systems and contains references to known iconography, it puts them together in different ways. In fact, none of Cacaxtla's monuments could be confused with sculptures actually from the Maya region, Teotihuacan, Oaxaca, or Veracruz as a result of peculiarities in details (treatment of the serpent fragments, the warrior figures), in physiognomies (three-dimensional clay sculpture and Once Señores), or most importantly in terms of the overall nature of iconographic complexes, which in Maya sculpture focus primarily on dynastic imagery bolstering the authority of rulers. The same could be said of all other stylistic comparisons drawn with other areas or centers (Teotihuacan, Veracruz, Zapotec) said to share similar components. For example, the Once Señores are cited in arguments of Cacaxtla's close ties to Teotihuacan. However, they too could not be confused with Teotihuacan production, which tended to conform to state-mandated content and style. Instead, the Cacaxtla pieces seem to evoke the proportions and iconographic details of Teotihuacan, without embracing its style and instead recombining Teotihuacan thematic elements in distinctive ways diverging from iconography known from the metropolis. What's more if one takes into account a comprehensive view of Teotihuacan's sculptural production, Cacaxtla's references or quotations are limited primarily to Tlaloc combined with jaguar imagery and a limited number of glyphic signs or emblems.

At the same time, there appears to be evidence of an interest in establishing a distance from Teotihuacan through physiognomy in sculpture at different sites in the Central Highlands, including Cacaxtla. With the rare exception in Mesoamerica of the juxtaposition of different physiognomies sometimes underscored by different styles discussed by Pasztory (1989) or of individuals of diverse ethnicities in a single style as seen in Maya vase painting (Nagao 1989) and monuments (Cohodas 1989), physiognomy is assumed to be the visual language chosen by a group to represent itself. It consists of devising a series of conventions to render the human visage, not quite a template, but a way of working that adheres to certain rules. Eyes and mouth might be treated as geometric shapes, as mere slits, or as specific, carefully delineated forms. The use of a standardized approach was discussed above particularly in relation to Teotihuacan, because centers in other parts of Mesoamerica replicated the features of the Teotihuacan physiognomy when they emulated certain object types, such as Escuintla censers (Berlo 1984) and the host figure set in a tripod vessel from Becan (Ball 1974).

A shift in the approach to physiognomy might indicate the introduction of different actors into the scenario if it were borne out by other archaeological materials suggesting a cultural rupture or intrusion. However, the situation appears to differ throughout the Central Highlands. Despite ceramic evidence of the arrival of people from western Mexico at Teotihuacan in the Epiclassic (Cowgill 2013; Gómez Chávez and Castro 2006; Manzanilla 2005), it is unclear to what extent newcomers would have had an impact on the sculptural arts in the Central Highlands. Instead, I would suggest changes in physiognomy formed part of a deliberate attempt to break away from Teotihuacan precedents as part of a process of visual disengagement deployed by Epiclassic centers. The apparent similarities in physiognomy described above between the Xaltocan censer fragment and the Cacaxtla

Once Señores could have been part of a new approach in the Epiclassic period, which could have been facilitated by changes in technology. The shift to using molds in pottery traditions (Sterpone Canuto 2006: 271, 277) was also part of the Epiclassic approach to figural imagery in clay. Molds perhaps used to make faces and other details on censers from Xochicalco have been on display at the local Site Museum since 1996 and some parts of the Once Señores—it would appear some of the faces—were also mold-made (Rivas Castro and Michetti Micó 2007:445-446). Therefore, the use of molds may have played a role in spreading the new approach to physiognomy in the Epiclassic.

Chapter 4: Searching for a Style: Xochicalco Sculpture in the Round

Labor intensive stone sculpture was abundant at Xochicalco, as well as evidence of what was probably a thriving production of large-scale clay pieces. What is striking about the corpus is its diversity of subjects and styles. This can be interpreted as an absence of strict state oversight controlling production, an open approach to aesthetics that allowed for such diversity, as well as the presence of sculptors of a considerable range of skill. The situation contrasts to that of Teotihuacan, where many of the pieces from the city conformed to a fairly standardized canonical style, albeit also accompanied by evidence of varying degrees of skill expressed in sculptures such as Old Fire God braziers and masks of differing qualities. Given the relatively short duration of Xochicalco (AD 650–900) and the fact that most of the material excavated comes from the moment of its violent end, it is difficult to speak of a sculptural chronology, although evidence suggests that the most renowned monuments, such as the Feathered Serpent Pyramid and the three stelae, are from relatively late in the city's life. According to Garza Tarazona (2010) some monuments were covered with stucco as a way of symbolically killing pieces. At the same time, if a sculpture were intended to be positioned outdoors, the application of stucco may also have been a form of repair or renovation necessitated by exposure to the elements, as suggested by the repair or reuse of monuments.[303] The following discussion will focus on a selection of

[303] Noguera (1934-1935) reported the incised carving on the Two-Glyph stela was covered with stucco and reused as a plain monument, while evidence surrounding the Once Señores of Cacaxtla (Rivas Castro and

three-dimensional monuments from Xochicalco chosen for their connection to the topic of non-local interaction, although it should be clarified that they are a small number in terms of the overall corpus at the site; a more complete list of stone sculpture may be found in Smith and Hirth (2000, 2). Discussion will begin with three-dimensional stone and clay pieces, and then chapter 5 will shift to two-dimensional works, which I posit as the culmination of Xochicalco sculptural glory, and will end with distinctive or unique pieces that characterize the diversity of the Xochicalco style.

One of the most enduring images in the Central Highlands, besides the Storm God (Tlaloc), were the four three-dimensional images of the Old Fire God (known in later times as Huehueteotl) from Xochicalco.[304] The most elaborate example (fig. 111) depicts a seated, elderly male with a wrinkled face, a pair of teeth indicating a toothless mouth, and body hunched by the weight of a large, round brazier with diamond and band fire symbols, while the other two are more simply carved versions identifiable by the seated position and a rectangular shape on its head evoking the brazier (figs. 112, 113). Only the most elaborate of these pieces is identical to types known from Teotihuacan in style, dimensions, and details (fig. 111 cf. 114). The Xochicalco Old Fire God was found broken in Structure A in

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Michetti Micó 2007) suggests the pieces were repaired with plaster and at some point covered in their entirety with stucco.

[304] Old Fire God images made of clay or stone have been found in Preclassic to Late Postclassic contexts. Preclassic examples come from Cuicuilco (Cummings 1933); Ticoman (Vaillant 1941); Tlalancaleca, Puebla (García Moll 1976); Jalapazco, Puebla (Nicholson 1971a: 96); and La Laguna, Tlaxcala (Carballo 2007). In the Early Classic period the Old Fire God (Huehueteotl) brazier became a hallmark of Teotihuacan, where it was carved in stone using a standardized iconography (Berrin and Pasztory 1993: 174). Huehueteotl (Old Fire God) braziers have also been found in Early Postclassic contexts at Tlalpizáhuac near Chalco (Tovalín Ahumada et al. 1992: 59), Cerro de las Mesas, Veracruz (Drucker 1943) and at Tula (Acosta 1974: 45), although no longer in the Teotihuacan style. Paddock (1972: 238) mentions one found in the Mixteca Alta, but provides no further information on provenience, date, style or appearance. See Matthew Robb (2007) for a more in-depth study of the presence of Old Fire God braziers at Teotihuacan and throughout Mesoamerica. So these sculptures may have been part of an ancient, surviving tradition. During the Late Postclassic, another version of the Old Fire God combining traits of two of the most ancient deities in Central Mexico—Huehueteotl and Tlaloc—was found in the Templo Mayor (Umberger 1987; Pasztory 1993a).

the site's elite core and with a piece of copal affixed to the face.[305] Part of it was found on the floor of the room at the back of Structure A and in the pit that contained large fragments of the three Xochicalco stelae in conjunction with Late Classic ceramics and other materials,[306] where it was perhaps broken and interred as part of a termination ritual as suggested by Matthew Robb (2007: 217). The most direct expression of a connection between Xochicalco and Teotihuacan sculpture, it is an isolated sculptural find and does not occur in a context suggesting any attempt to emulate Teotihuacan or replicate its ritual practices.[307]

Significantly, at Xochicalco the small corpus attests to both high and low expressions of the Old Fire God in sculpture, which speaks of the pervasiveness of the cult at different social levels. Sáenz (1962b: 46-47, foto 27) found a rudimentarily carved Old Fire God,[308] while Smith and Hirth (2000, 2:36ff) refer to two other sculptures as "human effigy braziers" without identifying them as the Old Fire God, although the brazier suggests the potential connection with fire. The first of the two cited by Smith and Hirth (2000, 2: 37, 40, 41) comes from an unknown location on Cerro Xochicalco, while the second was

[305] The description of the excavation (Sáenz 1962a:69-70) does not mention the piece of copal covering the face as if a mask, but it has been on display in the Museo Nacional de Antropología, Mexico City beside it.

[306] Sáenz (1962a: 69-70) found three stelae fragments on the floor of the temple in back part of Structure A and decided to dig a trench in the stucco floor on the temple's axis in search of the other fragments. He found a square pit lined with well-dressed Stone that contained four other stelae fragments along with "Teotihuacan and Mezcala type stone figurines, obsidian arrowheads, blades, spearheads, and eccentrics, tecali mask fragments and part of a vessel; a small rudimentarily carved sculpture, the Huehueteotl sculpture, jade, shell and turquoise beads, bone remains from a secondary burial, and Late Classic ceremonial-type ceramics.

[307] Tracing images of the Old Fire God outside of Teotihuacan, Matthew Robb (2007: 197, 210) deems them as translations into local idioms, and also does not regard them as evidence of exportation of a belief system from Teotihuacan.

[308] It was found in the fill of one of the walls of the Cámara de las Ofrendas along with a tecali mask fragment with shell and pyrite inlaid in the eye sockets and a figurine fragment (Sáenz 1962b: 46).

found in a room in an excavated household.[309] A number of male clay faces with deep creases along with the ceramic molds in which they were made have also been found at Xochicalco and are mentioned again in chapter 7. They might constitute local interpretations of the same figure.[310]

Given its clear association with the great metropolis, a word on the Old Fire God at Teotihuacan is necessary. Although many Teotihuacan-style Old Fire God braziers are currently in museum collections, very few of them have been found in archaeological context to shed greater light on their original use there.[311] Esther Pasztory (1993a: 174-175) has noted they were found in central courtyards or near central shrines of apartment compounds in Teotihuacan, and therefore associates them with hearth and household rituals. She has also suggested the Old Fire God represented ancestors.[312] In contrast, Annabeth Headrick (2007: 118) proposes these figures were connected to fire rituals conducted in three-temple complexes in Teotihuacan apartment compound patios, settings to light the primordial fire associated with the creation in the hearth in reenactments of the myth of the birth of the gods.[313] Based on a contextual approach, Matthew Robb (2007: 220) has noted an intriguing pattern in excavated examples of Huehueteotl in Teotihuacan and elsewhere in which the broken Fire God image is accompanied by equally "broken"

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[309] See Matthew Robb (2007: 216-221) for an in-depth discussion of the specimens from Xochicalco.

[310] The fact that the clay examples diverge from the canons of the stone model does not negate the possibility that Xochicalco artisans could have formulated a local version of the Old Fire God. In fact, Robb (2007: 215ff) suggests a unique image from Tikal is a local rendition of the Old Fire God known from Teotihuacan.

[311] Examples excavated at Teotihuacan, see Morelos and Monzón 1982; Jarquín and Martínez 1982.

[312] Pasztory 1997: 165.

[313] Recently a monumental Old Fire God sculpture was found in the fill of Teotihuacan's largest pyramid, the Sun Pyramid, which suggests it was not only for household rituals, but also formed part of a state cult. Illustrated at http://eleconomista.com.mx/entretenimiento/2013/02/12/hallan-escultura-huehueteotl-teotihuacan consulted April 2013.

human remains, together with greenstone figurines and vessels with water symbolism, both emblematic of water, as a "building termination or renovation ritual that often included fire in a defining role." Outside of the metropolis, he maintains the Huehueteotl deposit was understood as referring to Teotihuacan, even after the city's decline, and continued to be practiced only until the tenth century, when it was abandoned only, to be revived by the Aztecs in conscious references to the past.[314] In the case of Xochicalco, the interment of the Old Fire God does not occur in a context that makes obvious allusion to Teotihuacan, instead it is part of a longstanding tradition that is merged with other practices into a distinctively local system of practice and belief.

The Xochicalco Old Fire God brazier forms part of a limited group of pieces characteristic of Teotihuacan that were apparently transferred and continued to be used and perhaps revered in Xochicalco, along with purely Teotihuacan-style masks, Storm God vessels, and what have traditionally been referred to as Teotihuacan-Mezcala style figurines and masks (see chapter 7 for further discussion). These pieces appear deposited in specialized contexts in Xochicalco intermixed equally with local or non-local pieces. However, the location of the find in the elite ceremonial core of the city and the rarity of a pure Teotihuacan-style Old Fire God brazier by as late as ca. AD 850-900 suggest the Teotihuacan style piece was a relic or a treasured heirloom perhaps from Teotihuacan, at some moment brought to Xochicalco and preserved in the city's ceremonial core. Its special status is reinforced by the fact it was deposited with monuments of the importance of the three stelae. The care invested in breaking the stelae in such a way as to prevent disfiguring

[314] Umberger 1987; Pasztory 1993a; Robb 2007: 221.

the carved faces and glyphs[315] and ritually covering them with cinnabar indicates they were buried with honors by the people who hallowed these pieces, in contrast to the massive destruction and incineration that razed the rest of the city at its violent end. [316]

What is interesting about the group of Teotihuacan pieces and the body of Teotihuacan similarities is that they are largely found in the realm of portable remains. Although the people of Xochicalco may have continued to practice certain rituals and may have retained some beliefs similar to those of Teotihuacan, their presence was not intended to purposefully evoke or imitate Teotihuacan beliefs or practices. Instead, they appear to be integrated into contexts suggesting general reverence, but not emulation. In fact, they are incorporated into a larger body of local expression, often transformed into clay images of long-venerated powers—Old Fire God and Storm God—for local household worship.

Another category of three-dimensional Xochicalco sculpture seems to be tied to models perhaps conceptually originating in Teotihuacan, but that often seem to be mediated through a Maya visual filter, and reinterpreted at Xochicalco. They form a corpus that invites comparisons in their general subject matter or their details with other areas, but with the exception of the Old Fire God, they are distinctive to Xochicalco and are unlike what is found elsewhere in Mesoamerica. There they assume a hybrid form combining quotations, allusions, sometimes diluted to vague reminiscences of things past. This corpus refers to a diverse group of sculptures: 1) two macaw heads, 2) descending bird (quetzal?) *almenas*, 3) a seated feline sculpture; 4) "Señor Yelmo de Serpiente" (Lord Serpent Helmet) showing a human head emerging from a serpent maw; 5) the so-called Malinche sculpture, 6) the life-

[315] Sáenz 1961: 62.
[316] Sáenz (1961: 62) suggests the monuments were "killed" and hidden in a pit or "strongbox," but also notes that not all of the pieces fit, so some of them were left on the floor of the structure. Smith (2000: 83) has also noted this odd detail and has suggested the lapse between depositing the stelae in the "crypt" and the building's abandonment was relatively short, an interpretation that I concur with.

sized clay image dubbed "El Creador" (The Creator); 7) the sacrificial stone figure; and 8) the sculpture known as "El Marcador" or "El Señor Rojo." These pieces were found in diverse contexts from the ceremonial core of the city and again were not grouped together to suggest they were perceived as allusions to Maya traditions; instead they were integrated into diverse parts of the site.

Two stone macaw or parrot heads (figs. 115-116) have been compared with Maya ballcourt sculpture.[317] Both specimens have prominent round eyes, a tab near the upper part of the beak, a stylized curved beak with a distinctive treatment of the beak's inner contour forming a right triangle or L-shape, and a clear vertical line on the lower beak marking the line between the beak and the feathers. However, the larger specimen (58 cm tall; fig. 115) from Xochicalco deviates from the other specimens (21 cm; fig. 116) for its scale and for the bold stylization of the bird's head: elongated, elliptical head shape, prominent curved beak schematized into geometric curves, and prominent round openwork holes to indicate the eyes, which differentiate it from the smaller macaw head. Some details suggest the sculptor's familiarity with the species; for instance, the small tab above its beak might refer to the patch of feathers of a different color marked in some species, such as the military macaw (fig. 117), a species native to this region of Mexico, in contrast to the scarlet macaw, which lived in the tropical lowlands[318]

These pieces have been compared specifically to ballcourt markers from Southern

[317] The larger of the two macaw heads was found in the South Ballcourt (Solís 1991: 72), and the smaller head comes from an unknown location on Cerro Xochicalco (Smith and Hirth 2000, 2: 38);

[318] Somerville, Nelson and Knudson (2010: 126). The distribution of the military macaw (*Ara militaris*) includes Morelos in the IUCN Red List of Threatened Species website at
http://www.iucnredlist.org/details/106001549/0
accessed October 17, 2013.

Maya from centers such as Copán (fig. 70, 118).[319] Closer examination suggests the resemblance is probably based on the characteristics of the species itself and the notion of using a macaw head to adorn a ballcourt, but not that the Copán sculptures served as visual inspiration for the Xochicalco pieces. It suggests a possible awareness of what existed in other cities in Mesoamerica, although it does not necessarily indicate a deliberate attempt to emulate another center. What emerges is that Copán and Xochicalco had their distinctive ways of rendering this bird. An Early Classic macaw ballcourt marker from Copán (fig. 119) that shows that besides the bird's distinctive, curved beak, Copán artists chose to prominently display a scroll design on the lower part of the bird's face, even in glyphs and other representations.[320] This feature is omitted in the Xochicalco sculptures, which have a different set of salient features, as described above. It would appear that the Xochicalco macaws are local versions of ballcourt marker types perhaps widely known from the Maya region.[321] An interesting comparison can also be drawn between the large-scale macaw (fig. 115) and Gulf Coast imagery. The overall shape of the sculpture resembles small-scale stone pieces known as *hachas,* an allusion to axe-head shape of the piece. *Hachas* are often depicted worn by ballplayers on the waist (fig.120) that known from carved stone pieces (fig. 121). It is more likely that the Xochicalco sculpture was intended to be a monumental version of these smaller Gulf Coast effigies perhaps set on top of one of the platforms overlooking the playing field. Given the prominence of macaw imagery at Copán, the Xochicalco piece might even be an allusion to the Copán ballcourt with six macaw

[319] See Litvak King 1970:134 citing Marquina 1950, 587, fig. 24. Also Litvak King (1970: 134) compares these sculptures to an Early Classic Maya stone bead from Zaculeu and to objects from the Gulf Coast, but after viewing these images, the connections were not convincing.

[320] See Taube 2000: 30, fig. 22e.

[321] It is also possible that ballcourt markers featuring macaws may have been particularly emblematic of Copán, where at least some of the macaw and quetzal imagery can be tied to its dynastic founder, K'inich Yaax K'uk' Mo', which means Quetzal Macaw (Coggins 2002: 61).

sculptures tenoned vertically into the court's sloping wall (fig. 70).

Earthenware *almenas* (roof ornaments) from Xochicalco feature depictions of a descending bird with long tail feathers set on a curvilinear openwork background with raised edge contours (fig. 122).[322] They appear to bear a cartouche-shaped medallion on the body containing an unidentified glyph. The pronounced hooked beak and long feathers suggest it might be a stylized representation of a macaw descending in flight,[323] although an image of a similar descending bird painted on a *tecali* vessel (fig. 123) also displays a small head and long green plumes, which raise the question of whether it might be intended to be a quetzal. The question remains whether the focus largely on the feathers, beak, and eye might suggest it was rendered by an artist unfamiliar with the actual species, was using another image (such as the *tecali* vessel) as a model, or was only familiar with the bird's pelt.[324] The peculiar treatment of the eyes as large disks capped with a flat eye lid and framed by a larger circle might be intended to emphasize the macaw's distinctive facial patch (fig. 117). The idea of descending birds are known from Teotihuacan mural painting (fig. 124), although the resemblance with the Xochicalco examples is more conceptual than visual. The idea of depicting a bird with a glyphic cartouche on the body is also known from Teotihuacan mural painting (fig. 125). On the other hand, the openwork, scroll-like background with double outline[325] has its closest parallels in roof ornaments from Cacaxtla (figs. 25, 100a-d), although they are not identical. There is no compelling evidence to

[322] The *almena* sculptures were found in the recent Instituto Nacional de Antropología e Historia project (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 314).

[323] González Crespo and Garza Tarazona (1995: 109) identify it as a macaw.

[324] Some species were perhaps raised on site (see Somerville, Nelson and Knudson 2010), while others were perhaps only introduced in pelt form (Saburo Sugiyama, personal communication, 2013).

[325] Other clay *almena* fragments of this type have been reported before 1960 (Smith and Hirth 2000: 50, photo 3.25), but were incomplete.

suggest Xochicalco was drawing on earlier visual models or from other parts of Mesoamerica. Instead, it would seem that the artist was tapping pervasive ideas the artist developed in diverse ways. The descending bird roof ornaments appear to be a local innovation distinctive to Xochicalco.

The other monument that suggests non-local inspiration is a life-sized clay seated feline with a knotted cloth tied around its neck (fig. 126).[326] Identified as a puma,[327] it was found broken together with other large-scale earthenware sculptures. The detailed treatment of the large head, snarling mouth opened wide to give the creature's sharp teeth maximum exposure, and ears twisted backward as if in ire contrasts with the simplified, tubular treatment of the creature's limbs and paws, which lack visible claws. The sole insignia consists of a tied cloth around its neck, treated as rectangular plaques with a flat stylized bar-like knot. The same creature is also seen in ceramic effigy vessels to be discussed in chapter 7. On a similar scale, a polychrome urn (ca. 400-600) found in Monte Albán (fig.127)[328] shows attention to similar details of the puma's powerful head and sharp teeth, while the red and green knotted cloth is treated in rounded, three-dimensional terms, however, the seated animal's claws are rendered. On a smaller scale, similar felines, sometimes identified as bats, with knotted cloth are depicted on Zapotec ceramics. Later in the Early Postclassic at Tula and at Chichén Itzá, felines with knotted rope collars appear "prowling" in bas-relief as architectural ornamentation (fig. 128a) or seated and often in pairs serving as standard bearers (fig. 128b), believed to represent warrior orders. Personified jaguars sporting knotted scarves are often depicted on Classic Maya cylindrical

[326] The seated terracotta feline was found along with many other clay animal sculpture fragments in the Xochicalco Acropolis (Garza Tarazona 2010).
[327] Garza Tarazona (2010: 18-23) identified the species.

[328] Solís 1991: 157.

vessels in processions with other creatures (badgers, bats, toads) of the dark nocturnal underworld sporting knotted cloths worn around the neck usually identify sacrificial victims (fig. 127b).[329]

It is unclear if the full range of these associations also applied to the puma imagery, because the jaguar is a nocturnal creature, while the puma is active in the daytime. Perhaps the two were equated as powerful felines, the puma more abundant in the Central Highlands, while the jaguar's habitat was the tropical Southern Lowlands. Producing large-scale ceramic sculpture was and continues to be a technical feat and again the notion of iconic pieces worthy of quotation might help to explain the appearance of life-sized earthenware pumas from Xochicalco and Monte Albán. Clearly they were both intended to depict the same creature, but the differences in treatment and style suggest different makers visualizing the same composition. The minor differences in treatment of head, ears, and knotted cloth, as well as the presence and absence of claws may be attributed to the hand and vision of two different artists trained in different traditions. It is unclear if the sacrificial knot was intended to convey the sacrifice of the animal, a practice well-documented at Teotihuacan for the Moon Pyramid dedicatory offerings,[330] while worked jaguar-puma-lynx bones have been found at Xochicalco.[331] If the animals were intended to represent warrior orders, it might have served as a group emblem, although only a few images of

[329] Mercedes de la Garza (2013) identifies these scarf-bearing jaguars as *way* or animal alter-egos of rulers on a shamanic hallucinogenic journey. However, it is unclear if all creatures wearing these neck scarves are animal alter egos.

[330] Sugiyama and López Luján 2006.

[331] The remains of felines including nine jaguars, nineteen pumas, and twelve lynxes were found in ritual contexts at Xochicalco (Corona M. 1993-1994: 373, 364, 369, 370, 371). Corona (ibid.: 374) notes that most of the specimens come from Sectors B (the area directly north of the Acropolis and Main Plaza), E (directly east of the main plaza), and the Acropolis itself. Rather than front extremities and skulls, they pertained mostly to have worked back extremities in the form of claws or perforated and polished pieces that might have been trophies or talismans.

warriors on the upper story of the Feathered Serpent Pyramid are depicted together with animals. The seated feline sculpture attests to awareness at Xochicalco of pervasive beliefs from diverse parts of Mesoamerica, but it is akin to a homology, in other words a local invention. The seated feline with a neck cloth is a recurrent Mesoamerican creature, but it is rendered in a local visual language and not an overtly refer to any specific visual antecedent.

A related category of sculpture at Xochicalco is represented by stone sculptures of emaciated felines (fig. 129a-b). These three-dimensional seated felines that were found mutilated[332] in different parts of the site (fig. 31)[333] are perhaps the best example of sculptural innovation at Xochicalco. Depicted as skeletal or starving and seated with heads twisted to one side, they prominently display the spinal vertebrae on the back, bony ribs on the sides, and the legs are intended to evoke articulated bone segments, but the parts do not seem to strictly adhere to anatomical structures. It is the head that still retains its fleshy parts. The ears, when not broken off, are rendered as disks with another concentric disk within to indicate depth; the nose appears as if a mushroom in cross-section with the double curves of the nostrils on both sides; the eyes are deeply gouged hollows; while the feline's fleshy mouth is rendered with a double outline as if to give it more emphasis as the lips are pulled back to frame the bared sharp teeth and the large tongue hanging from the mouth emphasizing the notion of hunger. These pieces stand in contrast to the depictions of the

[332] Molina and Kowalski 1999: 159.

[333] Smith and Hirth (2000, 2: 42, S17, S18) publish pieces found before 1960, although the exact find spot is unknown, while Garza Tarazona and Palavicini Beltrán (1993-1994: 157) refer to these sculptures as a type found throughout the upper part of the city (Sector G, Structure 2, substructure). Fragments of skeletal jaguar sculptures were also found in the Pirámide Gemela substructure (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 174), which suggests these pieces may have begun relatively early in the city's development.

terracotta puma discussed above. Sometimes occurring in pairs,[334] these emaciated felines might have been positioned to flank entryways, as if guardians to sacred precincts as well as the local materialization of the feeding metaphor governing human-deity relations throughout Mesoamerica. Humans and animals required food to survive just as the gods relied on human blood and hearts for their sustenance. Although felines (jaguars or pumas) were often the subject of sculpture, these starving felines appear to be a distinctive invention at Xochicalco.[335] Although this hunger metaphor is also perhaps expressed in animal figures prowling and salivating perhaps in anticipation of what they are about to consume (fig. 130a) or shown on the verge of devouring heart emblems sometimes rendered with stylized gushes of blood (fig. 130b), hunger is not expressed in skeletal form until later periods.[336] The widespread Mesoamerican belief in the eternal need for bloodshed (through human sacrifice, autosacrifice, or even warfare, although it was also a means to capture victims for sacrifice) to feed the gods promoted images based on consumption metaphors expressing hunger or thirst. However, this conceptual model also applied to other areas. Hirth's (1989) identification of a Xochicalco glyph showing a mouth consuming a jewel as a representation of receiving tribute from local towns evokes the need

[334] González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 179.

[335] Actual jaguar, puma, and lynx bones have been found archaeologically at Xochicalco (see footnote 331 above).

[336] Panels from the Platform of the Jaguars shows seated jaguars consuming hearts clutched in their clawed paws (INAH 2013). They are not overtly skeletal, however, there is a zigzag band along their spine, perhaps to indicate their bony bodies and thus their hunger.

Instead human skeletal imagery in the form of skulls or lively personified skeletons is known from the Classic period in many parts of Mesoamerica (Xochicalco, Cacaxtla, Teotihuacan, El Zapotal/Veracruz, Monte Albán, Toniná and Maya cylindrical vessels), however, it appears to be a direct reference to death or the beings in the dark underworld realm of death. The use of skeletal imagery to evoke voraciousness or extreme hunger is a notion depicted most explicitly in later images in Mesoamerica, particularly among the Aztecs: some entities (often the earth monster) are depicted as entirely skeletal (e.g., Templo Mayor life-sized ceramic pair of sculptures of Cihuacoatls), with gaping jaws in the act of devouring (e.g., voracious earth in codices—Mixtec, Magliabecchi, the Aztec enormous Cihuacoatl relief), or as entities with open mouths displaying flint knife tongues (e.g., Aztec Sun Stone with Fourth Sun), or the voracious personified flint knife on its own (e.g., Templo Mayor flint blades personified with faces).

for tribute payment to sustain the state was just as important as the need for people to feed the gods. Ample evidence at Xochicalco supports its integration into this belief system, based on the need for blood and hearts to maintain the cosmos.

The "Señor Yelmo de Serpiente" (Lord Serpent Helmet) represents a human head in an enormous serpent headdress that rests on a slightly flaring base, which indicates it is a complete piece (fig. 131).[337] The elaborately carved deep relief is covered with stucco and red pigment, which would have matched the late palette of the Feathered Serpent Pyramid. Its bulging surfaces prominently outlined with a thick band emphasize the oversized serpentine helmet that dwarfs the more simply rendered human face. The bifurcated tongue below the face clearly identifies the creature as a serpent, while the human head is encased in an enormous serpent head with jaws gaping at a 45 degree angle and showing a peculiar tab-like formation over the human face's forehead (fig. 131b). It is unclear if it refers to a structural part of a serpent mouth, although it also appears in Maya jades depicting frontal figures wearing a serpent headdress (fig. 140a cf. b).[338] Slightly broken off at the nose, the face of the Xochicalco sculpture is schematically rendered with close-set, almond-shaped eyes formed by slightly gouging the stone's surface, broken nose, diagonal lines running from the upper curve of the fleshy nostrils to the sides of the lips, slightly parted so evoke speech.

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[337] The "Señor Yelmo de Serpiente" was found on an altar in Patio 2, Room 6 of Structure G6 behind the Feathered Serpent Pyramid and north of Structure A. It was accompanied by abundant lapidary material including greenstone beads, figurines, earflares, and pendants, obsidian projectile points and eccentrics, and a cylindrical vessel painted with crabs and aquatic plants (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 209-210). A simpler fragmentary human head in a serpent helmet rendered with different proportions and treatment was published by Smith and Hirth (2000: 43, S23) collected before 1960; although its find spot is unknown, it might have come from the ceremonial core, given the concentration of feathered serpent imagery in the zone surrounding the Main Plaza..

[338] See also Proskouriakoff 1974: 132 a3, 1, 164 b4. 184 b5.

What are the possible sources for the Xochicalco man with the feathered serpent helmet? At Teotihuacan the Feathered Serpent was a creature elaborately articulated on the early structure of the Feathered Serpent Temple (ca. AD 150-200) (fig. 132) and throughout the Classic period it also appeared in mural painting borders (Tepantitla, Zacuala, Techinantitla, and Atetelco), stone sculpture, and ceramics.[339] On the Feathered Serpent Pyramid, the Feathered Serpent head alternates with a headdress that has been interpreted as the symbol of the beginning of the ritual calendar and all time.[340] After that early date, the Feathered Serpent seems to occupy a secondary position in mural painting, appearing primarily in borders and not in central fields. Only rarely has it been found worn as a headdress (fig. 133).[341] It is unclear whether these images are intended to represent a warrior, a sacrificial victim, a supernatural or perhaps an ancestor.

In the Maya region the feathered serpent appeared in contexts suggesting contact or else awareness of its antecedents in Teotihuacan. In the Early Classic the feathered serpent appears as an independent entity at Tikal and Copán (fig. 139), but does not serve as a human headdress.[342] In the Maya region the anthropomorphic form of the Feathered Serpent—as a human wearer of a headdress—appeared after the fall of Teotihuacan.[343] Interestingly, the Xochicalco version of the human wearing a feathered serpent helmet

[339] See Sugiyama 2005: 57-64.

[340] López Austin, López Luján and Sugiyama 1999.

[341] The idea of a human head emerging from a serpent maw is part of a long-standing tradition that later became associated with the idea of the Feathered Serpent, often referred to as Quetzalcoatl. The Feathered Serpent later became embodied in the historical-mythical archetype of Quetzalcoatl, legendary ruler of Tollan. An extensive body of literature surrounds this figure for later periods. For a comprehensive overview, see Nicholson 2001. However, others believe that the entity revered by the Aztecs differed from the Epiclassic manifestation (Molina and Kowalski 1999: 152).

[342] Ibid.: 68, 70.

[343] Coggins 2002: 74.

bears a closer resemblance to Maya examples (figs. 134, 135). What seems to be the large, oversized eyes half-covered with heavy lids and a tubular nose ornament connects it to Maya style depictions, such as those from Cacaxtla (fig. 136a-b) and the Southern Maya (fig. 137) and Northern Maya regions, such as Uxmal (fig. 138).[344]

Despite greater affinities with Maya depictions of the feathered serpent headdress than Teotihuacan versions, the Xochicalco piece still stands apart as a distinctive monument. It is unlike images produced at other centers and differs from what was to come after it. The monument type—a vertically mounted head on a pedestal base—is a format not commonly seen in Mesoamerica. The parallel tubular forms in high relief on the back of the serpent's head that depict the long plumes of the Feathered Serpent are rendered in a distinctive local idiom.[345] The lack of comparable pieces would suggest Xochicalco's experimentation with three-dimensional sculpture in which artists sought distinctive means to represent the site.

A pair of full-figure three-dimensional sculptures from Xochicalco that depict a standing figure wearing a feathered serpent headdress and holding a disk over the lower abdomen should also be mentioned for its possible implications (fig. 141).[346] This sculpture conforms to a type known mostly from Early Postclassic contexts; however, these figures represent females wearing a feathered serpent headdress with bifurcated tongue below the face, similar to the depiction of a face with serpent headdress on Stela 1, which Esther Pasztory (1976) has also identified as a female. In the case of the three-dimensional figures,

[344] Such as Copán, Yaxchilán and Piedras Negras (Proskouriakoff 1950: 45, fig. 15, s', u', v').

[345] This treatment is also used on the Xochicalco terracotta sculpture known as "El Creador" discussed below.

[346] A pair is illustrated in Smith and Hirth (2000: 37, S3 and S4). Ringle, Gallareta Negrón, and Bey (1998: 203) suggest these standing figures have *chacmool* characteristics: the monster-maw headdress and the offering bowl on the female figure's stomach.

this identification is supported by the hip-length tunic and skirt, which is depicted on a number of other sculptures of female subjects at Xochicalco. It raises the question of whether the so-called Lord of the Serpent Helmet should instead be identified as a Lady. If so, then perhaps it represents the reuse of all three principal deities known from Teotihuacan: the Storm God, the Fire God, and the Great Goddess. However, the female deity has been reformulated to such an extent at Xochicalco so as not to have been clearly identifiable as the Teotihuacan goddess.

It is worth noting the variety in the type of serpent headdress depicted at Xochicalco. Headgear similar to the type rendered on the Miacatlan sculpture[347] is seen on Teotihuacan figurines that conflate feathered feline-serpent traits (fig. 142) and Monte Albán urns and whistles (figs. 143-144), but there is no indication that it is worn by female figures. However, the type on the Xochicalco sculpture (figs. 131, 141) more closely resemble types known from Maya monumental stone sculpture where the serpent headdress is usually worn by rulers and is also depicted frontally (fig. 135).[348] A similar headdress is also known from Maya jades (fig. 140) that show male nobility wearing serpent headgear, depicted either frontally or in profile. Some actual Maya jades have been found at Xochicalco (see chapter 7), although to date none of this type has yet been found there.

Instead, the idea of a figure emerging from a serpent mouth seems to be intrinsically Maya in conceptualization. Sometimes ancestors are portrayed emerging from the maw of the Vision Serpent (fig. 145) or on painted cylindrical vessels showing an old god or God K

[347] Smith and Hirth 2000: 37, sculpture S3.

[348] Stone (1989: 158) refers to these headdresses as "frontal mosaic dragon helmets." The feathered serpent is often referred to as a "dragon" to distinguish it from serpents found in nature, although it still refers to a serpent-like creature more than the image of the four-legged "dragon" from Western imagery. For the Maya region Taube (1992: 60-61) refers to the mosaic serpent helmet as the fire or war serpent, which he identifies with the headdress emblem on the Teotihuacan Old Feathered Serpent Temple, but with the lower jaw intact, while the jawless form is restricted to Late Classic Jaina and Jonuta figures.

emerging from the body of a serpent known as the bearded dragon (fig. 146). During the Epiclassic period the human figure associated with a feathered serpent or serpent headdress is most frequently known from two-dimensional depictions, such as those of the so-called Xochicalco stelae, discussed below. These Epiclassic representations might be the seed of later frontal bird-serpent-jaguar bas-reliefs ubiquitous in Chichén Itzá and Tula, where they are believed to allude to Quetzalcoatl, the feathered serpent, a mythical-historical supernatural as well as a legendary king of Tula,[349] who controlled the realms of these creatures. Human heads emerging from serpent maws are often found in Epiclassic sculpture from diverse sites.[350] In Maya imagery sometimes the serpent is replaced by a shell, although in that case the figure could be old or else young, as in the form of the Young Maize God.

The serpent also played a preeminent role that is articulated in architectural contexts throughout Mesoamerican, beginning in Teotihuacan and continuing to the Aztec Templo Mayor in which the serpent served as a conduit or a connection for communication, a role embodied by its positioning on the balustrades of buildings where its body serves to join earthly and celestial realms. This role is made more explicit in the psychoduct connecting the structure on top of the Temple of the Inscriptions to Pakal's tomb deep in the pyramid; made of stucco shaped in the form of a serpent, this channel has been interpreted as a conduit permitting communication between subsequent rulers of Palenque with their great ancestor buried within the monument.[351] In fact, the serpent head was positioned next to the

[349] Piña Chan 1977; Graulich 1988; Florescano 1993.

[350] Ringle, Gallareta Negrón, and Bey (1998) attribute this abundance of feathered serpent imagery to a pan-Mesoamerican cult that flourished in the Early and Late Postclassic, with roots in the Epiclassic.

[351] Romero Bernal 2012: 13.

effigies in stucco of what have been interpreted to be Pakal and his wife, images buried beneath the sarcophagus,[352] as if the effigies would be the entities infused with power and energy to communicate with the living who may have consulted the dead king as a sort of oracle. Although jaguars and birds became emblems linked to warrior orders, the serpent belongs to another category of power. Its role as a powerful link between the world of the living and the ancestors, the sky and the earth, the human and the divine may help to explain the prevalence of serpent, especially feathered serpent, throughout Mesoamerica.

Significantly, "Señor Yelmo de Serpiente" was found on an altar inside one of the rooms southeast of the Feathered Serpent Pyramid found in conjunction with large quantities of lapidary figurines, plaques, and beads. The area bore no production traces and thus is believed to have been a sort of storage space used to control the distribution of elite pieces.[353] Granting status symbols to members of the nobility or elite was a form of social recognition practiced in Aztec times that no doubt had deeper roots. Given the identification of figures wearing a similar headdress on Stelae 1 and 3 as rulers (fig. 41), the longstanding association of the Feathered Serpent and Quetzalcoatl with rulership, and the apparent pervasiveness of this type of imagery in the Early Postclassic period, the idea of identifying the sculpture as the image of a specific ruler (in the case of Xochicalco) or at least an embodiment of the office of rulership is appropriate. In fact, the Xochicalco artist may have been attempting to represent a conflation of ideas: a dynasty founder or ancestor emerging from the ultimate symbol of rulership, the feathered serpent.

The "Señor Yelmo de Serpiente" also constitutes evidence of knowledge and forms

[352] Ibid.

[353] González Crespo, Garza Tarazona, and Molina Montes 1994: 67-68; De la Fuente, Tarazona, González Crespo 1995:8.

of representation shared in different parts of Mesoamerica. Although the earliest images of the feathered serpent appeared at Teotihuacan, the "Señor Yelmo de Serpiente" has closer and perhaps explicit ties to the transformation of this creature in Maya imagery. Yet, again it is an example of transformation: a Maya idea has been reinterpreted by a Xochicalco sculptor in an image that is not a copy, but an evocation of a Maya idea of ancestry. The feathered serpent headdress will be explored at greater length below in the discussion of the Feathered Serpent Pyramid, where additional connections with representation in the Maya region are considered.

The so-called Malinche sculpture (fig. 39) was named after Cerro de la Malinche, where it was found, although no detailed information is available on its discovery.[354] It depicts a seated, possibly female figure shown frontally in a rectangular niche-like framework bearing rows of small figures, geometric designs, and glyphs. A unique monument at the site, its composition might be derived from Teotihuacan portable terracotta enthroned figurines (fig. 147) or else from the idea of stone sculpture depicting a ruler seated in a niche known particularly from Piedras Negras in the Southern Maya Lowlands, where rulers are depicted seated frontally in framed niche compositions (fig. 148).[355] In the case of Piedras Negras, the niche device distanced the ruler from other mortals and provided the sculptor with an opportunity to contrast the three-dimensionality of the ruler with the accompanying bas-relief figures who served to bear witness and thus validation to the ceremony recorded on the monument.[356] However, the Malinche sculpture

[354] Eduard Seler (1960) and Antonio Peñafiel (1890), who visited the site in 1887, first reported seeing the sculpture on Malinche Hill.

[355] Other examples of these niche compositions are Piedras Negras Stela 11 (Stone 1989: 155) and Piedras Negras Stela 14 (O'Neil 2012: 35).

[356] O'Neil 2012: 76-80.

is far from identical to either of these possible models and could well be of local inspiration. In Mesoamerican sculpture, frontality is generally reserved for supernaturals or else high status individuals, generally rulers.[357] The possible identification of the figure as female is based on the triangular garment resembling what today is called a *quechquemitl*, a garment worn by women. It is worth noting that it is also a garment worn by warriors at Tula, Chichén Itzá, and in other Epiclassic and Early Postclassic contexts. However, the Xochicalco version is stylized in a distinctive way unlike representations known from other parts of Mesoamerica. This type of triangular garb is also not the type depicted on female lapidary figurines at Xochicalco, which tend to have a rectangular upper garment.[358] Furthermore, this sort of cross-legged pose is more characteristic of males, while females tend to be depicted kneeling, with feet tucked neatly under them (fig. 149). Other non-local features include the interlaced geometric decoration framing the figure in the Malinche sculpture, a detail that Litvak King (1970: 137) has noted as evidence of a Veracruz connection. However, it is not entirely clear that whenever this decoration appear the intention is to cite El Tajín or other places on the Gulf Coast. Indeed, isolated geometric motifs are difficult to trace to a single point of origin. Instead, as many other sculptures from Xochicalco, it seems to be a hybrid image perhaps derived from awareness of developments in other parts of Mesoamerica.

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[357] Klein 1976.

[358] The triangular garment worn by the leaders of the victimized group in the Building B murals at Cacaxtla (fig. 19) has also sparked a polemic as to whether these figures might also be women (McCafferty and McCafferty 1994).

"El Creador" (The Creator) is an unusual kneeling,[359] life-sized, earthenware male figure with traces of stucco and pigment (fig. 150) that is unlike anything found to date in Mesoamerica.[360] The eyes have large, slightly bulging surfaces, the mouth is agape as if the figure is speaking through thick lips while displaying prominent fangs, beard, long hair rendered as thick coils of clay hanging from his head down his back to the waist (fig. 151a-b). His upper body displays distinctive features: an intertwined serpent necklace, a sort of triangular diadem with what seems to be a large knot in the center, peglike ear ornaments, and wristlets resembling knotted ties associated with autosacrifice in the Maya world. It seems to depict a supernatural with facial features resembling the Maya Sun god that is similar to images on Palenque censer bases.[361] His clothing is minimalistic: from the back he seems to wear a loincloth, but a bifurcated vine covered with cacao pods rise or double as his genitals, while the vine continues between and around his legs. Phallic depictions are rare in Mesoamerica and tend to be associated with the Gulf Coast and the Maya region.[362] Similarly, the depiction of cacao, a highly prized tropical lowland product, is similarly rare. Although it is known from moldmade "adorno" censer ornaments at Teotihuacan[363] and the

[359] Garza Tarazona (2010: 20-21) compares its pose to gods in Maya manuscripts (Dresden), although she ultimately concludes the pose is instead a matter of technical considerations to create a stable, balanced position.

[360] "El Creador" was found in the Acropolis with abundant fragments of other terracotta sculpture (Garza Tarazona 2010).

[361] Known as K'inich Ajaw (Lord Sun Face), the Maya sun god was represented in Maya painting and sculpture with a Roman or hooked nose, large square eyes with pupils alluding to crossed eyes, upper teeth are filed into a T shape, his hair suggesting flames, and association with a four-petal flower (INAH 2013).

[362] Naked prisoners are known from the Gulf Coast at El Tajín (fig. 162) and Mul Chic (Finegold 2012). In the Maya region stripped captives are depicted on Maya monuments (Miller 1985) and on cylindrical vessels (see Justin Kerr's database, vessels K638, K680, K767, K1082, and K3412, Foundation for the Advancement of Mesoamerican Studies, Inc., www. famsi.org). On phallic imagery in Maya sculpture see Amrhein (2003) and Joyce (2000). On Cantona, see García Cook (1994).

[363] Múnera and Sugiyama 1993.

coastal lowlands at Cotzumalhuapa,[364] it is more commonly part of Southern Maya imagery (figs. 153-154)[365] and in the Maya-inspired murals and urns from Cacaxtla (fig. 26, 155, 156). Similarly, the knotted serpent necklace (or belt) is only rarely depicted on human wearers, although some examples can be found in the Maya region (figs. 97, 157),[366] at El Zapotal (fig. 158), as well as at Cacaxtla (fig. 90 a-b). In the case of "El Creador," details suggest awareness of ideas of representation in the Maya region and perhaps on the Gulf Coast as well, but not necessarily of visual details. Therefore, the concept may have been derived from non-local inspiration, but the overall impression of difference that strikes the viewer stems from the need of artists at Xochicalco to devise their own visual solutions.

Although the Sacrificial Stone figure (fig. 159) is not cited as visually similar to any other work in Mesoamerica, it is important precisely for that reason.[367] It represents a decapitated, figure reclining on its back on a rectangular base, ribs carved as diagonal parallel lines, with arms resting beside the body, which is severed at the hips. Within the corpus of Xochicalco sculpture, it is unexceptional in its composition and carving. However, its significance cannot be denied, given that it was found on a spot of supreme importance at Xochicalco: at the base of the Feathered Serpent Pyramid. It would appear to be the Xochicalco version of the iconic figure of the chacmool, which later became codified into a representation of a reclining warrior holding a sacrificial vessel on his abdomen. The Sacrificial Stone figure also depicts reclining figure, but instead of showing a warrior in full

[364] Garza Tarazona 2010: 20-21.

[365] See also the censer lid with a monkey effigy and cacao fruit necklace, Toniná Site Museum.

[366] Garza Tarazona noted this resemblance (2010: 20-21). Jaguars and deer are also depicted with knotted serpent neckgear in Maya codex-style vessels (Robicsek and Hales 1981: 28, vessels 39, 40).

[367] The sacrificial stone figure was identified by Eduard Seler in 1887 in front of the stairs of the Feathered Serpent Pyramid (Smith and Hirth 2000: 33-34.

regalia, it depicts a naked, decapitated, legless prisoner with bands his arms in a position that would have enabled it to serve as a sacrificial vessel, with a hollowed out, long channel carved in the middle of the piece. Mary Miller (1985) has presented compelling evidence of the origin of the chacmool to Chichén Itzá by tracing Maya captive imagery throughout the Classic period as setting the precedent for this form. Sacrificial victims are often portrayed in recumbent poses, such as on Xochicalco Stela 1 (fig. 161).[368] El Tajín reliefs also represent the victim stretched out on his back with a corn plant sprouting from his decapitated neck and a channel of blood where his heart was extracted (fig. 162). Given the pervasiveness of human sacrifice and the depiction of captives, the idea of the independent creation of this proto-chacmool at Xochicalco is not far-fetched. Clearly human sacrifice was a widespread practice in Mesoamerica, and it would appear that the Xochicalco Sacrificial Stone figure was an early version of the later emblematic chacmool figure to receive the hearts and blood of sacrificial victims. This sculpture serves as additional evidence of the awareness of widespread beliefs in an absence of visual references, which led to an independently devised visual solution to meet local needs.

The most unusual sculpture from Xochicalco is the so-called "Marcador" or "Señor Rojo," because it defies a reading of its two simple components (fig. 163).[369] Although this complete and finely worked piece has been dubbed the "Red Lord" because it was covered in cinnabar, it clearly does not represent a human figure. The top is a wide ring carved in bas-relief with an aureole of tapering feathers (fig. 164a). This piece was set on top of a

[368] Smith (2000, 2: 88) and others have identified this figure as a ruler, although the design identified twice as a mat on this side of the stela could also refer to earth if compared to the relief on the side of the stairway of the Feathered Serpent Pyramid at Xochicalco and to the Tlalocan mural from Tepantitla, Teotihuacan.

[369] The sculpture known as "El Marcador" or "El Señor Rojo" was found broken in a small room in the elite residential complex known as the Acropolis and the offering pit associated with this monument was looted (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 351-352).

larger piece that shows two tiers of crisply carved, organic, curvilinear, vaguely serpent-like U-shapes terminating in small round disks with a hole in the center (perhaps representing *chalchihuitl* or precious jewel symbols) and resting on a base depicting a twisted shape that was set into the ground and the part above ground was painted red (fig. 165). The twisted base bears some resemblance to shapes carved below a seated figure on a relief on the south side of the stairway of the Feathered Serpent Pyramid (fig. 166), where two twisted shapes overlap a double band of squares with alternating vertical and horizontal striations, which can be read as cultivated land on the basis of similar forms in Teotihuacan murals (Tepantitla). Its physical division into two parts that were once joined, based on holes to tenon the pieces together, its lack of obvious visual parallels, and its intentional abstraction challenge viewers to read it. The central and bottom portion with the curved segmented serpentine sections lack the creature's features such as a head or rattlesnake tail that are common diagnostic traits. They do not have any direct parallels, although they vaguely resemble the shape of flowing liquid in Teotihuacan mural paintings (fig. 167), although the Xochicalco depiction seems to be of local invention. The strong symmetry and the way the different sections are joined together defy identification with any known living creature, whether plant or animal.

A number of different interpretations have been proposed. Garza Tarazona and González Crespo (2004) have compared the aureole to a relief from Teotihuacan showing a flat skull surrounded by what appear to evoke solar rays, rendered by carving the stone to resemble folded paper (fig. 168). [370] They also note the resemblance of the twisted form at the base of the Xochicalco Marcador with the roots of flowering trees in Teotihuacan mural paintings that appear to serve as place names with the roots perhaps serving a locative

[370] See also Garza Tarazona and González Crespo 2004.

function (fig. 169).

Instead I would suggest that its closest parallels can be found in what have been identified as ballcourt markers from Teotihuacan (fig. 170) and in the Maya areas displaying connections with Teotihuacan (fig. 171). All three pieces share the unusual feature of the prominent display of a disk with radiating design crowning the monument.[371] The Xochicalco and Teotihuacan *marcador* sculptures are both surmounted by a carved, flat disk carved with radiating lines, perhaps to depict feathers and an allusion to the sun, but the formal comparison largely ends there.

Instead, the strongest visual and conceptual parallels can be drawn between the disk on the Xochicalco and Tikal markers (figs. 164a-b). The latter was found in an elite residential area of the site bearing other evidence of Teotihuacan inspiration.[372] Grube and Laporte cite the Teotihuacan precedents in stone and mural painting, and another at Kaminaljuyú.[373] The finial of the Tikal Marcador consists of a disk completely framed by

[371] No ballcourts have been found at Teotihuacan, but the piece is identified as a ballcourt marker based on a similar piece depicted in a Tepantitla mural that shows diminutive figures playing the ballgame. The Teotihuacan sculpture is composed of four sections: a large, flat, openwork disk with an unidentified, curvilinear emblem framed by bands, the last one carved with radiating, slanted parallel wavy lines, perhaps representing feathers; a three-dimensional oval piece on a wider disk base and completely carved with curved designs, traditionally identified as Gulf Coast scrolls; and a conical form worked and a tubular shaft also carved with scrolls. The sculpture might be a stone effigy of a marker made of perishable materials to mark the playing field.

[372] It was found inside a dedicatory offering also containing a *Spondylus* shell and a stucco head in an altar (Sub-48) in the Tikal North Patio Group 6C-XVI (Grube 2001: 107-108; Laporte 2003: 211).

[373] The Kaminaljuyú marker is simpler in structure, consisting of a large disk surmounted by an inverted truncated triangle, the disk set on a tubular shaft base (illustrated on the cover of *Rescates arqueológicos en Kaminaljuyú*, consulted online September 2013 at: https://www.google.com.mx/search?q=kaminaljuyu+marcador&source=lnms&tbm=isch&sa=X&ei=CWUzUqKlJaae2QXE-YHgCg&ved=0CAcQ_AUoAQ&biw=1301&bih=597&dpr=1#facrc=_&imgdii=_&imgrc=InJMa-t4RjHCUM%3A%3BgL55DGaXUlnMfM%3Bhttp%253A%252F%252Fapi.ning.com%252Ffiles%252FBAcPAB7hbbgeEjR21U06utVtBd-6aBo9bkVqT5L-ofeBbuql7ES7qjjHQG6NdU*sjgP9DDwH9RSTFY07TRTrPf5OEU-xr1uH%252FMARCADORKJ1.jpg%3Bhttp%253A%252F%252Fremarq.ning.com%252F%253Fxp_search%253D1%252Bpersonas%2526xp_search_page%253D13%2526xp_search_pos%253D2%3B756%3B945

an aureole of feathers, but instead of a hollow center, it bears Teotihuacan iconography: a small bird (owl?) and a human hand holding an *atlatl* (spearthrower) on one side, and a Storm God emblem (three dots and a curled upper lip characteristic of the Storm God). It also represents two small, two non-Teotihuacan heads sporting Teotihuacan-style greenstone ornaments (butterfly nosepieces, earflares, beaded necklaces) over a medallion of resembling a trapeze and ray sign. in addition to a glyphic inscription recording the date of its erection, AD 416. Laporte (2003: 211) suggests it may originally have been on display as a dynastic monument on the upper platform in the North Patio and was not linked to any of the ballcourts at the site.

It would seem that the resemblance is too strong to be fortuitous. Could this be another piece of evidence of the widespread awareness of artistic events in different corners of Mesoamerica, monuments whose resonance was felt across long distances and through the centuries akin to some of the iconic monuments in Western culture (e.g., the Laocöon, Michelangelo's Creation) cited centuries later in different places and times? Roots are not normally depicted in Southern Maya sculpture, although ancestors are sometimes depicted as fused with fruit-bearing plants (fig. 153).[374] Significantly, the Xochicalco "Marcador" also did not come from a ballcourt context, and instead was found in a small room toward the back of the Acropolis, in other words, a private, elite space, with an offering interred near its base. It would appear that its message was conveyed in its imposing scale and bizarre component parts, which seen under conditions of relatively limited illumination, would have been an imposing, magical, and perhaps frightening image. Garza Tarazona and González Crespo (2004) suggest it was a sacred monument tied to the ruling lineage, which could well have been the case. The use of cinnabar might reinforce this identification

[374] It is also seen in Maya ceramics illustrated in Brittenham 2008, figs. 132 and 133.

with ancestors, based on Magaloni's (2010: 70) sensitive analysis of the materiality and symbolism of red pigments in Zapotec tombs, where cinnabar may have been restricted to depicting the founding ancestor, while hematite and other red pigments were used for more recent ancestors, which suggests that the symbolism of red pigment could have had repercussions far beyond alluding merely to the ritual killing of the monument. In addition to its possible connection with ancestors, the Marcador may also have been made with a coercive, terrifying intention in mind, in which its most horrifying aspect would have been its logic-bending illegibility. The organic quality is undeniable in the rounded contours of the lower curved section and even the excavation report describes the piece in terms reserved for plant-like living entities with "brotes con nervaduras" (shoots with nervure or veins),[375] while the three-dimensionality of these sections prevent an identification with leaves and instead evoke part of a segmented serpentine body. It clearly aroused the wrath of the people who instigated the city's final destruction, because it was found broken with parts of it cast on around the room, in the corridor, and the exterior patio.[376]

Discussion

The three-dimensional monuments chosen for exploration in this section on Xochicalco three-dimensional sculpture were intended to illustrate some of the diverse issues that the city's artists addressed in creating large-scale pieces for public, as opposed to personal, consumption. The possible sources of visual precedents have been identified with specific cities or general regions. These include Teotihuacan, as the preeminent site in the Central Highlands prior to the rise of Xochicalco; the Southern Maya region, which refers to various cities from earlier times and from the Epiclassic period; Monte Albán, the

[375] González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 352.
[376] Ibid.: 351.

foremost center in the Zapotec region during the Classic period; and El Tajín as the leading center on the Gulf Coast in the Epiclassic period. In all cases, I am proposing a conscious choice on the part of Xochicalco artists to seek inspiration abroad, tempered by a desire to not be mere copyists, but instead to create something different that could be called uniquely their own and that would fulfill local needs that would differ on a case by case basis.

The piece that displays the closest ties to its source of inspiration is the Old Fire God brazier. In fact, one of them might have been a piece brought from Teotihuacan itself. Interestingly, the Old Fire God is one of the deities that continued to be made at different sites throughout Mesoamerica after the demise of the metropolis, which is a topic that has been thoroughly explored by Matthew Robb (2007). The fact that more local expressions of the Old Fire God at Xochicalco tend to be simple, schematic pieces suggests the decision was to not exploit the possibilities of expanding on this age-old deity's identity in the Central Highlands. This decision contrasts with the later Mexica approach to the same piece. Emily Umberger (1987) has insightfully explored the Mexica transformation of sculptural icons such as the Old Fire God. She convincingly demonstrates how the artist revived the form of the Old Fire God, but transformed its meaning so the result was completely distinct from the Teotihuacan model. Although this was not the case in the approach of Xochicalco's artists to this figure, greater experimentation characterized another group of pieces.

Another category of pieces suggests that Xochicalco artists may have had a visual reference that served as a source of inspiration for their sculptures. This does not mean that there was necessarily a portable piece that served as a visual key, although there could have been. Instead, it also presents the possibility of an awareness that could have come from visual memory, which entails actually seeing the piece that seems to be the source of

inspiration, or from the transmission of this memory through the description of another party. These include the earthenware seated puma (fig. 126) that strongly echoes the Monte Albán jaguar urn (fig. 127), the macaw ballcourt marker and the smaller versions (figs. 115-116) perhaps indebted to Copán imagery (figs. 118-119), and the Marcador (figs. 163-165) that at least suggests an awareness of the Tikal Marcador (fig. 171). In all cases, however, the Xochicalco artist has taken liberties and has departed from the source of inspiration to create a new, distinctive monument. Lord Serpent Helmet (figs. 131a-c) and the Malinche sculpture (figs. 39-40) seem to arise from a Teotihuacan idea that is rendered in visual terms devised by Maya artists in monuments that specifically allude to the power of the great metropolis through iconographic details. The transformation from two-dimensional to three-dimensional format and deviations in minor details take these monuments a step away from their Maya models.

The final category consists of pieces that might have started from a Maya conceptual inspiration, but that were creatively reconfigured at Xochicalco. Their free rein is implied by what seem to be a lack of visual parallels elsewhere, although this situation is open to change as other discoveries are made. This category encompasses the Creator (figs. 150-151), the Sacrificial Stone (fig. 159), which I suggest is an early form of what goes on later to become the chacmool, and the diving bird *almenas* (fig. 122). Each of these pieces emerges from generalized concepts known in Mesoamerica such as phallic figures, cacao imagery, serpentine necklaces, sacrificial victims, and diving birds from the Maya region and the Gulf Coast. However, they are rendered in a way unlike pieces from Maya or Veracruz sites. Xochicalco patrons and artists drew on Maya and Gulf Coast ideas, but developed their own means of expressing these ideas. These are some of the concerns and processes that went into developing visual identity at Xochicalco.

Chapter 5: Consolidating a Style: The Feathered Serpent Pyramid at Xochicalco

Considerable scholarship has been devoted to monuments such as the Feathered Serpent Pyramid and the three stelae from Xochicalco, which is comprehensively summarized by Virginia Smith (2000a, 2000b) in her reassessment of these two major iconographic programs at Xochicalco. Therefore, the following discussion will primarily focus on the Feathered Serpent Pyramid and three sorts of information: 1) evidence of non-local interaction; 2) points of significance where I diverge from previous interpretations, and 3) details such as the ubiquitous Reptile's Eye Glyph and the Trapeze-and-Ray or Year Sign. However, instead of identifying these emblems with their traditional iconographic meaning, often associated respectively with Quetzalcoatl (Feathered Serpent) and with the calendar or time already explored by others such as Smith (2000a: 62ff), I suggest looking at formal variation and exploring other meanings arising from usage. Unconscious aspects are embedded in the handling of details,[377] which can reveal not only different hands, but also a wider panorama of cultural significance, including forms of interaction, object usage,

[377] This is in consonance with Morelli's nineteenth-century method described by Ginzburg (1980), as well as anthropological notions of technological style (Stark 1999; Childs 1991).

as well as cultural meaning.[378]

Turning to the most iconic image from Xochicalco, the Feathered Serpent Pyramid (fig. 172) is an unusual monument in many ways.[379] It is the only building at Xochicalco completely covered with bas-relief slabs forming a coherent iconographic program (fig. 173).[380] Evidence of two earlier constructions decorated solely with simple niche-like elements (fig. 76) suggests that its present appearance did not date to the earliest times of the city.[381] Yet, it had probably been used for some time, given evidence of a switch from polychrome to monochrome red.[382] Therefore, it likely did not date to the rise of the center, but rather to a time when its power and prestige had largely been consolidated or else was perhaps on the wane. Smith (2000) has interpreted the monument as a glorification of warfare and the material gain in tribute payments harnessed by the victorious city under the feathered serpent's patronage. I would add that it is this proclamatory imperial tone that distinguishes it from other Xochicalco monuments. The subject matter of the feathered serpent, felines, and birds of prey and the feathered serpent's headdress are subject matter repeated on other monuments from Xochicalco. However, absent from other Xochicalco imagery is the overt depiction of armed male warriors and explicit allusions to subjugated

[378] This approach would not prove to be as fruitful for the three-dimensional monuments discussed above as a result of the diversity of approaches to the same subject (Old Fire God) and because my argument is that each of these monuments was reconfiguration of what had existed in the form of objects or been known in the realm of ideas elsewhere in Mesoamerica.

[379] It does not seem to be by chance that the Feathered Serpent monuments at both Xochicalco and at Teotihuacan stand out as unique monuments, the exception more than the rule at both centers.

[380] See Appendix B for a general description.

[381] The earliest construction has been dated to ca. AD 635-669 (González Crespo, Garza Tarazona, Palavicini Beltrán and Alvarado León 2008).

[382] When Peñafiel (1890 Plates Volume, Pl. 208 and Text Volume pp. 44-45) described it in the nineteenth century, he reported traces of polychromy, which are still visible on the relief on side of the stairway (fig. 166), although the monument was apparently monochrome red in its final phase, as Peñafiel reproduces in his reconstruction.

(or in a more positive light, "allied") towns.[383] Instead warrior societies are possibly alluded to through abundant depictions of animals that probably served as metaphors, which is an approach more in tune with earlier imagery from Teotihuacan and other Central Mexican cities prior to the Epiclassic period.

Formal details of the Feathered Serpent Pyramid appear to quote the content of both Maya and Teotihuacan traditions, but the traits are used in a context unlike their possible sources. On the one hand the Teotihuacan components are thematic as opposed to visual; they represent ideas, but not specific forms of representation. On the other hand, some of the conceptual underpinning—such as the emphasis on figures juxtaposed with glyphs and the depiction of the human body with bare torso with ornate headdress and accoutrements—are more characteristic of the Maya than Teotihuacan. Maya imagery tended toward individualization and humanization of the human figure, while Teotihuacan representation leaned toward almost mechanical standardization in sculpture and painting. The pose of the ten cross-legged figures shown frontally with head in profile on the lower sloping base of the Feathered Serpent Pyramid (figs. 181-185) cites a seated pose from Maya rulership contexts in monuments, elite ceramics, and jades (fig. 180a), mentioned repeatedly in the literature from the nineteenth century and more often in the twentieth,[384] but they are recast in an standardized way uncharacteristic of the Maya style. Although this repetition of seated figures has been compared with those on Copán Altar Q (ca. 426-427)

[383] Other details that have been identified as appearing only on this monument are the distinctive cut shell ornament and the belly-up pose of the serpent (Smith 2000: 60). Although the shell motif from the Feathered Serpent Pyramid has been identified with what in Aztec times was known as the *ehecailacacozcatl*, the cut shell emblem worn by Quetzalcoatl (De la Fuente, Arellano et al. 1985: 177, 205), it is unclear that the same meaning is intended here, because the element appears dispersed throughout the composition, often serving as a border element, and is not worn as insignia.

[384] Litvak King 1972: 63.

(fig. 180b),[385] the Maya version has figures differentiated by costume and glyphs. The Xochicalco image adopts the idea of Maya-type figures, while it eschews stylistic features such as the sensitivity to the body and the attention to detail that are hallmarks of the Maya style.

At Xochicalco the figures are instead cast in a means of expression more in tune with representation known from Teotihuacan, based on repetition and undifferentiated figures, clad in identical costume and the rendered in identical pose (fig. 186). However, significantly at Xochicalco the profile heads on the lower *talud* are not made from the same pattern. Although they are not differentiated by glyphs or regalia, they clearly have different profiles (figs. 187), which would appear to result from the hand of different artists.[386] Even though the feathered serpent is well-known from Teotihuacan, there it usually occupies borders and only rarely does it occupy a central field.[387] In the Maya region, feathered serpents often appear in functional forms as headdresses in contexts suggesting a desire to convey the idea of the city's ties with Teotihuacan (fig. 188),[388] but not as the central focus of compositions.[389] At Xochicalco, the creature continues to serve

[385] Escalona Ramos 1952-53 cited in ibid..

[386] Some of the figures display greater skill in the execution of details such as hands, ornaments, facial features, and details of the headdress than others. I would suggest figure AN2 (fig. 181, 187) was executed by the most skilled sculptor and may have been the model that the sculptors were supposed to follow. The other figures display minor variance in details, some of which may have arisen from a lack of comparable skill or a misunderstanding of what they were supposed to represent. For example, AN2 displays the delicate gumline above the creature's teeth in the headdress, echoing the treatment of the gumlike of the feathered serpent, while AE3 has transformed this row of teeth into emblems for jade beads. There mayi have been seven or eight different hands involved in the carving of these seated figures, but for the moment, this remains a topic for further study.

[387] Sugiyama 2005: 248, footnote 5.

[388] Taube 1992: 60ff.

[389] However, the Maya feathered serpent headdress tends to have the lower jaw framing the wearer's well as the creature's head often has a nose tuft (Taube 1992: 61, fig. 6d-e to 9a) sprouting feathers, which are

as a framing device as seen at Teotihuacan (figs. 174-175), but it is visually retooled into a composition capable of serving as a powerful emblem of the city through scale, repetition, and the magnificence of a building encased on polychrome sculpture.[390]

The personages on the Feathered Serpent Pyramid wear three principal headdresses: a feathered creature on the lower *talud* (figs. 181-185), a trapeze-and-ray headdress on the *tablero* (fig. 176), and a balloon headdress on the upper *talud* (figs. 177, 189). Even though they might allude to types known at Teotihuacan, they seem to draw on Southern Maya visual conventions in their configuration, but with a distinctive local touch. The trapeze-and ray and balloon headdresses are among the principal types of evidence of Teotihuacan interaction in the Maya region or Maya emulation of emblems of power from the metropolis (figs. 176, 190), and at Xochicalco they appear together at a later date in a single monument. At Xochicalco the seated figure on the lower *talud* base of the monument wears a headdress that has traditionally been identified as that of a feathered serpent (Piña Chan 1977: 31; Smith 2000: 65). However, upon closer inspection it actually appears to represent a different creature. The headdress on the Feathered Serpent pyramid at Xochicalco differs from the serpent headdress of the Señor Yelmo de Serpiente (fig. 113) and Stelae 1 and 3 (fig. 41) from Xochicalco that clearly display a serpent, given the bifurcated tongue below the wearers' chin. It also differs clearly from the head of the feathered serpent framing the seated figures on the pyramid. Leonardo López Luján (1995: 57) identifies it as an Earth Monster, an interpretation that I basically concur with, but it merits closer examination.

The headdress crowning the figures on the lower *talud* of the Feathered Serpent

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depicted on the complete serpents on the Feathered Serpent Pyramid, but not on the Feathered Serpent headdresses worn by the human figures

[390] The power of the imagery particularly of the lower sloping base of the Feathered Serpent Pyramid is attested to by pieces that appear to refer to it. This is the case of a greenstone plaque found in an offering at the Templo Mayor (see footnote 153) as well as by a clay relief from Xochicalco itself that apparently alludes to the seated human figures (González Crespo, Garza Tarazona,1995: 236, fig. 23).

Pyramid consists of two parts: the creature's head and the creature's headdress (fig. 191, 193). The head lacks a lower jaw, has a neat row of small teeth (without fangs), a volute with a double outline delineating the segment constituting the snout, a ring eye with an ear-shaped volute brow next to an emblem with three bands, while the headdress has what Smith (2000: 68, 71) calls a tassel loop on top of the head with tiers of long feathers hanging down the back. This "tassel loop" is actually a small headdress on top of the creature's headdress (fig. 193a), which in turn sits on the head of these seated figures. It most closely resembles the smoking element on top of each of the monumental Reptile's Eye glyphs on the same monument, but in miniature (fig. 193b).

Feathered Serpent headdresses are represented in portable ceramic pieces from Teotihuacan that tend to have a curling snout forming a small hook at the tip of the snout, a feathered eye, and lack a secondary headdress (fig. 133). However, the Xochicalco bas-relief headdress is more like the three-dimensional, frontal isolated headdress alternating with the feathered serpent head (fig. 192a-b) on the Feathered Serpent Temple at Teotihuacan,[391] where the crocodile head wears a secondary headdress that resembles the bow element lying horizontally on top of the headdress terminating in feathers or flames (fig. 192b).[392] The lack of lower jaw, the absence of fangs, the headdress worn on top of the

[391] Sugiyama 2005: 69: fig. 25a.

[392] The small projecting element clearly set on top of the serpent's head at Xochicalco also resembles the bell-motif described by Taube in connection to mirrors (Taube 2000: 27, fig. 20f). More recently (Taube 2005: 43ff) has identified this element as a profile jade earspool, which he connects to Maya jade symbolism, representing breath, and wind, particularly in the context of royal Maya ancestors depicted on the Xochicalco Feathered Serpent Pyramid. At the same time, Taube (1992: 65-66) identifies a different body of terracotta figurines from Teotihuacan as wearing a Trapeze-and-Ray headdress; however, it is not clear this emblem is indeed represented on these headdresses.

Early handmade figurines from the Miccaotli period (Taube 1992: 66: fig. 10c-d) show figures or perhaps idols placed on a throne and wearing a stylized headdress that more closely resembles the emblem known as the Teotihuacan imbricated Trapeze-and-Ray sign. Whether this represents the same headdress show in late moldmade figures from the Metepec phase (ibid.: fig. 10e-f) is not convincing because the

creature's head, the presence of feathers, round eyes, stubby snout of the reptilian head (in contrast to the elongated snout of the nearby feathered serpent), and the notion of eye scrolls are features shared by both monuments. Sugiyama (2005: 73) presents persuasive evidence for making a clear distinction between the feathered serpent and this headdress creature. He identifies the latter as the "Primordial Crocodile, . . . a traditional deity of creation and divine authority involved in Mesoamerican cosmogenesis . . . a predecessor of the Postclassic Mexican deity, Cipactli," while the feathered serpent embodied the city's warfare and sacrifice complex (ibid.: 73, 84).

It was fitting to position this primordial creature at the foundation for rulership alternating with the undulating body of the feathered serpent (just as the original Teotihuacan temple) as the foundation for developments at Xochicalco by depicting it on the lower sloping base of what became the city's premier monument. In many ways like the Teotihuacan image that was apparently its conceptual prototype, the juxtaposition of the prominent feathered serpent is balanced by the depiction of human figures wearing the headdress that appears in secondary position at Xochicalco, echoing the equilibrium noted by Sugiyama of the headdress emblems, which are in fact larger than the feathered serpents' own head.[393] However, the Xochicalco headdress did not slavishly copy the Teotihuacan prototype. Instead, it incorporated Maya formal or stylistic details: the *pop* or woven mat sign;[394] the ear-shaped scroll element above the serpent's eye (fig. 188);[395] and

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features of the headdress are sufficiently different to question the identification of all of them as feathered serpent headdresses.

[393] The symbolic dimension of this equilibrium has been noted by Sugiyama (2005: 84), who identifies the feathered serpent as a manifestation of the warfare and sacrifice complex at Teotihuacan, while the headdress symbolism is interpreted as alluding to the origin of the cosmos and of time/the calendar.

[394] As noted by Smith (2000a: 64). This glyph also appears in Teotihuacan mural painting (e.g., Berrin and Pasztory 1993: 136-137) and is often referred to as an interlaced band, considered a variant of the movement glyph and a counterpart of the Maya month glyph Pop (Langley 1986: 232-233).

the long plumes cascading down the wearers' backs more characteristic of Maya representations where rulers and their kinsmen were commonly portrayed wearing headdresses dripping with feathers (fig. 190). Significantly, the treatment of the details and their assemblage at Xochicalco differ from Maya prototypes. The mat or *pop* sign is standard element in Maya headdresses; at Xochicalco it is a diminutive element, while it tends to feature prominently in Maya headwear (fig. 194).[396] Similarly, the idea of the ear-shaped scroll is akin in conception, but not visually; in Maya examples it is not rendered as an outlined element, but rather as a symmetrical, solid surface. Therefore, the feathered headdress worn by the figures on the Feathered Serpent Pyramid appears to be a combination of the components from the headdress emblem represented on the original old Feathered Serpent Temple at Teotihuacan combined with minor formal innovations made in the headdress inspired by ideas from the Maya region, although apparently not by visual models.

In contrast, another frontal helmet version of the feathered serpent headdress is worn by the human figure on the front of Xochicalco Stelae 1 and 3 (fig. 41). However, in these cases, the serpent's head completely encases the wearer's head. The serpent has round eyes, jeweled nose ornaments, curvilinear volutes mirrored backward S-shaped scrolls forming the nose and upper lip, fangs, and a bifurcated tongue (fig. 195).[397] This type of feathered serpent headdress is best known in examples from the Maya region, in

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[395] These resemble details in Maya images; see Taube 1992: fig. 6a, c, d, fig. 7a, e, f, fig. 8a, d, 9a

[396] As discussed by Stone (1989: 162).

[397] The Xochicalco stelae serpent headdresses do not actually display feathers, perhaps because the serpent took precedence over the feathers, which would have been difficult to accommodate given the emphasis on glyphs in the cramped composition.

monumental sculpture particularly at Piedras Negras (fig. 135)[398] and in portable jade pieces (fig. 196),[399] where it is presumed to enhance the status of the ruler depicted.[400]

Therefore, the feathered serpent headdress worn by the seated figures at Xochicalco seems to refer to a type whose iconography originated in the headdress emblem on the early Feathered Serpent Pyramid at Teotihuacan, but that was transformed in the Maya region. There it became a foreign military costume linked to Teotihuacan prestige worn by the rulers of Maya city-states.[401] Similarly, the headdress on the stelae also seems to derive from Maya precedents. However, the question remains: to what extent do the forms replicate the meanings of the different contexts? As for the feathered serpent in Teotihuacan, Sugiyama (2005: 62) specifically acknowledges that the Feathered Serpent was rarely represented with martial objects. Instead, he states that it appears on balustrades and mural borders in contexts linking them to sacrificial rituals, blood, authority, the planet Venus, while Leonardo López Austin has emphasized its role as the original bearer of time and as a creature that defined space.[402] Sugiyama goes on to note the headdress worn on the body of the Feathered Serpent on the Temple of the same name represents the Primordial Crocodile, a symbol of creation and divine authority, an idea in consonance with the

[398] Stelae 6,. 8, 26, 40 in Stone 1989.

[399] Proskouriakoff 1974.

[400] The addition of the jeweled noseplug is a formal detail that also appears in Late Classic contexts at Piedras Negras (Stela 5-Proskouriakoff 1950: fig. 15, v'; Stela 7 REF), Copán (Stela D; Proskouriakoff 1950: fig. 15, s'), Yaxchilán (Stela 4 and Structure 20, Lintel 14; Proskouriakoff 1950: fig. 15, u', z') and is also seen in the Northern Maya Lowlands perhaps in the Early Classic at the frieze at Acanceh (Taube 1992: fig. 8a; 2000: fig. 19e), and later at Chichén Itzá, where it is said to represent the sacred breath of the deity (INAH 2014) and Uxmal (INAH 2014).

[401] The idea that the meaning or nuances of the feathered serpent changed through time exemplifies George Kubler (1985)'s idea of disjunction. Molina and Kowalski (1999: 152) have also noted that the feathered serpent had a different meaning in Epiclassic Xochicalco than it did for the later Aztecs, who combined the features of the deity with a legendary priest-ruler from Postclassic contexts.

[402] Sugiyama 2005: 62-68, 73.

creature's cosmological role. For the Maya region, Stone (1985: 164), noting the persistence and sustained use of Teotihuacan imagery from AD 620-735 at Piedras Negras, observes the election of these traits at this and other Maya sites often occurs after the decline of Teotihuacan. Nevertheless, she suggests these traits were chosen at a time of local political expansion in which local rulers donned the Teotihuacan military costume as part of a strategy to augment their status by claiming a foreign pedigree.

In the Maya region, it would seem that the feathered serpent headdress plays a role strongly linked to militaristic iconography and ruler authority, while the cosmological dimension as the original bearer of time and marker of space is downplayed, perhaps in part because the Maya already had a highly sophisticated calendrical system, anchored to a fixed date of origin, versus the cyclic nature of Central Mexican calendrics. Although both northern and southern Mesoamerican traditions shared the component of conveying divine authority, Xochicalco might have chosen the formal means of representing the headdress from Maya conventions, but it retained more of the underlying meaning of the feathered serpent and the headdress from ancestral Teotihuacan,[403] while not necessarily embracing the warrior costume complex developed in Maya contexts. Unlike Maya contexts, the Xochicalco feathered serpent and the figures wearing its headdress lack overt emblems of warrior status,[404] which is in tune with the use of these emblems in Teotihuacan. The creature and the headdress appear in a section of the monument devoid of overt martial

[403] Smith (1988: 194) cited in Molina and Kowalski (1999: 152) has also identified the feathered serpent at Xochicalco as a "composite dragon associated with earth, water, fertility and blood . . . a tutelary deity and a symbol for authority," an interpretation in harmony with Sugiyama's assessment (2005) of the feathered serpent in Teotihuacan.

[404] An incomplete figure is shown on the side of the stairway on the lower level, however, given the semblance of other costume elements—rectangular shield with feather pendants, a bundle of arrows, the object identified by Smith (2000: 73) as *atlatls* or spearthrowers—suggest it resembled the balloon headdress warrior from the upper sloping wall of the monument.

content, occupied solely by a glyphic combination: 9-Reptile's Eye. Its conceptual adoption juxtaposed with more contemporary Maya referents make sense in an interconnected world where authorities in power were sensitive to developments in other areas and eager to incorporate visual keys to enhance their status.

Another key element in the iconographic program of the lower *talud* is the enormous Reptile's Eye Glyph, which appears six times accompanied by the coefficient nine in bar and dot numbers (fig. 175, 197). The origin of the Reptile's Eye glyph is generally regarded as Teotihuacan, where it is most frequently in carved or molded portable ceramics identified with popular rites and not state-level ceremonies, because it appears only rarely in mural painting (fig. 198).[405] It is one of the emblems from Teotihuacan that appears in diverse contexts throughout the Epiclassic and Early Postclassic period, only to disappear after that time.[406] Perhaps its pervasiveness in Teotihuacan ceramics served as a means of transmission far and wide. In Teotihuacan the glyph generally appears without numerals,[407] but outside of the metropolis, it is frequently paired with diverse numerals: 2, 4, 7, 8, 9, or 12, which suggests it may have served different purposes in Epiclassic and Early Postclassic contexts.

The meaning of the Reptile's Eye glyph is still debated and is beyond the scope of the present discussion to resolve, but a few additional comments are in order. Von Winning (1987.: 2:75, 77) suggests the sign refers to the eye of the mythical earth monster later known as *cipactli* and by extension links the glyph at Teotihuacan with the earth and

[405] Von Winning 1987, 2: 73, 76.

[406] Ibid.: 2: 77-78.

[407] Ibid.: 2: 73-74. However, Caso (1967: 145-146) illustrates an unprovenienced Teotihuacan-style tripod vessel bearing a turquoise glyph and what is identified as a 7 Reptile's Eye, although it lacks the diagnostic dots and curl over the eye.

fertility, while Laurette Séjourné[408] identified it as a butterfly with associated flower and bird symbolism, as well as with Tlaloc (the Storm God) and destruction by a rain of fire. Meanwhile, Alfonso Caso (1967: 161) identified the specific combination 9-Reptile's Eye as the birth date and thus the calendrical name of Quetzalcoatl, the feathered serpent, largely on the basis of its appearance on the Xochicalco Feathered Serpent Pyramid, while Von Winning (1987, 2: 77) linked 7-Reptile's Eye[409] with year bundles for new fire ceremonies, and Caso (1967: 168-169) suggested it is the name of a goddess shown on Xochicalco Stela 1[410] and the Ixtapaluca plaque. More recently, Smith (2000: 65, 85) has interpreted the 9-Reptile's Eye on the Feathered Serpent Pyramid as a personal name, as opposed to a calendrical, glyph, for the human figure repeated on the lower *talud,*[411] while 7-Reptile's Eye is regarded as a name for a different member of the city's ruling elite depicted on Stela 1.

A cursory look at the use of the Reptile's Eye glyph in contexts other than Teotihuacan reveals several interesting points (see Table 2 below). To date it would appear that 9-Reptile's Eye appears principally at Xochicalco, while 7 Reptile's Eye is the combination that has the most widely dispersed distribution in Mesoamerica. Six smoking Reptile's Eye glyphs, which are rendered with slight differences in each case (Smith 2000: 65), alternate with the seated figures on the lower *talud* of the Feathered Serpent Pyramid.

[408] Cited by Langley 1986: 280.

[409] The 7-Reptile's Eye appears on Xochicalco Stela 1, the Four-Glyph Slab, and the Two-Glyph Slab.

[410] See also Pasztory (1976).

[411] The 9-Reptile's-Eye glyph is repeated 6 times on the Feathered Serpent Pyramid, while the figure that it is apparently intended to be named appears ten times, a discrepancy that in my mind would undermine this interpretation.

The fire significance of some Reptile's Eye glyphs is suggested through representations resembling smoke or a fire bundle, or abbreviated as the double-comb sign (fig. 199)[412] while the association with the earth known at Teotihuacan is echoed in the Palenque example, where Pakal's ancestors rise intertwined with fruit-bearing trees from an earth band identified with these emblems. There is some debate as to whether the glyph could have served as a date, specifically as an equivalent to the later *cipactli*, an aquatic crocodilian creature that represented the first day sign of the Late Postclassic 260-day ritual calendar,[413] or whether it was associated with this creature, but was not a day sign but rather an individual's name.[414] Whether these signs represent names for individuals, deities, dates, or dates as names in these diverse contexts is unclear, although it is possible that the meaning was polysemic and dependent on the context.

Table 2: Use of Reptile's Eye Glyph (based on Von Winning 1987, 2: 76-77 plus author's additions).

MONUMENT	2 R-E	4 R-E|	7 R-E	8 R-E	9 R-E	12 R-E	No number
Ixtapaluca plaque (Chalco)			Goddess				
Mixcoac				Round stone			
Piedra Labrada, Veracruz, Stela 1			With fire bundle on top in glyphic context				
Maltrata, Veracruz						Boulder sculpture with feathered serpent	
Texmelincan, Guerrero, Slab						Juxtaposed with Year Sign	
Tula, Hidalgo, slab; Maya blue paint	Slab to cover drain						
Tula, Hidalgo, Burnt Palace Slab		With warrior and RE in cartouche					
Xochicalco, FSP					6 in smoking		

[412] Von Winning 1987, 2: 77.

[413] Ibid.: 75.

[414] Smith 2000a, 2: 64.

					cartouche with vase-shaped element		
Xochicalco, Stela 1			In feathered cartouche in vase-shaped element w/ feathered serpent helmet				
Xochicalco, Four-Glyph Slab			In cartouche				
Xochicalco, Two-Glyph Stela					In rectangular frame with vase-shaped element		
Cacaxtla, Building A, south jamb			Red-haired figure (corn) emerging from shell				
Cacaxtla, Building A, north jamb			Standing figure holding Tlaloc vessel				
Palenque, Temple of the Inscriptions, Pakal's Sarcophagus							Shown in an earth band below ancestors

In the case of Xochicalco, the 9-Reptile's Eye glyph on the Feathered Serpent Pyramid is of importance equal to that of the seated human figures. The underlying question regarding this pyramid's iconography is whether the feathered serpent, seated figure, and glyph are all synonymous expressions of a single deity or idea, expressions of a broader but related complex of ideas, or distinct entities. The assumption has generally been the first: the three have traditionally been identified as references to the feathered serpent as royal predecessors associated with the creature[415] to priests of the cult dedicated to the legendary Quetzalcoatl.[416] On the one hand, identifying them as distinct identities does not seem compatible with the evidence. On the other hand, there seems to be more at play then solely Feathered Serpent iconography. The seated figures wear a headdress that

[415] Ibid.: 79.

[416] See Caso 1967; Piña Chan 1977. In this regard, I agree with Smith (2000: 64-65) that the Feathered Serpent at Teotihuacan and Xochicalco differed from the Postclassic Quetzalcoatl associated with the wind god (Ehecatl) and the legendary Toltec priest-ruler Ce Acatl Topiltzin Quetzalcoatl. For an alternative interpretation, see Aguilar (2002).

contrasts with the head of the feathered serpent, and instead seems to be an earth monster or *cipactli* headdress, as known from the old Feathered Serpent Temple at Teotihuacan. Furthermore, what is significant is the prominence with which this bursts onto the scene in Mesoamerica, where it appears primarily (if not exclusively, at least to date) on the preeminent monument at Xochicalco. The glyph has been identified as the eye of this earth monster[417] and as the sign for wind or Ehecatl.[418] The seated figure and glyph overly display fire symbolism in the smoking element crowning each of them. Xochicalco's audacity in visual expression is underscored by the innovative emphasis placed on glyphs in public expressions in the Central Highlands.[419]

Therefore, in the case of Xochicalco it seems that the *talud* imagery was intended to be both a revival of ideas from the past from an early, iconic monument in Teotihuacan juxtaposing two powerful entities (feathered serpent and earth monster), but reformulated in an ideology of renewal drawing on non-local, predominantly Maya conceptual or visual sources, in which the feathered serpent, identified with the new date 9-Reptile's Eye and emblems of rulership in the form of the seated figure were intended to convey this new beginning: a new form of authority literally within the framework of the feathered serpent's undulating body. Although the seated figures appear to be drawn from Maya rulership imagery, the anonymous, repetitious nature of the figures undifferentiated by insignia or glyphic inscriptions, differentiated instead by physiognomy, suggest the image of a created

[417] Von Winning 1987, 2: 75.

[418] Caso 1967: 164.

[419] Additional evidence of Xochicalco's eagerness to implement innovative expression may be found in its use of glyphs suggesting a calendrical change in a shift in year bearers (Caso 1967: 182) identified on the western *talud* of the Feathered Serpent Pyramid (Noguera and Cook de Leonard cited by Smith 2000: 66). Smith (2000: 66ff) disagrees with the interpretation of a calendrical correction and instead interprets the glyphs as recording a sociopolitical Alliance important in Xochicalco's history.

dynastic lineage of rulership set on a supernatural plane connected not only to the feathered serpent, but also with to timeless emblem of the earth monster, alluding to the primordial origin of the cosmos. As for the numeral coefficient, Thompson (1950: 53-54, 93) presents abundant examples of the propitious nature of the numeral 9 in modern and ancient Maya contexts. It is the most frequent coefficient, with the numeral 7 in second place, for dates other than period ending dates (ibid.: 91).[420]

Turning now to the twenty seated figures on the *tablero* panels surmounting the sloped based of the Xochicalco Feathered Serpent Pyramid, they wear the Trapeze-and-Ray headdress (figs. 176, 201). The seated figures are the same, but are differentiated by glyphs and they hold either a triangular bag or an oval container with a large handle. The same headdress is also prominently displayed on the head of the Storm God with prominent goggles on Stela 2 (fig. 202). It first appears in diverse media at Teotihuacan as an independent emblem or worn as a headdress presumed to be associated with time, so it is often known as the Year-Sign. However, at Teotihuacan it is shown imbricated (overlapping) and not interlaced, which is a form that also appears in Late Classic Maya monuments.[421] Moreover, the insignia composed of an interlaced trapeze-and-ray sign headdress combined with goggles generally shown on the wearer's eyes are known from monuments in the Southern Maya Lowlands (fig. 145, 203, 204), where monuments generally display this iconography in dynastic contests depicting the ruler as a valiant

[420] However, in terms of specific combinations, the most oft cited date in Maya inscriptions other tan period ending dates is 6 Caban (equivalent to 6 Movement) (Thompson 1950: 89), followed by 7 Imix (equivalent to 7 Cipactli or here 7 Reptile's Eye), while the third most cited date is 9 Ik (equivalent to 9 Wind, or 9 Reptile's Eye according to Caso's interpretation the glyph (1967).

[421] Langley 1986: 293.

warrior who had alleged ties to Teotihuacan.[422] Although the origin of the Trapeze-and-Ray may be traced to Teotihuacan, the form it assumes at Xochicalco has closer parallels to the Southern Maya region (fig. 204), where it appears interlaced and with a pointed ray, similar to the Xochicalco form. Furthermore, the use of goggles in the absence of the Storm God's long-fang-like teeth is more common in Southern Maya imagery (fig. 205) and later Early Postclassic imagery at Chichén Itzá and Tula, than in the Classic period Central Highlands.

The third prominent headdress on the Feathered Serpent Pyramid is the balloon headdress (fig. 189), which is worn by at least six figures on the upper *talud* (fig. 177). At Xochicalco this headdress is characteristic of seated figures sporting long hair, a beaded or feathered collar, and armed with spears, a shield, and perhaps a spearthrower. This headdress is known from Teotihuacan figurines (fig. 207) and in Maya monuments and ceramics (figs. 190, 203, 204) showing the ruler in his military capacity. Sometimes in Maya monuments (figs. 203, 206) and elite ceramics (fig. 204), the balloon headdress is combined with the Trapeze-and-Ray sign (figs. 190, 203, 204, 206), or other Teotihuacan features such as the Storm God (figs. 203, 204, 206) or a frontal owl (fig. 190). The subject of this headdress will also be revisited in chapter 6 on the Cacaxtla murals, which raises additional questions. All of these examples show there was considerable awareness of non-local iconography and signs throughout Mesoamerica, as well as willingness to adopt foreign traits. Of all of the headdresses with ancient roots at Teotihuacan, it is an unlikely coincidence that the three types of headdresses chosen for the Feathered Serpent Pyramid are precisely the ones that were spread in the Maya region and embraced by the local polities. These outsider traits might have been mutually attractive in their respective contexts in diverse Maya polities precisely for their exotic status and the aura of authority

[422] Such as Tikal, Aguateca, Dos Pilas, Yaxchilán, and Copán (Nagao 1989).

that surrounded Teotihuacan. In waves of interaction back and forth between the Central Highlands and the Maya region, these traits spread freely from one site to another and then back again. Scholars re-examining Early Classic interaction between Teotihuacan and the Maya region[423] have amply demonstrated a variety of interaction patterns with equally varied impacts expressed in monumental and portable remains from Copán, Tikal, Kaminaljuyú and the Pacific Coast of Guatemala, as well as centers more even distant geographically and temporally, such as Altún Ha and Oxkintok. This evidence attests to an early date for widespread interaction between distant regions, especially at elite levels of society, which would help to explain the use of non-local iconographic elements in monumental arts.

Also important to address in how this group of pieces with non-local ties relates the larger contexts of the corpus of Xochicalco monuments, as well as Mesoamerican three-dimensional sculpture. Clearly some of the examples mentioned above must have been major masterpieces at the site given the excellence of their technical finish and evidence of skill required for their production. However, they constitute a small portion of the body of three-dimensional works and an even smaller part of the corpus at the site, if two-dimensional works are also taken into account. Other pieces seem to be of purely local invention. This is to be expected in a center seeking to develop its own distinctive identity that would it apart from other centers, instead of suggesting affiliation by copying or imitating failed models. Therefore, in this quest for new forms of expression, a number of monuments appear to be unique to Xochicalco.

Discussion

At Xochicalco it was the two-dimensional monuments that embodied the city's

[423] Such as Geoffrey Braswell and other contributors to his 2003 volume.

hallmark style, best exemplified by the reliefs covering the Feathered Serpent Pyramid, the three stelae, and a number of other free-standing monuments found throughout the site. Only a small number of three-dimensional pieces bear glyphs at Xochicalco; glyphic monuments are for the most part sculpture carved in relief.[424] Another feature of many of these monuments is the use of a plain rectangular frame around the entire composition or around glyphs. All of these monuments were probably covered with a layer of stucco and pigment, only traces of which have survived, while other pieces were covered in cinnabar (e.g. "El Marcador" and the three stelae).[425]

At Cacaxtla the tendency has been to speak of a pure Maya style, based essentially on the site's spectacular mural painting, while at Xochicalco, references to the Maya are more aptly described as Mayoid. However a closer examination of sculpture seems to tell a different story. Only a small number of Cacaxtla's sculptural pieces evoke comparison with Maya sculpture. On the other hand, although Xochicalco offers more numerous points of comparison with Maya monuments, these connections are iconographic more than stylistic, conceptual more than visual. Only occasionally does it appear that Xochicalco artists resorted to a Maya visual solution; the trapeze-and-ray sign is a case in point. Overall, the

[424] These include the standing figure holding a serpent and the carving with the crescent-shaped moon (see Appendix A).

[425] Sáenz (1962: 69) identified this cinnabar layer as part of the "death" of the stelae in an internment ritual, but the stelae and "El Marcador" were probably red when they were *in situ*, because the tenon on these monuments lacks pigmentation. The notion of entirely red monuments is not unusual in Mesoamerica. The Feathered Serpent Pyramid shows evidence of red pigment over underlying polychromy.

Garza Tarazona and González Crespo (2004: 202) state that most sculptures at Xochicalco were covered with a thick layer of stucco that covered the original message beneath, citing the Two-Glyph Stela, which Noguera 1934-1935) first reported as a plain stone covered with stucco. It was not until the next excavation season that he discovered it actually had carved glyphs (10 Reed and 9 Reptile's Eye). Garza Tarazona and González Crespo interpret this stucco layer as an act of iconoclasm stemming from a philosophical-religious shift. However, the stone may simply have been reused given the rudimentary incising of the glyphs in the stone, which would be easy to cover with stucco. Hirth (2000, 1: 221) has noted that plain stela could have been painted with information. The use of painted information would have allowed for greater flexibility in response to changing needs in recording specific dates or names of individuals.

examples of Cacaxtla and Xochicalco sculpture do not form a cohesive corpus; instead they represent a diversity of styles and types, which despite their vague resemblances to other known traditions, appear to be distinctively local in various ways. This variety of diverse forms of expression contrasts with the uniformity of Teotihuacan's earlier production and could be interpreted as part of an ongoing search for a visual identity for these newly prominent centers. At the same time, they both suggest an awareness of trends in other parts of Mesoamerica, which must have resulted not only from the movement of goods but also of bearers of these goods as well as elite interaction.

Although some of Xochicalco's conceptual sources can be traced to the major centers or regions of political prestige, their visual sources were more heterogeneous. For example, Xochicalco seems to have devised its own distinctive type of serpent. Teotihuacan serpents displayed diversity, but tended to include "essential elements": "serpent head, 'bird eyes,' curling snout, wide mouth with backward-curving fangs (without incisors or molars), bifurcated tongue, eyebrow with curled-up end, feathered body, and tail rattles" (Sugiyama 2005: 60). Significantly, the Xochicalco serpent from the Feathered Serpent Pyramid lacks most of these key features, retaining only four of the most general of the eight features: the serpent head, some backward-curving fangs, a bifurcated tongue, and eyebrow with curled-up end. Instead of a rattlesnake tail, the Xochicalco serpent has a symmetrical hat-like shape with feather panaches. In the Maya region during the Classic period, serpents generally lack feathers, are more likely to appear on painted cylindrical vessels, and only rarely in monuments, which tend to focus on rulers. The Maya version of this deity is referred to as the Water Lily Serpent and is often depicted with a water lily leaf or flower and spiral swirls of water on the body with a quetzal feather crest on the back (Martin 2013: 533-534, fig. 11.7). Significantly, this description—but not the Maya style

depiction—might explain the repeated shell-like curl attached to the Xochicalco feathered serpent's body (figs. 85, 87), not known from Teotihuacan. What's more, representations in the Maya region lack rattles, which begin to appear in contexts labeled "Toltec" primarily in the Northern Maya Lowlands in the Early Postclassic period.

The Feathered Serpent Pyramid at Xochicalco seems to draw on numerous concepts from Teotihuacan (feathered serpent, primordial crocodile). However, they reformulated this original inspiration by turning to generalized iconographic ideas from the Maya world to seek solutions. The seated figures on the lower courses of the Feathered Serpent Pyramid remind us of Maya monuments. Did they evoke the same response among the people of that time? Following Baxandall's (1985, 1988) discussion of the diverse capacities of viewers at a given time, I would suggest that at least some viewers were aware of these visual echoes and that they were intentional. It is interesting that the patrons and artists of Xochicalco chose to employ a number of fundamental ideas from Teotihuacan, but to clothe them in apparently Maya visual imagery. Yet they did so in such a way that the result could not truly be called Maya. Instead, it had to be different. It was not intended to boast the city's actual social, political, and economic ties, which seemed to be directed not to the Maya region, but to areas near and far within the Central Highlands. The visual program of the Feathered Serpent Pyramid was planned to evoke a desired identity, one of elegance, grandeur, and civic pride for this newly founded center.

Chapter 6: Competing for Attention: Cacaxtla Murals and Xochicalco Polychromy

Stone and terracotta sculpture was the art form par excellence for Xochicalco, but these media played a lesser role at Cacaxtla, where mural painting was the city's premier means to express identity during a certain phase of the site's life.[426] The following discussion takes into account the ground-breaking work on materials employed in Mesoamerican mural painting by Diana Magaloni Kerpel within the framework of Beatriz de la Fuente's mammoth research and publications project focusing on pre-Hispanic mural painting in Mexico, as well as the former's insightful work on the subtle meaning attached to specific materials in different cultures. The category of mural painting in conjunction with the information available on materials employed in the creation of these works introduces the notion of portability not present in the preceding discussion of architecture and sculpture. Evidence of the use of Maya blue—a distinctive paint based on an organic blue pigment probably from the indigo plant combined with a palygorskite clay either as

[426] Prior to the Epiclassic period, mural painting has deep roots in Mesoamerica, with surviving examples of Preclassic Olmec-style murals known from caves (ca. 100 B.C., e.g., Oxtotitlán, Juxtlahuaca, and Cacahuaziziqui in Guerrero; Zohapilco, State of Mexico; Lombardo de Ruiz 1996), later examples on Preclassic Maya architecture (e.g., San Bartolo in Saturno 2009, Savkic 2013) and in Classic period Southern Maya cities (e.g., Bonampak, Calakmul, Toniná, Palenque, Yaxchilán in Magaloni 2001: 156), covering the walls of some monumental structures and the interior walls of apartment compounds in Teotihuacan (Miller 1973), as well as the walls of underground tombs in Oaxaca (Miller 1995; Magaloni 2010). Late Classic or Epiclassic murals are also known from Cholula, another site in the Puebla-Tlaxcala region, as well as at El Tajín, Las Higueras, and El Zapotal in the state of Veracruz (Ladrón de Guevara 2005; Wylie 2010), while mural painting went on to flourish in the Northern Maya Lowlands at Chichén Itzá and numerous sites on the coast of the peninsula (*Pintura Mural Prehispánica* vol. 2, tomos 2-3, 2001). These numerous examples clearly attest to a long-standing, well-established tradition throughout different regions in Mesoamerica.

attapulgite or saponite[427] or sepiolite clay, both geologically restricted to the Yucatán Peninsula and Guatemala—can be found throughout Classic to Postclassic periods Mesoamerica,[428] in the Maya region, the Gulf Coast, and Cacaxtla and Xochicalco, but not in Teotihuacan and Zapotec murals.[429] Researchers believe it was first developed in the Southern Maya region in the Classic period during the fifth or sixth centuries.[430] Therefore, Maya blue was one of the luxury materials in high demand for elite consumption in the Mesoamerican exchange system, in addition to jade, turquoise, shells, feathers, and animal pelts, to name a few. Magaloni (2001: 174) notes the homogeneity of the use of this color in Postclassic sites as evidence of the long-distance, widespread commercialization of pigments in standardized formats, referred to as *panecillos de color* (color tablets) mentioned in sixteenth-century sources. However, the use of Maya blue at Xochicalco in conjunction with the absence of evidence of the participation of Maya artists in the painting of murals would suggest this portability of the raw material (whether as prepared pigments or in the form of the clay) as well as of knowledge of its technology must have had earlier roots in the Epiclassic period.

Beyond their beauty, what makes the murals of Cacaxtla remarkable is the enigma of their strong evocation of the Maya style in the Central Mexican Highlands, far from the Maya heartland in the tropical lowlands of southern Mexico, Guatemala, Honduras, and Belize. The discovery of Cacaxtla's vibrant, polychrome murals in 1975 triggered enormous interest in the site and in cultural changes stemming from Teotihuacan's

[427] Magaloni 2001, 2: 179.

[428] Magaloni 2010: 66.

[429] Reyes-Valerio 1993; Magaloni 1996, 2001, 2010, 2014.

[430] Houston et al. 2009.

declining influence in Mesoamerica, resulting in a proliferation of interpretations and publications (see chapter 2 for an overview). The purpose here is reassess specific aspects identified with non-local input, which obviously encompasses the entire albeit small corpus, given that they are executed in a style that has most often been termed "Maya." Discussion will focus on material, stylistic, and iconographic features that connect Cacaxtla mural painting with the non-local traditions, especially the Maya component, which predominates. However, the intent is not to provide a stylistic and iconographic reading of all of the murals,[431] but rather to explore the distinctive reconfiguration of Maya, Teotihuacan, and other elements in Cacaxtla imagery viewed within the overall framework of the site, its monuments, and portable remains. The underlying assumption in the discussion that follows is that the appearance of non-local traits arises from a conscious decision on the part of the artist or patron in the production of images. However, a degree of unconscious decisions made on the basis of custom or tradition should be acknowledged.[432]

The actual corpus of murals that have been uncovered to date at Cacaxtla is fairly limited. Remains of mural painting were found on at least seven excavated structures:

Table 3: Cacaxtla murals:

Location	Brief description
1. Room of the Stairway walls flanking a doorway	2 small-scale human figures striding in procession (figs. 17-18)
2. Sub-structure beneath the Great Plaza, wall fragment	A plain white ground framed by a feathered serpent and watery border with chitons (fig. 28)

[431] For a recent comprehensive reinterpretation of the iconographic of specific murals, see Brittenham (2008).

[432] See discussion of "technological style" in Terry Childs (1991: 332) and Miriam Stark (1999: 27-29) focus on utilitarian goods, said to be more sensitive to cultural boundaries, while highly decorative or "iconological" styles are consciously manipulated to convey social information, thereby making them more difficult to understand.

3. Red Temple walls flanking stairway	a) Framed by a feathered serpent and watery border, the asymmetrical composition contains the Maya merchant god with his traveling bundle, a cacao "plant," two corn plants sprouting human heads, a huge toad and a fragment of another creature on one wall, and a huge spotted toad, two corn plants sprouting human heads, a jaguar-turtle creature on the other (fig. 26) b) a step with captives on the top and six glyphs on the rise (fig. 27)
4. Venus Temple piers	Two fantastic humanoid figures wearing Venus emblems standing on a watery border (fig. 20).
5. Building B on the *talud* flanking a stairway	A dynamic composition with 48 life-sized figures in a dramatic, bloody "battle" scene pitting bird-costumes Maya warriors against Central-Mexican jaguar warriors; plus fragments of another figure on the side of the stair. (figs. 19-20).
6. Building A portico	3 sections of life-sized figures: Portico: a) an eagle clad male holding a serpent bar standing on a feathered serpent and watery band; b) a jaguar-clad male holding a bundle of spears standing on a jaguar serpent on a watery band. Jambs: a) a dancing male holding a red-haired male emerging from a huge shell on a watery band; b) a male holding Tlaloc vessel and a serpent standing on a watery band. Fragmentary back wall: a procession with striding figures over a serpentine band (figs. 4, 13-16).
7. Fragment from Pozo 11-A (reburied)	A glyph showing a medallion containing a leg wounded by a spear (fig. 24).

However, at one time there were undoubtedly more. Five structures—Buildings A and B, the Room of the Stairway, the Venus Temple and the Red Temple—retain relatively complete programs in situ, while only minor evidence was found at the base of Portico A,[433] and only painted wall fragments or sections are known from the other structures. Clusters of broken mural fragments were found in several areas: near Building E, near

[433] Portico A bears traces of at least two layers of paint. The lower one appears to have been solid red. This was later covered by a layer with a bright blue rectangular border with thick black outline, surrounding a white field.

Group II, in the Sunken Patio and in a cache near Building B.[434] The chronology and dating of these murals is a matter of disagreement, although there is sufficient consensus to at least place them in the Epiclassic (650-950).[435]

Materials

Turning first to the materials employed in the Cacaxtla murals, Diana Magaloni studied the Red Temple and identified the pigments employed by the painters as follows:

Color	Source of pigment (Magaloni 1994: 53)
White	Calcite
Black	Charcoal (carbon vegetal)
Yellow	Illite-montmorillonite + hydrated iron oxide (yellow iron oxide)
Red	Hematite
Blue	Palygorskite + indigo

She also identified Maya green, also made with palygorskite clay and a colorant, also known from El Tajín, Monte Albán, and Suchilquitongo (Magaloni, Brittenham, Baglioni, et al. 2013: 166, 174). The murals were painted on a dry surface and contained the gum of the prickly pear cactus as a binder (Magaloni 1994: 69).

Comparisons of materials with other parts of Mesoamerica reveal a variety of

[434] Some deposits appear to represent bits of rejected or destroyed murals used as fill, while others are clearly intentional and presumably "ritual" in nature, such as the mural "cache" found near Building B, where the deposit was covered by a thick layer of stucco and sherds arranged like a mosaic (López de Molina and Molina Feal 1977: 13, K'-2). In some instances the fragments may pertain to red lower walls rather than polychrome murals. See Brittenham (2009) for a discussion of the symbolic significance of these ritual deposits of mural fragments.

A more in-depth study of mural fragments found in these different locations was not possible. Some of the fragments were stored in boxes simply labeled "pintura" (painting) in the Cacaxtla storeroom. These were originally collected during excavations, placed in sixty-two boxes with notations of excavation quadrant where the fragments were found and were later sent to Churubusco, INAH's restoration center. Here they were removed from the marked boxes for analysis without regard to their excavation quadrant context. Hence all data regarding their exact find spot were lost (López de Molina and Molina Feal 1977-78: "Materiales entregados al Departamento de Restauración de Churubusco").

[435] See Brittenham (2008: 198-250) for the most recent and comprehensive reconsideration of the dating of the murals.

connections, but with diverse regions. Maya artists employed Maya blue, hematite for red, montmorillonite for yellow, and calcite for white,[436] which are materials similar to Cacaxtla pigments. However, Magaloni (2001: 188-196) points out that they used an orchid-based binder, available in the tropical lowlands, but not in the Central Highlands. A smaller number of Cacaxtla materials coincide with pigments used by Teotihuacan artists, such as hematite for red from the Tlamimilolpa to Metepec phases (AD 200-750) and hydrated iron oxide for yellow prior to Tlamimilolpa (AD 200).[437] Early Zapotec murals bear a resemblance to Teotihuacan techniques in the use of hematite for red in addition to cinnabar and other red pigments, as well as a prickly-pear gum-based binder[438] employed to apply color to a dry wall surface.[439] These techniques display some similarities with those of Cacaxtla, with the exception of the diverse types of red. Overall, materials in the Cacaxtla murals coincide most with those used in the Maya region, with the obvious adjustment necessary to local conditions, such as the substitution of the orchid binder with a more readily accessible prickly pear cactus gum agglutinant. Materials suggest experience and specialized knowledge of Maya painting technology adapted to different geographical conditions.

Turning to another line of evidence to aid in the overall understanding of the paintings, biologist Óscar Polaco (1986) identified some of the animal species depicted in the Building A watery border and B murals. Despite the stylized simplification of forms, he

[436] Magaloni 2001: 173, 178.

[437] Magaloni 1996: 207, 213.

[438] It is unclear whether the use of this prickly pear binder was a case of independent invention or whether it was a case of Monte Albán technology being transferred to Cacaxtla, or perhaps even vice versa, although Cacaxtla would seem to be later in date.

[439] Magaloni 2010: 56, 70, 58-59.

identified Atlantic and Pacific coasts species, as well as local freshwater varieties. In terms of actual materials from the site, archaeologists found specimens of Pacific coast shells like those identified by the biologist in the murals.[440] These depictions and discoveries bespeak long distance trade and the concomitant movement of people, particularly merchants, although the nature of these Epiclassic merchant groups is still a matter of speculation.[441] In addition to the movement of goods, it could also indicate the movement of artists, or it certainly signals their familiarity with species originally from highly disparate parts of Mesoamerica. The movements of these materials, pieces, and people reinforce the vision of an interconnected world in which there was a high demand for luxury items, especially portable materials that served as personal status symbols.

Deviating from the Maya Style

However, materials alone are insufficient to speak of similarities with the Maya region, but rather how artists employed these materials. Therefore, matters of style and iconography must also be addressed. At first sight, the murals clearly evoke the Maya style (figs. 208, 209): the varied, active poses; fluid body articulation; overlapping of figures; double outlines for certain bodily contours; sensitivity to depiction of the body; Maya facial

[440] Polaco 1986: fotos 11, 12; López de Molina and Molina Feal 1986: lám. 169.

[441] Most of today's assumptions about the nature of trade in Mesoamerica are derived from sixteenth-century sources, particularly those dealing with Aztec merchants, known as *pochteca*. They were essentially autonomous social groups free from state control (Hirth 2000, 1: 207; Hassig 1985) that traveled through Mesoamerica, yet they also performed a reconnaissance function rather like spies (Sahagún 1959, Bk. 9: 6, 7, 13, 47). On the Early Postclassic riverine and coastal areas in the Yucatán Peninsula, J. E. S. Thompson (1970) spoke of a Putún or Itzá Maya merchant group that revolutionized the nature of trade by harnessing water channels to exploit new trade routes. In contrast, for the earlier Classic period, it is believed that much of Teotihuacan trade was coordinated by the state, particularly the exchange of obsidian (Santley 1983).

In contrast, Hirth (2000, 1: 205-208) proposes the continuity of professional merchants and hints at the possibility of a different breed of Epiclassic trade, in which independent itinerant merchants had greater freedom after the decline of Teotihuacan. In Hirth's view, their non-elite status would have enabled them to cross political boundaries and afforded them greater freedom in faraway places, precisely for their lack of political affiliation. Merchants traveled to key regions for different materials (e.g., obsidian) and brought it to Xochicalco as a regional marketplace that supplied high and low status households with the same goods (ibid.: 207).

features; asymmetrical compositions; spatial organizational; axes often dominated by diagonals; and naturalistic rendering of bodily proportions.[442] However, closer inspection reveals deviations.[443] Brittenham (2008: 107-110) has pointed out a number of small but highly significant departures from the Maya style, particularly the absence of the Maya calligraphic use of line discussed by Herring (2005) to define volume and with its characteristic whiplash curves. Insightfully, Brittenham (2008: 108-109) describes how the subtly modulated Maya line is replaced by a thick, uniform line employed to enclose form in conjunction with other lines of varying thickness to produce a sense of textural contrast (fig. 210), a technique that she compares to the double outline in Gulf Coast painting and sculpture in El Tajín, as well as in Xochicalco.[444] She also compares the use of color at Cacaxtla[445] to the Teotihuacan application of saturated solid blocks of color, but once again shows how different they are by pointing to contrasts in palette, while also signaling Cacaxtla's simplicity in contrast to the rich Maya approach to the application of a diversity of colors based on overlapping and shading to produce subtle iridescent and translucent effects. Therefore, a number of details from what may be regarded as the technological style of painting at Cacaxtla reveal awareness of Maya techniques, yet display divergences from original Maya forms of expression. As Sonia Lombardo de Ruiz (1995b: 34) aptly

[442] See the discussion of formal traits in Foncerrada de Molina 1976, 1978a, 1993; Lombardo de Ruiz 1986, Robertson 1985; Quirarte 1983; Walling 1982.

[443] In the past (Nagao 1989: 98), I regarded the use of the Maya style at Cacaxtla without question and instead identified Xochicalco as the locus of a new and distinctive style based on a recombination of Maya, Oaxaca, and Teotihuacan features. However, I now agree with Brittenham's (2008) identification of traits distinguishing the Cacaxtla style from the diverse painting styles employed in different centers in the Maya region, although we both agree on the presence of artists trained in the Maya style at the site. Martin (2013: 543) pushes the idea further by saying the Cacaxtla murals were done by "artistically bilingual artists experienced in two regional traditions and skilled in mixed styles the thematic programs."

[444] It should be clarified that the double outline is not a hallmark of Xochicalco mural painting, but is characteristic of some of the sculpture at the site.

[445] Brittenham 2008:112-113.

noted, the painters selectively used Maya elements and recombined them to create a distinctive form of expression.

There are always details that impede the complete identification of the Cacaxtla murals with Maya imagery. Brittenham has convincingly argued that the Cacaxtla murals depart from the Maya style in small but significant ways, although she acknowledges that it is in "the domain of form where Cacaxtla paintings most closely resemble Maya art" (Brittenham 2008: 117), while it is in the realm of content or iconography where they diverge most significantly. Reinforcing the notion of reiterated deviations from Maya iconography, Brittenham (2008: 90) goes on to point out the details that betray minor shifts from Maya usage that perhaps arose from quotations that reveal a degree if not of misunderstanding, then of reinterpretation. For example, she mentions that the deity in the Red Temple murals (fig. 211) blends aspects of Maya God L, a god of trade and the underworld, with those of God M, the Postclassic Maya patron of merchants and cacao growers, perhaps intended to evoke metaphorical equivalences between the two entities. Furthermore, the deity's characteristic headdress edged with feathers and a bird is transformed into more of a serpentine creature, which Brittenham interprets as a possible misunderstanding of the original referent, perhaps of the type depicted on the Calakmul North Acropolis radial pyramid.[446]

The Pervasive Maya Undercurrent

However, when Brittenham (2008: 97) goes on to claim that "the Cacaxtla paintings represent Central Mexican themes clad in Maya clothing," I would instead argue that it was Maya themes that predominated and not Central Mexican ones, and that in fact, these

[446] Brittenham 2008: 91.

visuals were reconfigured into fairly neat dualistic categories in an effort to ensure maximum clarity. Central Mexican elements were used, but they tended to be signs and emblems widely known from Teotihuacan times that were inserted into compositions,[447] I would say, in part to make them seem less alien to viewers.[448]

Cacaxtla imagery displays unique thematic bonds with the Maya region by prominently deploying subject matter that lacked equivalents in the Central Highlands. This category of iconography refers to: 1) "battle" scenes[449] (figs. 208, 212); 2) the focus on individual figures laden with insignia and identified by glyphs (figs. 213, 214);[450] 3) the explicit equivalence of corn and men (figs. 215, 216a-b in 217); 4) prisoner stairways (figs. 218, 219); and 5) depictions of the watery underworld (figs. 221, 222, 223); and 6) the formal composition of the watery borders, (figs. 224, 225). In addition, specific iconographic elements characteristic of the Maya region, but not Teotihuacan, that appear in Cacaxtla murals are 1) the serpent bar, an emblem of rulership (figs. 213, 214); 2) the balloon headdress worn by rulers dressed as warriors in a context alluding to Teotihuacan (figs. 225, 190, 203, 204, 206; see also chapter 5); 3) interlaced Trapeze-and-Ray emblems affixed to headdresses (figs. 227, 190, 203, 204, 205, 206) also discussed under Xochicalco sculpture (figs. 201, 202); 4) anthropomorphic supernaturals emerging from

[447] These included the Reptile's Eye glyph; Trapeze-and-Ray sign; trilobe blood motif; Storm God; the idea but not the appearance of the watery band; feathered serpent border.

[448] Although I argue widespread awareness of developments in other parts of Mesoamerica, I do not think this applied to all members of society, including local elites.

[449] These are not "battle" scenes in the traditional Western perspective of warfare, but rather, as succinctly described by Finegold (2012) are "Martial and bellicose imagery, as it occurred in Mesoamerican monumental art, was almost always reductive and allusive." See this dissertation for an excellent discussion of warfare in Epiclassic Mesoamerica.

[450] However, Maya glyphs are completely different from Cacaxtla glyphs (see Berlo 1989 for further discussion).

shells (figs. 228; 229),[451] and 5) chitons in watery bands (figs. 230a-c, 231-a-b). I would like to select two of the topics from the general (corn and man equivalence; watery band setting) and specific categories (chiton in watery bands and the balloon headdress) that I believe will be illustrative of Cacaxtla's immersion in Maya iconography.

Man and Corn

At Cacaxtla the man equals corn theme is depicted in the Red Temple vis-à-vis three corn stalks sprouting elongated human heads with long red hair alluding to the corn tassel and kernels each with a red dot—possibly an allusion to blood—covering the head (figs. 220-221, 215 cf. 217). This theme is also rendered less explicitly but more elegantly in Maya art, which shows long-haired human heads, instead of maize, resting in corn leaves on the tablet from the Temple of the Foliated Cross in Palenque (fig. 216a-c). The Cross Group at Palenque, which includes the Temple of the Foliated Cross, was dedicated in AD 692, while Brittenham (2008: 246-247) has suggested the Red Temple murals were probably painted sometime in the eighth century, clearly after the Palenque program. Taube (1992a: 46) has observed that the connection between the tonsured hairstyle of the Maya Maize God and the ripe ears of corn are expressed more explicitly in the Cacaxtla murals than elsewhere in the Maya area. However, instead of seeing Cacaxtla as the source of this theme and given its absence at Teotihuacan, it seems much more likely that the inspiration for the idea of depicting a maize plant sprouting human heads came from the Maya area. Martin (2013: 543) underscores the uniquely Maya connection by pointing out that the maize god in the underworld in the Red Temple is an episode of a myth only seen in Maya art. As for the degree of its explicit nature at Cacaxtla, I would suggest maximum

[451] The sole case of a similar theme in Teotihuacan is in murals from Tetitla (Miller 1973: 135), in a context of paintings by local painters inspired by Maya conventions (ibid.: 137).

intelligibility as the principal underlying intention. As an unfamiliar subject in the Central Highlands, it was all the more important that it be clear to Cacaxtla viewers.

The belief in the equivalence of man and corn is an integral part of Maya beliefs and it has come down to the present as part of the creation story recounted in the Quiché Maya *Popol Vuh*.[452] This belief stems from the myth of the three failed attempts at making living beings—first animals, beings made of wood, then of clay—that would venerate them and give them offerings. The creator gods finally ground corn to shape the first people, who prayed to them, were perceptive, and intelligent.[453] Since that time, man was expected to feed the gods with copal incense offerings and blood from human sacrifice (and by extension warfare) or autosacrifice, while the gods would in turn provide the conditions that enabled the growth of corn for human sustenance. This myth is not expressed in earlier Teotihuacan imagery or in later Toltec or Aztec iconography, although it is alluded to in Mixtec manuscripts, such as the *Codex Borgia*, where cornstalks bear ears of maize that have been personified by giving them eyes and mouth (fig. 232). Significantly, this part of the Maya myth does not figure in the major creation stories and cosmogonies for Central Mexico,[454] which suggests that in the Epiclassic it may have been more of a Maya versus a Central Mexican myth. This distinction was also noted by Miguel León-Portilla (2002) in his overview of origin myths in Mesoamerica, while Mercedes de la Garza (2002) refers to

[452] See Tedlock 1985: 163. The original Quiché document was copied and translated into Spanish in the early eighteenth century by Fray Francisco Ximénez, although it is believed to record the ancient Maya myths that were passed down from generation to generation as part of an oral tradition (Tedlock 1985: 23-33). However, Martin (2013: 542) points out the problems of using the Popol Vuh as a "Maya Bible" given that it dates hundreds of years later than Classic Maya imagery, which must have been colored through time by political, social, and local concerns.

[453] See Tedlock 1985: 78-80, 163-165.

[454] Nicholson 1971b; Garibay K. 1965.

other Maya myths describing the creation of man from corn. Although by the Late Postclassic and in twentieth century ethnography,[455] the man-corn equivalence formed part of a more widespread belief in both highlands and lowlands, in earlier times it may have been viewed in different terms. For Maya viewers it would likely have been a well-known part of their mythology and worldview, but the question remains, can the same be said for Cacaxtla viewers?[456] There is broad consensus that the artists were clearly trained in the Maya visual system and presumably had a degree of knowledge of Maya worldview. However, the same was not necessarily the case for other viewers at Cacaxtla. In fact, there may have been an express rejection of corn imagery, given the acts of desecrating the polychrome relief containing corn and targeting the mural of the corn plant on Building A by covering it with a relief sculpture (fig. 13, 90a-b) may have been specific actions aimed at obliterating the maize imagery.

Aquatic Bands and *Le* Signs

Although the watery band and feathered serpent border have been identified more with Teotihuacan (Brittenham 2008: 116), I believe that together they are a more complex blending of Maya and Teotihuacan symbol systems. The feathered serpent border rests on top of the compartmentalized watery band, which is populated by real and fantastic aquatic creatures in the Red Temple (fig. 220-221), the Great Plaza substructure wall section (fig. 230a), and the portico of Structure A (figs. 13, 224, 230c), while the watery band alone also appears on the Venus Temple piers (fig. 21) and the Structure A jambs (fig. 14). In these

[455] See for example Sandstrom 1991.

[456] The idea of human sacrifice and blood offerings for the gods has different forms of justifications in mythology, expressed through the Maya notion of man equals corn, Quetzalcoatl's blood shed on ancestral bones to create new life, among other myths, to the extent that methodologically and in the literature it is often cited the man is corn as a generalized Mesoamerican belief, without making any distinction between regional cosmologies. Further research bringing to bear a wider variety of sources could shed greater light on this question.

murals the red background is framed by a feathered serpent adjacent to or sometimes overlapping and switching places with an aquatic band with diagonal subdivisions. The Red Temple depicts a Maya God L-God M hybrid (fig. 211, 221) [457] in a realm populated by oversized toads (fig. 222a-b), a jaguar-turtle (fig. 222c), corn sprouting human heads (fig. 215), and another stalk bearing cacao fruit (fig. 155) set on a red background, while Building A shows insignia-laden single figures surrounded by floating glyphs also on a red ground (fig. 213).[458] In both the Red Temple and Building A, the feathered serpent and the aquatic band surrounding the red ground reinforce the supernatural nature of the images they frame. It would seem the combination of the feathered serpent and the watery band was intended to conjure a divine space and time, perhaps the primordial beginning of creation, which was consistently described as a calm sea that ripples and murmurs in the night.[459] Interestingly, the Sovereign Plumed Serpent is among the numens of the creator gods present at the dawn of creation in the *Popul Vuh*.[460] Similar water bands were modeled in stucco at the Palace in Palenque on House D, Pier D (fig. 225) or used on polychrome Maya vases showing lords (or the Maize God) emerging from turtle carapaces (fig. 225b) with diagonal lines dividing the water band into triangular compartments, as well as on a incised cylindrical tripod vessel from Tikal burial 48.[461] In contrast, Teotihuacan water borders commonly consist of parallel bands that are not subdivided, but

[457] Brittenham 2008: 90.

[458] In the case of the north portico mural in Building A, the feathered serpent is replaced by a spotted jaguar-serpent as part of a strongly dualistic program forming tidy contrasts with the south portico mural. Like the Feathered Serpent, it is a fantastic creature surely intended to convey a realm beyond everyday reality.

[459] Tedlock 1985: 72.

[460] Ibid.: 73. Although the feathered serpent is not depicted in full length form in Classic Maya imagery, it was incorporated into headgear symbolism, as discussed earlier in the section on Xochicalco sculpture.

[461] See Berlo 1976: fig. 22b.

that are interspersed with shells and other creatures associated with water (figs. 233a-b).

What is noteworthy about these aquatic borders at Cacaxtla is that the ones accompanied by the feathered serpent appear to have a different meaning from the ones that stand alone. The creatures swimming in these aquatic bands at Cacaxtla include turtles, sea snakes, crabs, water birds (such as herons), sea horses, eyes, chitons, and a wide variety of shells with creatures emerging to swim in the blue waters of the band,[462] accompanied by water lilies and eyes, perhaps to suggest its glinting surface.[463] The aquatic borders with the feathered serpent contain an element not found in the other murals: chitons (fig. 230a-c) or "cucarachas del mar" identified by biologist Óscar Polaco (1986). In fact, the Main Plaza substructure has only chitons in the aquatic band. What is interesting about these chitons is their strong resemblance to a Maya glyph or motif: the *le*.[464] The glyph appears in Maya monuments (fig. 234a-b, 235) and polychrome ceramic vessels (fig. 236), where Wirth and Stross (n.d.) interpret it as an allusion to lineage or ancestry, as well as fertility, because it is associated with womb or shell designs and the waters of the Underworld, the realm of fertility, creation, and life.[465] These meanings appear to be commensurate with the contexts in which they appear in Cacaxtla, where these sea creatures serve a double purpose: they not only identify the nature of the aquatic border, but they also appear to bring to bear a range of other meanings reinforcing the conjunction with the feathered serpent, a creature

[462] See Polaco 1986.

[463] The Red Temple murals also feature large bisected stars with five points, commonly identified in other images at the site as Venus symbols (Baird 1989).

[464] I thank Karl Taube for bringing this to my attention.

[465] Wirth and Stross (n.d.) do not connect the *le* motif to chitons; instead they suggest it is linked to leaves or penises. However, the *le* motif also appears in Maya contexts along with shells and stacked rectangles signifying the water's surface (Schele and Miller 1986: 272), which reinforces the identification of the Cacaxtla motifs with those found in Maya monuments.

linked with the origin of time and space at Teotihuacan, as well as with ancestry and rulership.[466] However, it is open to question whether the viewers of the Cacaxtla murals would have understood this polyvalent meaning, because it was not part of the Central Mexican visual system; understanding would have been contingent on Maya visual literacy, which would have been unlikely in the Central Highlands.

Maya Headgear

Headgear at Cacaxtla, particularly the balloon headdress, also reveals special connections with Maya iconography. The balloon headdress worn by figure 32, one of the leaders of the defeated Maya bird warriors in the Building B "battle" mural, is an enormous red bulbous form with small brushstrokes that evoke its feather-covered surface (fig. 226), while long, curved turquoise blue feathers trail behind the warrior (fig. 19).[467] Unlike other images of the balloon headdress, here it sags and hangs down behind the warrior's head and is not worn vertically in emblematic fashion atop the wearer's head, as in other cases of its depiction in the Maya region (figs. 190, 203, 204, 206). The fact it is worn in the context of a confrontation reiterates its warrior connotation in the Maya region, but it is recast at Cacaxtla. Stone (1989: 156) has analyzed the balloon headdress at Piedras Negras in contexts suggesting Maya adoption of Teotihuacan iconography to portray local rulers as great warriors in fixed durations after their accession. This headgear is believed to have originated in the Maya region, but according to Barbour (1997) only later did it appear at Teotihuacan on ceramic figurines depicting elaborately garbed, enthroned males during the Metepec phase (AD 550-650) (fig. 207).

[466] See discussion of the feathered serpent on Xochicalco sculpture in chapters 4 and 5.

[467] The other leader of the bird group (figure E6) wears a bird headdress with abundant feathers instead of the balloon headdress.

In the Maya region, the earliest recognized image of the balloon headdress appears with a parrot or macaw on Uaxactún Stela 5 from ca. 378 (fig. 237)[468] in which the ruler is armed with a Teotihuacan *atlatl* (spearthrower). Moving from the Petén to the Usumacinta region, the balloon headdress appears on more monuments at Piedras Negras than at any other Maya center. According to Stone (1989) its earliest occurrence there is on Ruler 2's Lintel 4 (ca. AD 659) and Stela 35 (AD 662) as well as on Stelas 8 and 9 (AD 726 and 736 respectively), erected by his son K'inich Yo'nal Ahk II.[469] Stone (1989: 158) describes the headdress on Piedras Negras Lintel 4 as covered with beads, although Linda Schele's drawing (FAMSI Resources Collection)[470] clearly indicates it was covered with feathers (fig. 190 cf. 238a). The Piedras Negras balloon headdress, particularly those on Stelae 35, Stela 9, Stela 8, and Panel 4, are among the most baroque examples known from the Maya region (fig. 238). Bedecked with feathers or beads (in the case of Stela 35), they are packed with emblems: a Maya serpent wing and mat symbols, in addition to Teotihuacan-derived rosettes, a blunt imbricated Trapeze-and-Ray sign with goggle eyes alluding to Tlaloc, a dripping fluid (blood?) emblem in a cartouche, a rattlesnake, along with other elements suggestive of Teotihuacan military costume discussed by Stone (1989: 162-163). The balloon headdress is also represented on Yaxchilán Lintel 25 (AD 725) (fig. 203), which depicts a ritually induced hallucinatory vision in which a warrior covered in Teotihuacan-

[468] Stone 1989: 157; Berlo 1976: 31.

[469] See also Martin and Grube 2008.

[470] This was consulted at the FAMSI website:
http://research.famsi.org/schele_list.php?rowstart=0&search=Piedras Negras&title=Schele Drawing Collection&tab=schele&sort=
accessed December 2013.

inspired insignia emerges from the gaping jaws of a vision serpent.[471] However, here the headdress is clearly shown as made of spotted jaguar pelt, again adorned with Teotihuacan details such as the blunt Trapeze-and-Ray sign and a Tlaloc mask, combined with prominent knots known from Maya images of autosacrifice. The balloon headdress is also worn by rulers on Dos Pilas Stela 16 (AD 736) and Aguateca Stela 2 (AD 736) (fig. 206) in conjunction with Teotihuacan features including the blunt trapeze-and-ray, the Tlaloc mask, rosettes, and owls. However in these cases it is unclear whether the bulbous portion was fashioned of feathers or a feline pelt. The balloon headdress is also depicted on portable Maya ceramics sometimes in contexts with a man (not obviously clad as a warrior) wearing a jaguar pelt spotted balloon headdress with an affixed interlaced trapeze-and-ray, with creatures that seem to conflate Tlaloc and a serpent with an interlaced trapeze and ray base (fig. 204),[472] and even on pottery from a wide array of Maya cities.[473] While artists may have had a visual knowledge and memory of some of these monuments; such portable pieces could have aided in the dissemination of this iconography.[474]

Presumably these examples from the Maya region predate the appearance of the balloon headdress at Cacaxtla and Xochicalco, where the headdress is recast in more simplified form and in a context suggesting a shift in meaning. At Cacaxtla the balloon headdress is not melded with the Trapeze-and-Ray headdress, because it is worn by the opposition leader, the jaguar-clad victorious Mexican warriors, in the Building B battle (fig.

[471] Schele and Miller 1986: 187-188.
[472] See also Coe, 1982: fig. 51.

[473] Uaxactún, Piedras Negras, Tikal, Altar de Sacrificios cited in Berlo 1976.

[474] The interlaced trapeze-and-ray features prominently Copán monuments (Stela 6, the Hieroglyphic Stairway, and other reliefs; see Berlo 1976: figs. 51c, 51d, 51e) in conjunction with Tlaloc iconography associated with rulership.

227).[475] In fact, the Trapeze-and-Ray headdress worn by the leaders of the victorious warriors, figures 3 and 29 in the battle mural, also wear the emblem in an odd position: one lying on its side suspended from the warrior's headdress, and the other upside down, hanging from the back of the headgear. This latter headdress is accompanied by Tlaloc masks, worn by the same two figures, the victorious chiefs. In contrast, at Cacaxtla the balloon headdress is associated with individuals intended to convey the otherness, evoked through the physiognomy of Maya peoples, which is fitting given evidence of the origin of this insignia from that faraway region (fig. 226). Interestingly, the other emblems from Teotihuacan that were embraced in the Maya region as part of the insignia of power accepted and adapted to flaunt the military prowess of the Maya ruler, are carefully excised from the Maya context and are instead endowed as warrior attributes to the Central Mexican victors in the conflict. However, it is important to remember that the source of the Trapeze-and-Ray at Cacaxtla is the Maya region and not Teotihuacan, based on the pointed interlaced treatment of the emblem, which formed part of the iconographic vocabulary of artists who were trained in the Maya tradition (fig. 204).

Also worthy of consideration is the different way that artists at Cacaxtla and Xochicalco approached two headdresses: the Trapeze-and-Ray and balloon headdress. At Cacaxtla these headdresses are employed as emblems to symbolize a conflict between two groups that are differentiated by physiognomy to suggest a conflict between Central Mexican and Maya warriors. In contrast, at Xochicalco the headdresses seem to serve a different purpose. The Trapeze-and-Ray and goggle are worn by seated figures on the

[475] A similar process of separation was also seen in Xochicalco sculpture, but in that case, the balloon headdress and trapeze-and-ray did not appear in positions of opposing forces, but instead in a context suggesting functional differences: the balloon headdress worn by armed warriors, and the trapeze-and-ray worn by seated figures in a context suggesting conquest or tribute-payment (Berlo 1989; Hirth 1989; Smith 2000).

tablero that are suggested to represent Xochicalco tributaries identified by a glyph for their town (Hirth 1989). Meanwhile, the balloon headdress is reserved for the seated warriors on the upper platform, as though they formed part of different worlds and thereby different functions. The Storm God and Trapeze-and-Ray combination is also retained on Xochicalco Stela 2 that forms part of a complex that implies an opposition between the Storm God and the personified Feathered Serpent. At Xochicalco the two headdresses do not convey conflict and diverse ethnicities, but more of a coalescence of diverse roles.

Tracing the appearance of this headdress suggests the movement of symbols between Central Mexico and the Maya region in a fluid exchange of ideas and emblems that were selected, adapted, and reassembled in new visual systems and imbued with different meanings. Interestingly, the warrior aspect of Tlaloc, which Esther Pasztory (1974) dubbed Tlaloc B and linked to warfare, sacrifice, and jaguar symbolism, was embraced in the Maya political realm to enhance the power of individual rulers, while the crocodilian-fertility aspect of Tlaloc A was not integrated into the Maya system, because it already had its own well-developed pantheon of water, maize, and other deities. However, at Cacaxtla, both Maya deities (God L-M in the Red Temple) and Teotihuacan gods (Storm God in the Building A and B murals, in sculpture, as well as in portable remains) were incorporated in what seemed to be a constantly changing panorama of visual arts.

Oaxaca and the Gulf Coast

Before turning to Xochicalco mural painting, a brief word is in order regarding connections between the Cacaxtla murals and painting traditions from other parts of Mesoamerica, primarily Oaxaca and the Gulf Coast. As mentioned earlier in the discussion of materials, Monte Albán tomb murals and those of Cacaxtla employed a prickly pear-

based binder, which has not been identified elsewhere in Mesoamerica.[476] Other than this point of coincidence, the principal Oaxaca traits that can be connected to Cacaxtla are entirely glyphic in nature. The most oft-cited Oaxacan feature is the dot and tied bar system of numeration,[477] which was used together with a dot numeration system. However, Berlo (1989b: 30) regards the use of both systems as an example of the type of flexibility characteristic of incipient traditions prior to codification and standardization that also occurs at Teotihuacan, Xochicalco, and Teotenango, and does not see it as evidence ties with Oaxaca. Nevertheless, Berlo (1989b: 25-26) does identify the closest parallel for the Cacaxtla serpent boat glyph as a glyph from Tequixtepec Stela 18 in the Ñuiñe area, a potential zone of interaction between Mixtec and Nahua speakers given the geographic proximity of this border area. She also conceptually relates the star enclosure glyph with Mixtec iconography. However, this is the extent of specific connections. In contrast, McVicker (1985: 85) suggested the 3 Deer glyph from the Building A south portico jamb figure and the two depictions of the leader of the victorious group in the Building B battle murals revealed a connection with Oaxaca, an idea dismissed by Berlo (1989b: 27) by pointing out the common use of the deer name throughout Mesoamerica. In addition, Andrew Finegold (2004: 39-40) has drawn a connection between the crossed-arm pose of Building B, figure 43, the leader of the defeated bird warriors, that suggests a different reading from the traditional interpretation of submission and defeat. Finegold suggests the use of a similar pose on more or less coeval coastal Oaxacan stelae that Javier Urcid (1993: 148) has interpreted as depictions of venerated ancestors. He also notes Urcid's identification of the Reptile's Eye and Blood glyphs on these coastal Oaxacan monuments

[476] See Magaloni 2010: 58-59.

[477] Foncerrada de Molina 1982.

(ibid: 144). It would appear that these marginal centers, discussed by Urcid in the context of the westernmost appearance of Zapotec script in coastal Oaxaca and Guerrero, could well have been within the Central Mexican sphere of interaction and could constitute evidence of shared elements in Epiclassic iconographic systems.

Turning to the Gulf coast, traditional comparisons linking Cacaxtla with the Gulf Coast have largely centered on formal elements. This includes the use of double outlines on figures,[478] and iconographic ones, such as the appearance of the feathered serpent, star eyes as seen on the boulder relief of Maltrata, Veracruz. With a fresh perspective, Andrew Finegold (2004) traces a number of previously unnoticed similarities between the Cacaxtla murals and the sculptural program at El Tajín, a preeminent center on the Gulf Coast known for its many ballcourts and imagery commemorating kingship.[479] In addition to the crossed arm pose (discussed above for Oaxaca) used by the ruler 13 Rabbit and other elites, Finegold (2004: 40-50, 23) also notes the prominent appearance of objects of authority (feather bundles, a string of beads with fringed ends, a long, narrow cloth, and a baton) at both sites, while identifying similarities in weapons and war serpent imagery, which he interprets as evidence of interactions between the two centers, reinforced by evidence of diverse types of Gulf Coast ceramics found at Cacaxtla. He suggests they might have been allies in a pact to protect trade routes.[480] One might argue that the nature of these comparisons is largely conceptual and limited in scale taken within the overall corpus of Cacaxtla's mural painting and instead suggests that certain themes and motifs were shared

[478] Foncerrada de Molina 1976, 1978a, 1993; Lombardo de Ruiz 1986, Robertson 1985; Brittenham 2008: 108-109.

[479] Rex Koontz (2009: 9-10) has discussed the problems surrounding El Tajín's culmination, which is generally dated from 600-900 and 900-1100 (citing Jeffrey Wilkerson's work) or from 850-1100 (based on Jürgen Brüggemann and Yamile Lira López), and suggests essentially an Epiclassic apogee for the city.

[480] See Finegold 2004: 53.

throughout Mesoamerica. Nevertheless, Finegold (2004: 56) maintains that close contact and interaction could still have been the case. It would still seem that despite the possible similarities of elements and themes connecting Cacaxtla to El Tajín, these would not have been readily apparent to viewers at Cacaxtla and would also raise the question of why these details would be alluded to so obliquely, in contexts strongly unlike from those seen in El Tajín monuments, so much so, in fact, as to suggest different meanings. Diversity in the nature of monuments, alternative means of bolstering authority, and distinct interests in the programs of monumental works might help to explain the overall impression of difference when monuments from the two sites are compared.

Discussion

This overview of murals at Cacaxtla reinforces the notion of artists trained in a Maya painting tradition, of their innovations and their decisions or perhaps errors in understanding and conveying content known from diverse media, both monumental and portable, from the Maya region. The examples cited by Brittenham (2008) as well as her discussion of the puzzling variety of Venus symbols in a single image and the inconsistencies in details of the iconography of Building A reinforce the idea of the translation of images that were perhaps not fully understood by the artists themselves, and even more certainly not fully understood by viewers as well. Some clusters of costume and iconographic details suggest subtle shifts in meanings different from that of their original contexts, in which the source is determined by the larger number of examples and the evidence of greater complexity of usage. Some elements had a specific meaning in their original contexts, but were changed in translation.

The deviations from the Maya visual system might appear to be minor details, but there is also the bigger picture. There is always an underlying schism that arises from the

fundamentally disparate nature of monumental artworks in the Central Highlands and the Maya region. While most Classic period Maya monumental arts, whether sculpture or mural painting, focused on glorifying members of the ruling dynasty identified by hieroglyphic inscriptions, the same cannot be said for Central Mexican cultures, which tended toward greater anonymity.[481] Although Sugiyama (2005: 242) attributes current lack of knowledge of individual Teotihuacan rulers to the absence of a writing system, it would seem that the decision to eschew the high visibility of individual rulers to a matter of the deliberate choice to remain unidentified by an iconic image or a written record of their personal names and subsumed, or at least invisible, in the overall apparatus of the state.[482] The emergence of a writing system in the Epiclassic Central Highlands responded to a greater interest in recording names, places, and dates, at the same time that it may have been inspired by awareness of the extensive use of writing in Maya area spurring the desire to deploy its own writing system. This notion of an awareness at the same time as a lack of understanding of Maya glyphs are evident in the "Pinturas Realistas" in the Teotihuacan

[481] Clearly this discussion refers to cultures prior to the Late Postclassic Aztecs. See Pasztory 1997 and Sugiyama 2005. Saburo Sugiyama (2005: 9, 236, 242) believes that Teotihuacan rulership was not as anonymous as it tends to be described today. He states that the Feathered Serpent Temple sculptural and sacrificial burial program implies the existence of a formidable individual ruler, whose royal burial may have been looted in pre-Hispanic times. In contrast, while in the Maya region individual rulers and their families were commemorated in monuments and elaborate funerary programs honoring their lineage, Teotihuacan opted for a more symbolic form of expression. Esther Pasztory proposes that this unsuccessful attempt at dynastic rulership at Teotihuacan was initially replaced in the Tlamimilolpa phase (AD 200-400) by a more corporate system, shifting attention away from individual rulers to household political organization for greater social integration and harmony (1997: 116-117), which again shifted to a more heterogeneous, individualistic focus by the Metepec phase (550-650; Pasztory 1988b). On the other hand, Janet Berlo (1989: 23) hypothesizes that the tree glyphs from Techinantitla, Teotihuacan, might have been patronyms of important elite families, which would seem to contradict the anonymous nature of Teotihuacan society.

After the Epiclassic period, for the changes in the nature of public monuments in the Early Postclassic period, see Berlo's (1989: 43-44) comments on glyphs at Tula and Chichén Itzá, as well as Marvin Cohodas's (1989) discussion of the Early Postclassic transition..

[482] See also Pasztory 1990-1991.

apartment compound of Tetitla,[483] where mural paintings incorporate stylistic features that show an attempt on the part of Teotihuacan artists to render figures that evoke the Maya style. Human figures accompanied by rudimentary glyphs clad in garments revealing more of the human body than other Teotihuacan images. Furthermore, Taube (2003) illustrates fragments showing Maya glyphs, but rendered backwards (ibid.: 286-287), which attests to this awareness of both the Maya style and glyphic expressions, as well as an utter lack of understanding.

Iconographically, the Cacaxtla murals display the use of concepts known from Teotihuacan, but most of them are mediated through the Maya style. The explanation resides in the presence of artists trained in the Maya style; therefore, the artists' ideas about how to render certain features were embedded in a technological style. These details were not reinvented each time a painter or sculptor approached a subject, but at times formed a part of the maker's unconscious as the way things are done.[484] Some features were conscious citations or quotations from other visual idioms, while others were akin to the artist's "default" mode of production, such as the way the artist chose to paint the Trapeze-and-Ray emblem in the headdress of the leaders of the victorious group in the Building B battle mural (fig. 227). Although the Trapeze-and-Ray was an emblem that appeared prominently at Teotihuacan across media (on frescoes, ceramics, figurines, and painted on trumpet shells) always in conjunction with other signs, particularly the Reptile's Eye glyph and water or fire signs,[485] the pointed ray overlapping the trapeze was the canonical form. However, the Epiclassic version, known from the Maya region at Copán and in pottery in

[483] See Taube 2003.

[484] See Stark 1999: 29, 41.

[485] Von Winning 1987, 2: 25-28.

contexts alluding to Teotihuacan usually through costume, as well as at Cacaxtla, Xochicalco, and Teotenango, characteristically shows a pointed ray interlaced with the trapeze most frequently attached to headdresses.

Similarly, the earliest images of the Storm God or Tlaloc come from Teotihuacan, but the Tlaloc mask at Cacaxtla also worn by the two victorious captains (fig. 227) most closely resemble Maya depictions.[486] The Maya elaborated and adapted it to different political structures of dynastic rulers, and in the process they conflated it with the balloon headdress and imbued it with new meaning connected with warrior status and rulership. At Cacaxtla, this headdress is recast in a more ambiguous context splitting the headdress's power between rivals in a vision of conflict.[487]

The question of how to understand these hybrid entities arises. And how they were seen by artist, patron, and other viewers probably differed. In cases when there were local artists using nonlocal elements for local patrons and audience—which fits the cases of Maya artists looking at Teotihuacan, Teotihuacan artists looking at the Maya in the Pinturas Realistas of Tetitla, and the artists of Xochicalco--elements are selected, reinterpreted, repurposed, recombined, and recast to give them a new meaning, one not necessarily connected to the original context (which might or might not have been known to the

[486] Only the Yaxchilán image shows a long appendage identified as scrolls of blood (Schele and Miller 1986: 187-188) issuing from Tlaloc's mouth (fig.). The long, red, curvilinear appendage emerging from below the teeth at Cacaxtla most closely resembles the Yaxchilán image, which also share some costume details, but they appear recombined in a different way in the Cacaxtla murals. See Aguateca Stela 2 (AD 736) (fig. 206), Dos Pilas Stela 16 (ca. 736), and Yaxchilán Lintel 25 (ca. 725) (fig. 145).

[487] The Cacaxtla battle murals has been interpreted from highly diverse perspectives, ranging from historical and commemorative (Foncerrada de Molina 1993; McVicker 1985; McCafferty and McCafferty 1994), depicting a ritual or sacrifice (Baird 1989; Carlson 1991; Langley 1981; Lombardo de Ruiz 1995b: 36; Piña Chan 1998: 81-87), allegorical (Escalante Gonzalbo 2002), or referring to mythologies such as the Popol Vuh (Finegold 2004). Whatever their nature, the principal interest for the present discussion are the choices involved in putting together the parts of the imagery. Similarly, the Building A murals have seen interpreted as historical figures (Abascal et al. 1976; Foncerrada de Molina 1976; Lombardo de Ruiz 1986), as deities (Foncerrada de Molina 1976; Kubler 1980; López de Molina 1977b) deified ancestors (Quirarte 1983), or a combination of the above (Brittenham 2008).

artists). When nonlocal artists or local artists trained in a nonlocal tradition use foreign elements for local patrons and audiences—as in the case of Cacaxtla—the images might bear meanings known to the artists, but not necessarily understood by the patrons and public (e.g., *le*-motif). It remains a matter of speculation to what extent departures were the result of artists' personal choice and inspiration, limitations in their understanding or technical skill, demands made by patrons, different needs stemming from an audience not deeply versed in Maya iconography, or more generally a different social and political context dominated by a Central Mexican ethos.

Based on an examination of the other aspects of material culture from the site (discussed in the following chapters), the murals were among the most luxurious investments in visual arts at Cacaxtla, not only for the intensive use of specialized labor, but also for the lavish use of exotic Maya blue, especially abundant in the murals of Building B. The special status of the murals was acknowledged even after they were apparently rejected in an act of iconoclasm that led to their concealment from public view. However, they were not attacked, defaced, or destroyed; instead, they were buried. In fact, they were interred with special care and covered with a layer of finely sifted earth to avoid abrasion to the painted surface, before they were covered with subsequent construction.[488] In fact, Brittenham (2009) has noted that in instances in which ritual deposits were composed of mural fragments, they were accorded specialized treatment in contrast to the unceremonious deposits of sculpture fragments.[489] Clearly mural painting in varying degrees of the Maya style and employing Maya blue pigment were cherished and honored

[488] López de Molina and Molina Feal 1986: 21-23; Brittenham 2008: 262ff.

[489] However, the polychrome anthropomorphic figure and head fragments were also acccorded a similar special treatment: buried in a very fine bed of sand (Espinoza García and Ortega Ortiz 1985-1987, 1: 192).

at Cacaxtla. If they were once as abundant as implied in Brittenham's (2008) identification of generations of teams of artists spanning almost a century and multiple generations would imply, it would appear questionable whether the murals would have all been given this honorific treatment. Too little is currently known of Cacaxtla archaeologically to offer conclusive evidence of whether the Maya painting tradition at Cacaxtla was limited to one, two or more generations of painters, but it would appear that the non-local or intrusive nature of mural painting was both its key source of attraction, as well as the seed of its downfall.

Taking a step back away from the forest of details suggests the iconography of the Cacaxtla murals may have been one of the reasons why the decision was made to ultimately bury all of them, to conceal them from public view. Both the overtly bloody and grisly violence of the Building B battle murals and the emphasis on the "man equals corn" iconography of Building A and the Red Temple may have been unwelcome or simply alien for the Central Mexican public. Both of these themes did not constitute part of the prevailing subject matter at Teotihuacan, nor later Tula and even the Aztec Templo Mayor. Instead, imagery predating Cacaxtla could refer to warriors and to sacrifice, but it did so in an indirect, more abstract, symbolic way, without entering into the messy details of intestines and blood gushing from huge wounds in the fallen body of sacrificial victims. Without doubt human sacrifice was practiced on a particularly large scale at Teotihuacan; the sacrifice of hundreds of victims deposited in what was probably a single ritual event orchestrated at the early Feathered Serpent Temple[490] was no secret and must have resonated for centuries as an awe-inspiring act not replicated elsewhere in Mesoamerica.

[490] See Sugiyama 2005.

However, it was not the overt subject of mural painting or sculpture. The need for blood and hearts in sacrifice was referenced by way of a style that already implied an abstraction of the human body, removing it from the sensation of immediate reality,[491] which was more difficult to avoid or deny given the immediacy of the Cacaxtla paintings both in terms of style and in the use of space. In fact, Oriana Baddeley (1984: 176) has pointed out the shallow sense of space created by the lack of elements to ground the highly three-dimensional figures, which in turn, in the case of the battle mural, directly faced an open plaza that would have further enhanced the immediacy of the paintings and would thus have had the effect of drawing the spectator into the fray.

Although the idea of the man and corn formula in the cosmic food chain in which corn is to man as man is to the gods is not a belief unique to Maya worldview, it was not depicted as explicitly in the visual arts in the Central Highlands as in the murals Cacaxtla. In fact, even in the Maya region, the allusion tended to be a more subtle one, with the principal focus of compositions on rulers, their exploits, their rituals, and their ancestry.

How can one make sense of this complex network of ties to diverse parts of Mesoamerica couched in a largely, albeit derivative, Maya visual language? Brittenham (2008: 197) has identified these uncharacteristic Maya features as evidence of a workshop spanning generations of artists trained in the Maya artistic tradition, but who after generations had lost a sense of their original visual idiom.[492] From another perspective, Marta Foncerrada de Molina (1993) interpreted the diversity of iconographic traits with strong connections to Teotihuacan and Xochicalco expressed in a strongly Maya style as

[491] See Pasztory 1997.
[492] Part of Brittenham's argument (2008: 107) is based on her claim that the Cacaxtla paintings display a technical uniformity throughout the sequence. However, the Room of the Stairway, the only murals displaying a wavering use of outline and figures on a much smaller scale, would seem to constitute evidence of earlier faltering attempts at mural painting.

evidence of the intrusion of the Olmeca-Xicalcanca, the elusive group mentioned in documentary sources. The answers to these questions remain pending until further archaeological work is conducted at the site to shed greater light on Cacaxtla as a whole.

What is noteworthy about murals, beyond the aspects discussed above, is the concern for legibility that operated in their design. One of the most noteworthy features of the murals is the strong emphasis on dualism, which had engendered a series of structuralist interpretations—such as Graulich (1990) and McVicker (1985)—that are frankly difficult to avoid when viewing the murals. This obvious deployment of dualism is uncharacteristic of both Teotihuacan and the Maya region, and in fact I would argue is not characteristic of Mesoamerica until Aztec times. I do not mean to imply that there was no dualism prior to the Aztecs, for clearly cases exist; instead, it did not seem to constitute such a prominent organizational principle in the composition of monumental arts. In the case of Cacaxtla, it would appear that this tidy structuralist organization seen in Building A, Building B, the Venus Temple, and to a certain extent in the Red Temple, was a strategy to ensure maximum comprehension and legibility of perhaps unfamiliar or alien subject matter. Compositions were guided by streamlined, simplified oppositions as if didactic tools to convey specific messages. This approach contrasted with the original Maya or Teotihuacan contexts that operated on a number of diverse levels of understanding depending on the knowledge carried by different viewers. For Maya-trained artists to address a Central Mexican audience, one of their priorities must have been intelligibility. Yet, they had to use the visual and technical tools that they knew the best. What they achieved in the Cacaxtla murals was a mixed program: one that invited dualistic readings, yet that contained nuances that must have eluded the understanding of observers even at that time.

Xochicalco Polychromy

Little in the way of mural painting has survived from Xochicalco. Rare references include traces of red, green, blue, yellow, black and white pigments reported for the Feathered Serpent Pyramid[493] and still visible today on the south side of the stairway relief (fig. 166) and the use of cinnabar on the three Stelae[494] and the Marcador,[495] It is believed that the so-called "Twin Pyramid" (Pirámide Gemela), so named for its apparently identical dimensions and shape to the Feathered Serpent Pyramid, was once covered with murals; however, all that was recovered were 400 painted fragments in quite poor condition.[496] Floors of large rooms, some porticoes, and walls of rooms were completely or partially painted, and often a red or blue band of color was applied around columns.[497]

Most of the examples are relatively simple and geometric, although one figural composition was found. The mural painting often occurs on altars painted with geometric, repetitious and only rarely with figural compositions:

Table 4: Xochicalco polychromy

Location in Xochicalco	Colors	Composition	Source
A.Pirámide Gemela (Twin Pyramid) Structure G-2 (fig. 239)	Black, red, white, Maya blue	2 rooms with mural painting on interiors. 400 painted stones were collected. Phytomorphic and zoomorphic motifs. Stone blocks with fragmentary murals, including bird talons,	Garza Tarazona 1993-1994, Informe 16-175: 297; González Crespo, Garza Tarazona, Alvarado León 1993-1994, Inf. 16-168: 172-174.

[493] See Peñafiel 1890 Plates Volume, Pl. 208 and Text Volume pp. 44-45; Noguera 1961a: 41. This was later covered by a solid coat of red (Noguera 1961a: 41; Kubler 1975: 42).
[494] See Sáenz 1961.

[495] Garza Tarazona 2004.

[496] Garza Tarazona 1993-1994, Informe 16-175, ch. 5: 297.

[497] Ibid.: 293.

		jade beads (*chalchihuites*)	
B.Structure G-3. Altar of the Waves (altar at entrance to large room) (fig. 240)	Green and blue	Horizontal wavy lines resembling water	Garza Tarazona 1993-1994, Informe 16-175, ch. 5: 297; González Crespo, Garza Tarazona, Alvarado León 1993-1994, Inf. 16-168: 177.
C.Structure G-6-Room 3C (east side of main plaza).	Maya blue and black	Blue background with vertical parallel black lines.	Garza Tarazona 1993-1994, Informe 16-175: 298-299; González Crespo, Garza Tarazona, Alvarado León 1993-1994, Inf. 16-168: 212
D.Structure G-7, Room 5 (northeast corner of main plaza)	Red, blue, green, yellow, orange, and black	Main frontal figure with head in profile, bands with human heads and geometric motifs	Garza Tarazona 1993-1994, Informe 16-175: 299
E.Feathered Serpent Pyramid (fig. 166)	Red, yellow, blue, green, black, and white / Red and blue;	To enhance the sculpture	Peñafiel 1890 Plates Volume, Pl. 208 and Text Volume pp. 44-45; Noguera 1961a: 41 / Garza Tarazona 1993-1994, Informe 16-175, ch. 5: 294
F. Feathered Serpent Pyramid substructure (fig. 241)	Red	Ten red dots painted with cinnabar	Garza Tarazona 1993-1994, Informe 16-175, ch. 5: 296
G. Sector B, Structure 1, *temascal* (fig. 242)	Red and blue	Geometric decoration of red mat design alternating with two blue vertical bars	Ibid.: 301
H. Sector B, Structure 2, altar (fig. 243)	Two shades of blue	Disks with dot in middle (*chalchihuitl* or jade bead symbol) on narrow *tablero* and vertical wavy lines on sloping *talud* (representing water?)	Ibid.: 301
I.Sector K, Structure 2 (next to East Ballcourt), Room 5, altar with small figures painted in tablero (fig. 244)	Blue, black, white, red	Fourteen small seated human figures, seven on each side of a central temple are painted in the *tablero*, which is outlined with a blue frame	Ibid.: 302; González Crespo, Garza Tarazona, Alvarado León et al. 1993-1994, Informe 16-168: 304, fig. 412.
J.Sector I, Structure 9,	Red	Small adobe bench	Garza Tarazona 1993-

Portico I9		with modeled clay figures painted red depicting birds, insects and flora	1994, Informe 16-175, ch. 5: 303 description, p. 304 fig. 518.

Such a limited, fragmentary corpus makes it difficult to assess the nature of Xochicalco mural painting. Based on what little remains, it would appear that the stone and clay sculptural tradition was much more extensively developed and served as the primary focus of public monumental expression. Stylistically and iconographically, Xochicalco's murals bear little resemblance to murals in the Maya region, Teotihuacan, Oaxaca, or the Gulf Coast. Despite some similarities in materials employed, by and large Xochicalco murals appears to be a local development, secondary in importance compared to stone and earthen sculpture.

In the rare cases of figural compositions, the murals differ from Xochicalco sculpture in that they do not include glyphs. The principal figurative mural (fig. 244) shows fourteen seated figures—seven on each side—flanking a building with a symbol in the doorway composed of two crossed Cs, which perhaps represents the symbol for Movement known in Aztec times as *ollin*.[498] Rendered in a black outline on a plain white stucco ground, some of the figures are clearly female, although in cases in which it is unclear, the figure is assumed to be male. Perhaps the most interesting feature is that a number of the figures are seated next to an oval, basket-like shape with a handle or occasionally a longer, triangular shaped bag. These pieces resemble the basket and bag depicted on the *tablero* of the Feathered Serpent Pyramid. The other evidence of figural murals consists of the fragments on display in the Site Museum (fig. 239). These are executed on a much larger

[498] However, this cross C glyph differs from the representation of what has also been identified as the ollin glyph or symbol for movement on Stela 3 by diverse scholars (Sáenz 1961; Caso 1967; Pasztory 1976; Smith 2000b).

scale than the composition described above. A thick, even black or red line defined figures, while a thick application of pigment was applied in flat areas. The fragmentary condition of these pieces precludes further comment.

Ivonne Velasco Almanza (1993-1994, Informe 16-175: 305-328) identified the pigments used in Xochicalco mural painting, which consist of only four colors: black, red, blue, and green. It would seem the painting tradition was not as developed as mural painting at Teotihuacan, in the Maya region, and even in Oaxaca, given the restricted range of materials and colors. The black is identified as carbon black and calcium carbonate; the red as hematite and cinnabar[499] (although the different contexts in which they appear are not specified), the green is either with copper and calcium carbonate classified as malachite, or else a combination of Maya blue and ochre; while the blue is identified as authentic Maya blue made of palygorskite clay and indigo.[500] Furthermore, she reports that the murals were applied to a dry surface and did not involve the use of a binder or agglutinant, such as that used in the Cacaxtla mural paintings.

Connections between Xochicalco murals and the Maya region cannot be denied on the basis of raw material. The principal evidence of a connection between Xochicalco mural and the Maya region is the use of Maya blue, a distinctive color composed of an organic indigo dye heated and combined with a palygorskite clay, which can only be found in the Yucatán peninsula[501] to produce the distinctive blue tonality. However, given

[499] Cinnabar was locally available from Cerro Tepeyoculco ten kilometers away from Xochicalco (Hirth (2000 1: 154) or from the Santa Rosa mines known from colonial times (ibid.: 20). On the other hand, specular hematite was available in northern Guerrero (ibid.: 20).

[500] Velasco Almanza (1993-1994, Informe 16-175: 325-326.

[501] Magaloni 2014.

evidence of the ample use of this color in pre-Hispanic times throughout Mesoamerica,[502] it does not imply the presence of Maya artists, but rather attests to the long-distance trade of this material to produce the distinctive hue of Maya blue, which was highly esteemed throughout Mesoamerica. In the Maya region, hematite was most often used to produce red paint, while the use of cinnabar was rare.[503] Black in both the Maya region and in Xochicalco mural painting was most often made of carbon black.[504] Maya mural painting displayed particular sophistication in developing blue and green hues, colors of special aesthetic appeal in this region as well as symbolic resonance.[505] However the preparation of Maya greens differed from the materials used at Xochicalco. Other than the use of Maya blue, there is little in Xochicalco mural painting that suggests any connections with the Maya region.

Xochicalco mural painting displayed only minor similarities with Teotihuacan. For example, Teotihuacan painting also employed hematite for red and malachite to produce green,[506] although Teotihuacan apparently did not use cinnabar and Maya blue. Also unlike Teotihuacan is the mural painting technique: murals from the Tlamimilolpa and Xolalpan phases at Teotihuacan have been identified as executed in the fresco technique, based on the absence of a binder or agglutinant.[507] Also unlike Teotihuacan is the purely geometric

[502] Reyes Valerio 1993.

[503] Magaloni 2001: 184, 173.

[504] Ibid., 181.

[505] Ibid: 173, 178-180, 196.

[506] Magaloni 1996, 2: 206, 208.

[507] Ibid.: 195. In contrast, the absence of an agglutinant in the case of Xochicalco has been used as evidence of the murals being applied to a dry surface (Velasco Almanza's (1993-1994, Informe 16-175: 325), however, as Magaloni (2001: 195-196) has pointed out, the question of whether murals were painted al fresco or not may have depending more on local geographic, climatic, and cultural conditions.

composition and use of simple figures outlined in black on a white ground of Xochicalco murals. Iconographically speaking, there is also a complete absence of Teotihuacan's iconographic complexity. When water is depicted in Teotihuacan imagery, it is commonly composed of wavy bands interspersed with elements that identify it as water, whether animals, stars, swimmers, or eyes to suggest its glistening surface.[508].

Both hematite and cinnabar, as well as other reds, were used in Zapotec painting. Diana Magaloni (2010) identified three red pigments that differ by composition, optical effects, physical source, which serve as the basis for her insights into the rich symbolic connotation fittingly tied to the ancestors and places of origin given their use in a funerary context. In Monte Albán IIIb, Zapotec murals displayed both Teotihuacan techniques and the introduction of innovations that permitted a change in painting applied to a dry surface through the introduction of a binder, probably the gum of the prickly pear cactus that permitted the application of more transparent layers of paint that could be overlapped to produce different effects.[509] However, it is questionable as to whether any of the same symbolic connotations as those surrounding the distinctive use of these minerals in Zapotec tombs also applied to Xochicalco mural painting, given the different context in which mural painting was used in Xochicalco.

As for Veracruz mural painting, the three sites where mural painting have been found appear to constitute three different traditions.[510] Murals at El Tajín and Las Higueras were found on building or pyramid exteriors, while the Zapotal murals were painted on a

[508] See Miller 1973: 58, 71-72, 84, 98, 136.

[509] Magaloni 2010: 58.

[510] Ladrón de Guevara 2005.

building identified as a royal tomb or mausoleum, surrounded by elite burials.[511] All three of these Gulf Coast traditions display a major focus on human or supernatural figures, usually standing, occasionally sitting, and involved in a variety of ritual activities, unlike the murals from Xochicalco. El Tajín also featured red and blue or blue on blue geometric motifs—predominantly scrolls or interlaced patterns—on building exteriors,[512] but they display a greater complexity than Xochicalco murals.

Discussion

This review of evidence of non-local interaction evoked in public monuments highlights major differences between the two sites. As a once powerful center in decline or already overshadowed by competing city-states, Teotihuacan was not a prominent source of stylistic inspiration at either site, although there is some evidence of continuity in its iconography at both centers. A small number of Teotihuacan symbols continue to be used, but they are adapted into new, local visual idioms. If a direct citation occurs (as in the case of the Huehueteotl sculpture found at Xochicalco), the context seems to be one of conscious reverence tied to the past in the form of cached heirlooms from diverse traditions as opposed to a direct quotation suggesting the mirroring of usage and meaning from Teotihuacan. In spite of the overt rejection that one would expect of Teotihuacan after the burning and destruction of parts of the city, some degree of continuity would be expected. Although Teotihuacan in many ways was indeed a unique city that developed innovative and visually distinctive solutions to meet local needs, some of its beliefs had roots that preceded it and that continued after its decline. The entire Mesoamerican religious system could not be rebuilt from zero. Instead, certain figures that played a more secondary role at

[511] Wyllie 2010.

[512] Reyes Valerio 1993: 84, 87.

Teotihuacan (such as feathered serpents) continued to appear and rose in importance outside the metropolis. Although certain Teotihuacan symbols continued, they usually occurred in isolation, removed from the overall context of a body of other Teotihuacan signs because they could be read and understood, without being intimately linked to the fallen city. Both Cacaxtla and Xochicalco shunned the Teotihuacan style and attempted to develop a visual identity obviously different from the metropolitan Teotihuacan style that had dominated in the previous period.[513]

One of the foremost visual traditions identified in parallels at Cacaxtla and Xochicalco is the Maya style, perhaps the most antithetical to the Teotihuacan in both form and content. The Maya style may have been particularly attractive precisely because of these strong differences. Cacaxtla displays both Maya iconographic and stylistic elements, predominantly in mural painting, architecture, and to some degree in sculpture, while Xochicalco reveals the selective use of Maya iconographic ideas reformulated in a local style.

There is ample evidence of misquotation of original material or resignification in local contexts, such as in Cacaxtla murals. This mirrors quotation processes seen at Teotihuacan in the "Pinturas Realistas" of Tetitla, which reveal Mayoid poses, body treatment, and glyphlike elements.[514] However, those murals were clearly executed within the canons of the Teotihuacan style, suggesting local mural painters rendering unfamiliar content, underscored by backward Maya glyphs, which suggests a lack of understanding of

[513] Implicit in this process of rejection and acceptance of non-local visual imagery is the obvious awareness of different stylistic and symbolic systems throughout Mesoamerica. This awareness might have come about through the movement of individuals (such as members of the ruling class or merchants) who viewed monuments in situ and who described or rendered their impressions upon return to their home region, the movement of artists, or the movement of portable goods in nonlocal styles (Robertson 1985).

[514] Villagra 1954.

the original on the part of local artists who must have been copying a model they were unable to read.

A number of details have been discussed that set the Cacaxtla murals apart from Maya mural painting in matters of style (e.g., calligraphic line) and iconography (e.g., God L-M; Venus symbolism). These departures can best be understood as the gradual loss of a tradition's integrity on the part of the artists, once its practitioners are far removed from the source culture. As second or third generation artists practiced a tradition increasingly alien to their worldview, difficulties would arise in preserving an understanding of the original ideas. Despite the artists' efforts to produce visual programs with beautiful and comprehensible content, the patrons remained dissatisfied and continued their drive to do away with the past and build on yet another layer to cover the hill.[515] Meanwhile, how would observers of that time regarded the murals? To what extent would they have understood the content? On the one hand, the dualistic oppositions posited in a number of the murals could be easily deciphered and understood. On the other hand, there were those odd details that were intimately linked to Maya visual systems and beliefs that may not have been as intelligible in a Central Mexican context.

Little from Oaxaca could be traced to murals at either site, while the Gulf Coast offered interesting, but isolated, conceptual parallels in Cacaxtla murals. Although scrolls or volutes may be found in Cacaxtla painting in the interlaced serpents on the back wall of Building A, it is unclear whether any usage of volutes or scrolls can necessarily be connected to the Gulf Coast. Although scrollwork reaches a peak of development in Veracruz, it is doubtful that it was the inspiration for all scrolls or volutes throughout

[515] This sort of massive vertical accretion to build up an entire hill was a phenomenon also observed at the Great Pyramid at Cholula, said to be the largest pyramid in Mesoamerica.

Mesoamerica.

Monumental art (architecture, sculpture, mural painting) at Cacaxtla and Xochicalco help to indicate the inherent differences in the character of the two sites, the concerns of their builders as well as their capabilities. The general impression given is that leaders at both sites were interested in creating monumental public art, for this is not the case for all Mesoamerican centers. Cantona, for example, is a center with many ballcourts and phallic sculptures, but little in the way of what one might call public monuments.[516] Both Cacaxtla and Xochicalco drew to different extents on traditions of the time with which they were clearly familiar. However, based on available data it seems that Xochicalco and its monuments were more carefully planned and carried out with a sense of vision and conception of an overall project that encompassed looking at the past and interweaving it with recent trends from the Maya region. Although much archaeological work remains to be carried out at Cacaxtla, the same planning is not evident in the remains known to date. The site evokes an image of confusion and indecision, with frequent changes and reconstructions in architecture, changes in style, media, and iconographic messages in monumental arts.

The tremendous amount of artificial modification of the terrain at Xochicalco involved the movement of massive quantities of fill, as well as the excavation or cutting of the stone of the hill to create flat surfaces for floors.[517] The result of enormous quantities of labor, the construction of Xochicalco represents the efforts of a work force that would have

[516] See García Cook 1994.

[517] Hirth 1983: 267, 268.

exceeded that available from the local population.[518] At Cacaxtla, construction stage after construction stage was piled one on top of another, as if involving an endless process of destruction and reconstruction, complicating chronological reconstruction today. In many ways Cacaxtla's architecture may be characterized as "veneer" or display architecture, to be used, destroyed and rebuilt rapidly to accommodate the needs of a particular time, rather than as massive monumental masonry architecture meant to make more of an enduring display of the city's might. The frequent, ongoing changes and reconstructions, as well as repainted murals, burying murals, covering murals with sculptural programs indicate a lack of a coherent vision of the growth of the site, perhaps part of its ongoing search for identity. Perhaps constraints were more of a matter of limited resources to carry out large-scale works. In contrast, at Xochicalco it seems that massive efforts were invested initially in constructing the entire site according to a master plan and that afterwards, energies were aimed at maintenance and minor modifications.[519]

Unlike Cacaxtla's sculpture, its mural paintings exhibit considerable homogeneity in style and iconography; the predominant style is Maya with deviations that reveal an attempt to create a distinctive style at the same time as a gradual departure from Maya canons. Why was mural painting the major focus of public arts at Cacaxtla, while stone sculpture the principal medium at Xochicalco? Part of the explanation may reside in costs and labor, in which stone sculpture, later stuccoed and painted, would have been a more

[518] Ibid. 354.

[519] The scale of architecture at Cacaxtla is also unlike that of Xochicalco and other central Mexican sites; architectural masses and open spaces at Cacaxtla are considerably smaller than at Teotihuacan, Xochicalco, Teotenango and Tula, for example. The estimated dimensions of Cacaxtla are 1,700 m x 800 m, while the core area of the hill itself measures approximately 200 m x 110 m (García Cook 1986: 52, 56), yielding an area of 1.36 km^2, while Teotihuacan has an estimated surface area of 22.5 km^2 (Weaver 1981: 354), Xochicalco of 4 km^2 (Hirth 1984: 580) and Tula of 13.5 km^2 (Cobean 1978: 95).

labor intensive, and hence costly, procedure than mural painting. Another explanation may have to do with availability of skilled artisans trained to do certain types of work. There was apparently a dearth of great stone carvers at Cacaxtla, while clearly they had master mural painters on hand, while the opposite held true at Xochicalco.[520]

The nature of styles used in monumental arts at the two sites is quite different. On the one hand Kubler (1980) has characterized the Cacaxtla style as "eclectic" or "syncretic," although it is relied more heavily than Xochicalco on the Maya style. On the other hand, Xochicalco relied on Maya inspiration, but perhaps from the lack of skilled Maya artists, local artists visually reformulated Maya ideas so the end result lacked the impression of a strong Maya visual component. Despite Cacaxtla's closer ties to the Maya visual tradition, it would be impossible to confuse its monuments with those from the Maya region itself. In contrast, the Xochicalco style can be less easily identified with any one style. It is more of a compilation, more of a successful creation of a new, unparalleled style. While the Cacaxtla style may be compared to Western Neo-Classical or revival styles (but without the major disjunction in time) summoning and using elements of other styles so that the original referent is still quite identifiable, the Xochicalco style is more of a critical synthesis derived in part from other known traditions combined with its own invented traits.[521]

Although both centers are often cited as evidence of the wave of Maya influence in the Central Highlands following the decline of Teotihuacan, the actual scenario was no doubt much more complex and formed part of a continuum of highland-lowland interaction

[520] The availability of artists obviously may relate to the wishes of the ruler-patrons, who may have requested and commissioned artists for certain works (e.g. cf. Robertson 1985). However, this is an issue difficult to prove in the archaeological record without the aid of textual information.

[521] See processes discussed by Kenneth Frampton 1983 in Foster 1983

that involved local choices more than the imposition or domination of one area over the other.[522] It is clear that considerable interaction linked diverse regions of Mesoamerica, parallel or connected to the movement of trade goods, people, and ideas. The following chapters will explore what is known of the exchange of portable goods of an elite or ritual nature, and then of a utilitarian one to get a sense of the processes that could have operated at Cacaxtla and Xochicalco.

[522] See Braswell 2004.

Chapter 7: Prestige and Power: Desire and Ostentation in Portable Luxury and Ritual Items

This chapter explores potentially portable non-utilitarian remains documented from Cacaxtla and Xochicalco to provide a comparative context in which to view the public monuments discussed in the preceding chapter.[523] The focus is on pieces not employed in day-to-day activities performed in domestic contexts, such as food preparation or consumption, which will be examined in the next chapter. Instead it refers to status goods such as personal ornaments, as well as ritual or ceremonial items more likely to bear symbolic meanings beyond utilitarian purposes. These pieces range from lapidary masks, figurines, plaques, vessels, obsidian eccentrics, shell, and ceramic effigy urns or censers.[524] Discussion will touch on matters of "source" based on: 1) sources of raw materials (when available), 2) sources of visual and technological style, and 3) object type to shed light on the nature of status items coveted in the Epiclassic period in an effort to shed light on what wants—both desires and lacks—may be traced in the material.[525]

The preceding chapter showed the overt deployment of aspects of the Maya style at both Cacaxtla and Xochicalco in murals painting and stone sculptures, respectively the premier monumental arts at each city. Maya features were quoted and then deliberately repurposed in different contexts, stemming from the fundamentally different role of

[523] Objects considered "portable" have been somewhat arbitrarily defined: their maximum dimension (length, diameter, etc.) generally does not exceed 50 cm. Objects larger than the indicated range may have been moved over long distances, although their size and shape may have made safe transport difficult. Furthermore, fired objects are less fragile than works of unfired clay, and hence are considered portable even though some objects may not have been easily or conveniently transported due to their shape.

[524] Materials not discussed in this chapter that could provide useful comparative information in future work include turquoise, worked bone, and slate or pyrite disks, believed to be mirror backs or *tezcacuitlapilli*, back mirrors worn by warriors.

[525] See Mitchell 2005.

monuments in highland and lowland traditions. At times non-local allusions were blended with local ideas with deep roots in Teotihuacan, or might have had to other regions, such as Oaxaca and Veracruz. The Epiclassic suggests a time of widespread awareness of the monumental arts in other parts of Mesoamerica, a vision borne out by elite portable remains, although the patterns formed are slightly different, suggesting some of the choices underlying monumental works. Significantly, public monuments and small scale artifacts do not appear to tell the same story regarding the nature of foreign contacts at Cacaxtla and Xochicalco and perhaps shed some light on the roles of these two centers in their respective regions. Portable goods suggest a different scenario that brings into focus the relative power and scope of each center. The evidence of interaction suggested by portable remains contrasts with the vision projected by the monuments, which proclaim a different image more in line with the concerns and needs of the ruling powers at the respective centers.

This chapter offers an overview of portable remains from the two sites divided into general materials (lapidary, obsidian, shell, and effigy ceramics). These media categories are subdivided to facilitate discussion into groups of objects: lapidary masks, figurines, plaques, vessels; worked and unworked shell; obsidian eccentrics; and effigy censers or urns. These divisions are used more to facilitate access to information on a particular material or object type, than as inherently meaningful categories in themselves. The case of Xochicalco merits special comment with regard to context of pieces. Excavators have estimated that 90 percent of the archaeological material found in excavations during the 1980s and 1990s were found on the floors of rooms and patios stemming from the violent destruction of the city.[526] Only rarely did they find caches, burials, or other deposits in an

[526] González Crespo, Garza Tarazona, Alvarado León et al. 1993-1994:51.

untouched context that might give some indication of their original usage.

One problem encountered in the following discussion particularly in relation to the concept of non-local interaction is that of original object provenience. Several artifact types have a broad distribution that has makes it difficult to identify their place or region of origin (e.g., Mezcala, Guerrero or Teotihuacan-Mezcala style lapidary figurines; greenstone plaques). It is unlikely that all of these artifacts came from a single source, because many of them could have been locally produced to fulfill specific needs within a widespread shared belief or value system,[527] which could help to explain their similarity. Instead, there is a growing body of evidence that some of these categories of pieces were made locally (e.g., some lapidary and obsidian pieces). Studies of raw materials and particularly sourcing studies would be helpful in untangling at least part of this confusion, although in many cases this type of information is not yet readily available. Even when sourcing information is cited, it does not insure that production was centered in a single region or at a single location, for there are known cases of the transport of raw materials or blanks, which were then worked in local contexts, such as Maya blue discussed in chapter 6, jadeite,[528] and obsidian.[529] Furthermore, such generalizations are limited to non-organic materials; only rarely can the trade of perishables in pre-Hispanic times still be identified archaeologically. More often, they can only be surmised on the basis of a combination of ethnohistorical references combined with archaeological extrapolation, such as Hirth's (1998: 459) idea

[527] Ringle, et al. (1998) suggests the spread of a Quetzalcoatl cult as a world religion in the Epiclassic and Postclassic periods and their model includes some of the object types included in the present discussion. However, based on the discussion of monumental arts in the previous chapter, it is clear that the Feathered Serpent played different roles at Cacaxtla and Xochicalco. It was much more prominent at Xochicalco, while it appeared in a supporting role in Cacaxtla murals.

[528] Taube, Hruby and Romero 2005.

[529] Hirth 1995; Hirth and Robinson 2000.

that some imported ceramics may have contained resin, honey, or some other commodity. Practicality, logistics, and the feasibility of long-distance interaction also must have been fundamental concerns,[530] although there are known cases of long-distance trade of utilitarian (as opposed to specialized elite goods) materials even when closer sources were available.[531] Non-utilitarian portable remains offer a rich source to trace the intentions or at least the desires of ancient makers when they chose to deploy non-local imagery or styles. Although emulation of wealthier trading partners is a widely cited phenomenon,[532] no doubt a more complex web of desires, possibilities, and realities were part of the forces underlying the diversified range of materials discussed in this chapter. Hence, monumental and non-utilitarian portable types of objects are important sources of information that should be considered both separately and then in conjunction.

Lapidary Objects

This corpus refers to diverse materials, including jadeite, different types of greenstone (including jade, jadeite, serpentine, fuchsite, lutite, among others), *tecali* (alabaster), schist, marble, quartz, pyrite, hematite, and other dense varieties of stone. The desire for jade, as the highly prized lapidary stone for Mesoamerican cultures from Olmec,[533] Maya,[534] Zapotec,[535] to Aztec times[536] must have fueled long distance trade or at

[530] See Hassig 1985.

[531] As discussed by Hirth 2000, 1: 195; Moholy-Nagy 1999.

[532] Flannery 1968.

[533] Early to Middle Formative 1500-500 BC; see Taube 2005 citing Ortiz and Rodríguez 2000: 79 on El Manatí.

[534] Guderjan 2000; Taube 2005.

least expeditions in pursuit of the material from early on. However, the field is split as to whether the majority of jadeite came from a single region, the Motagua River Valley in Guatemala and its neighboring highlands[537] or whether other sources might be from Puebla, Guerrero, Oaxaca, or Chiapas.[538] Experts also point out difficulties in identifying made artifacts with jadeite sources because the materials are "inherently inhomogeneous," making comparisons of minor mineral components and visual traits a more reliable fingerprint.[539] The translucent blue-green jadeite prized by the Olmecs, as well as the apple or emerald green coveted by the Mayas have been beyond the means of all centers and thus have been substituted with other types of greenstone closer to home. Other tonalities of lapidary or so-called greenstone included black, grayish, greenish, yellowish, and whitish stone, which were probably from the modern-day state of Guerrero,[540] while *tecali* (alabaster) has been identified as from central Guerrero or southern Puebla[541] or more

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[535] Caso 1965.

[536] Late Postclassic AD 1325-1521.

[537] Seitz et al. 2001; Taube et al. 2005.

[538] See Olmedo and González 1986: 80-81; Cabrera 2005 citing Alejandro Pastrana 1991. Unconfirmed reports of jade sources have been made for the Mixteca region, Morelos, Guerrero (the Oro and Balsas River basins), Chiapas, Hidalgo (Zimapan area), Torreón (Jimulco) (Mena 1990: 8, 76-78), Zacatecas, Querétaro and San Luis Potosí in Mexico, as well as Manzanal in the Motagua Valley of Honduras (Proskouriakoff 1974: 2). Costa Rica, the Motagua River (Guatemala) and the Balsas River (Western Mexico) have been cited as sources for Olmec jade (M. Coe 1968: 94, 102-103). Puebla and southern Chiapas have been identified as a serpentine source for the Maya and central Guatemala (the Motagua region) as a jade source, based on neutron activation analysis of jade materials (Hammond 1977 discussed in Turner 1987). Aztec sources of greenstone based on studies of tribute lists have been identified in Guerrero, Oaxaca, Veracruz, Chiapas and San Luis Potosí (Tochpan--or Veracruz?) (Berdan 1987: 164, 166), although this refers to payment in the form of finished objects and may not indicate actual sources. Authors are careful to point out that although these areas may have been the sources of raw materials, they are not necessarily the centers where greenstone was worked (Olmedo Vera and González 1986: 80, 86).

[539] Seitz et al. 2001.

[540] Turner 1992: 106.

[541] See Hirth 2000a: 203.

specifically from near Tecali and Tepeji de Rodríguez in Puebla,[542] where it is still exploited by artisans today. Based on preliminary studies, the most common lapidary materials from Xochicalco were lutite and filite, followed by serpentine, schist, tufa, travertine, jasper, and diorite.[543] Furthermore, similarities in technique and the presence of Granular Ware in both Teotihuacan and Guerrero have led to the idea that Mezcala lapidaries carved Teotihuacan masks or that the Teotihuacan masks were made in Guerrero and exported to the city,[544] although this remains speculative.[545] Guerrero might have been a source of lapidary stone[546] as well as salt,[547] which could have drawn merchants from both Teotihuacan and Zapotec areas.

These materials were often worked into masks, figurines, plaques or pendants, beads, vessels, ballgame effigies, and other items. Some of these types of materials were also known from Teotihuacan and Maya contexts (e.g., masks, figurines, beads, vessels), while others appear to have a more limited distribution (e.g., greenstone plaques; ballgame effigy equipment) in the Maya region and the Gulf Coast. On the one hand, Beatriz Palavicini Beltrán has suggested that Cacaxtla was a site devoted to producing elite luxury items.[548] On the other hand, Hirth (2000a, 1: 165, 178), citing Norberto González Crespo,

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[542] See Cabrera Cortés 1995: 134. Hirth (2000a: 200-201, 203) refers to these pieces as "marble," although most other sources (Cabrera Cortés 1995 who in turn cites the work of Margaret Turner and Ricardo Sánchez) refer to *tecali* as alabaster.

[543] Garza Tarazona and Palavicini 1993-1994.

[544] Louise Paradis cited in Turner 1992: 98. 99.

[545] According to Braswell's (2003) model, these materials would fall into the private realm suggesting the possible resettlement of peoples from these areas.

[546] This is according to various authors cited by Taube, Hruby and Romero 2005:6.

[547] Reyna Robles 2006: 127.

[548] "Muere la arqueóloga Beatriz Palavicini," *El Universal*, Monday, May 11, 2009. El Universal website: http://www.eluniversal.com.mx/notas/597257.html

has identified microdebitage as local evidence of a lapidary workshop at Xochicalco.

The following discussion presents an overview of lapidary materials found in Cacaxtla and Xochicalco by artifact category to facilitate discussion. In the case of Xochicalco, the tables below separate the excavations of César Sáenz carried out in the 1960s and the projects headed by Norberto González Crespo and Silvia Garza Tarazona in the 1980s and the 1990s, because the latter archaeologists emphasized that most of their material was found in contexts showing the massive destruction of the city, and not in sealed deposits suggesting the nature of the inhabitants' original purposes. In contrast, a number of Sáenz's finds appear to represent dedicatory deposits conducted to commemorate major structures.

Masks

López de Molina and Molina Feal (1986: 74) reported only the fragments of an ear and part of a face of a lapidary mask described as Teotihuacan style at Cacaxtla,[549] although a large number of masks in a wide variety of materials, styles, and scales have been excavated at Xochicalco (see Table 5 in Appendix D). Roughly thirteen masks have been found in the González Crespo-Garza Tarazona excavations, thirty-nine fragments,[550] in addition to the pieces discovered by Sáenz detailed in Table 5.[551] These pieces form part

accessed August 4, 2013.

[549] Impressive Olmec-style and other jade maskettes were depicted prominently as pectorals worn by the defeated warriors in the Maya-style battle murals of Building B. The Mayas were known for reusing Olmec jades, sometimes recarving them, or using the iconic Olmec celt incorporated into Maya worn insignia (Schele and Miller 1986: pp. 119-121; Taube 2005). However, no actual greenstone masks have been found at Cacaxtla, only a small number of greenstone plaques, which are described below. The central figure on one of the Cacaxtla effigy urns discussed below also wears a maskette suspended from his neck.

[550] Garza Tarazona and Palavicini 1993-1994: 118-181.

[551] The excavation report (Garza Tarazona and Palavicini Beltrán 1993-1994) mentions masks found in the 1993-1994 season, but only illustrates object types and not the entire range of finds. It also contains a detailed

of a tradition that was well-established in Teotihuacan; in fact, some of the pieces from Xochicalco are identical to types from Teotihuacan (fig. 245 cf. 246).[552] Similar pieces have also been linked to the Mezcala region in Guerrero. However, these pieces do not seem to be connected to the Maya, Oaxaca, and Gulf Coast traditions.

The most obviously public contexts for such finds at the latter site are from dedicatory offerings as termination rituals, in architectural fill, or in strategic structures for subsequent redistribution. Sáenz (1961, 1962, 1966) reported Teotihuacan-style *tecali* masks deposited in the pit with the broken stelae, which probably constituted a termination ritual, while the Chamber of the Offerings deposit could have been a dedicatory offering to the building itself (Appendix D, Table 5, nos. 1-2).[553] The fragments reported for the Pirámide Gemela (Twin Pyramid; Appendix D, Table 5, no. 7) might have served a similar

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table listing the finds, but is useful for quantitative purposes, but not qualitative assessment of Teotihuacan or other mask styles. Complete masks or fragments are mentioned for the following locations (quantities over one appear in parentheses) divided by sectors:
-Sector A: trash; Unit 2, cave entrance (2); Unit 3, east corner; Unit 3, below stair;
-Sector B: Unit 1, Structure 1; Unit 1, Structure 2, Room 2 (2 complete; 2 fragments); Unit 1, patio, southeast corner (12 fragments); Unit 2, Structure 1, Salon (6 fragments); Unit 2, patio; Unit 3, cistern;
-Sector E: Unit 3, Structure 5, Room 2;
-Sector G: Structure 2, Substructure (3 complete, 1 fragment); Structure 3, column base; Structure 4, outdoor bench; Structure 6, west exterior (2 fragments); Structure 6, patio 3; Structure 6-7;
-Sector H, Structure 5, Room 4;
-Acropolis: Structure 6, Room 2; Structure 6, Room 2; Structure 7, patio 1, Structure 8 (2 fragments); Structure 8, Room 1 (2 fragments); Structure 8, Room 8 (3 fragments); Plaza (ibid: 118, 120, 122, 124, 128ff, 140-141, 150, 154, 157-159, 170-171, 174, 179-181).

[552] The characteristic Teotihuacan mask has an overall U-shaped contour that narrows at the chin. A clearly defined ridge that dips in the center, where the nose bridge rises, separates the smooth curve of the forehead from the plane of the forehead to the more subtly modulated rounded areas of the eyelids and the raised upper bridge of the nose, which formed a triangular outline from the inner eye socket to the outer corners of the mouth, sometimes marked with a slightly grooved line. The eyes and mouth were generally formed by drilling holes at each corner and then the space for the elliptical eye with rounded ends was hollowed out to form cavities probably for inlaid shell and stone. Rectangular tabs perforated near the bottom project at the sides in place of ears. The triangular nose rises to form the mask's highest surface, which has a rounded tip. Starting narrow at the bridge and flaring out, the nose often had perforated nostrils. The mouth characteristically has slightly parted lips for inlaid teeth or to evoke speech. The upper lip is bow-shaped, while the lower lip forms a continuous curve echoing the shape of the chin.

[553] The presence of human remains does not indicate the individual interred was the focus of the offering; instead it probably represented the remains of a sacrificial victim.

purpose. Fragmentary *tecali* masks were also found in building fill (Appendix D, Table 5, no. 3), which could well have been the result of other ritual events.[554] However, in one case a mask was found with figurines in a niche in Room E3-5 (Appendix D, Table 5, no. 6), which the archaeologists interpreted as where these pieces were stored for daily use,[555] without specifying what sort of use these pieces could have been given.[556]

In the sole Teotihuacan-style Old Fire God (Huehueteotl) brazier known from Xochicalco in the pit with the broken stelae, other Teotihuacan-style pieces were found in the deposit, as well as a cosmopolitan variety of ceramics. The presence of this array of non-local materials may be interpreted in many ways. Were the pieces gifts brought by foreign dignitaries to a Xochicalco ceremonial?[557] Were the pieces acquired by different means and intentionally combined to represent an event implying a cosmopolitanism or interaction beyond Xochicalco's immediate sphere of influence for internal purposes by bringing together materials from Teotihuacan (lapidary materials), the Maya region (Maya blue, ceramics), Oaxaca (ceramics), and Puebla (*tecali*), to evoke real or desired ties?[558]

Two of the deposits from the later excavations seem to represent different types of contexts (Appendix D, Table 5, nos. 4-5, 8). On the one hand, González Crespo and Garza Tarazona (et al. 1995) identified the East Platform Mound flanking one of the principal entrances to the city as a strategic location where lapidary materials were stockpiled for

[554] At the Aztec Templo Mayor, where almost a hundred offerings have been found interred in this structure alone, some of the deposited were made directly in construction fill (Nagao 1985; Lopez Luján 1994).

[555] González Crespo, Garza Tarazona, Alvarado León 1993-1994: 144.

[556] The implication of this interpretation on the part of the González Crespo and Garza Tarazona is that the masks and figurines were manipulated in daily ritual, as opposed to forming part of a deity or ancestor image, a mummy bundle effigy, or an actual funerary purpose.

[557] This practice described for the Aztecs in sixteenth-century chronicles (e.g., Durán 1967).

[558] The panorama is further complicated by questions of the chronological significance of the materials found in the deposit, which have not been studied for dating purposes.

later, presumably ritual redistribution. On the other hand, the Room B1-2 find of abundant materials associated with an altar suggests an area for ritual activity, reinforced by the censer, drinking vessels, grinding bowl, incense pans, bowls, and flutes, as well as personal ornaments (beads, plaques, pendants, earflares, shells),[559] where a large quantity of masks were also reported. However, it is also possible the latter site was a location for the distribution of these masks, if they were intended for household consumption and might have required a consecration ritual to activate them so to speak for subsequent use.

Based on an examination of masks from Xochicalco on exhibit in the Xochicalco Site Museum, it is possible to identify some masks in Teotihuacan style (fig.245a-c), some that seem to be imitations of the Teotihuacan style (fig. 247 cf. 246),[560] others that seem to introduce Olmec features although they do not as a whole resemble Olmec masks (fig. 248), and others that conform to Mezcala styles (fig. 249b). The presence of Mezcala style masks forms part of an ongoing enigma. In the 1940s Miguel Covarrubias (1948), an avid collector with a passion for archaeology and anthropology, devised a typology for Mezcala style masks and figurines from the Balsas River area in Guerrero based on pieces in his possession.[561] Still used today, the types he identified are: 1) Olmec or La Venta style; 2) Olmecoid objects (fig. 248a); 3) Teotihuacan and Teotihuacanoid objects; 4) Olmec-

[559] González Crespo, Garza Tarazona, Alvarado León 1993-1994: 71-72.

[560] Even at Teotihuacan, masks display variation in style (e.g. Berrin and Pasztory 1993: 185-193).

[561] Even today only a handful of Mezcala style lapidary pieces have been excavated in the region to confirm or refine Covarrubias's typology. Paradis (1991) reports four masks conforming to Covarrubias's type 2, made of grayish greenstone flecked with white from a residential-funerary context that she dates to the Middle-Early Preclassic (700-200 BC), while Reyna Robles reports one pure Teotihuacan style mask fragment from Organera-Xochipala (2003: 23) and three Mezcala style greenstone "heads" in a context of Epiclassic construction reinforced by carbon-14 dates (2006: 113-114), although it is not clear that she is referring to masks; instead these might be figurine fragments (to be discussed in the next section). As for the dates of a Mezcala culture, she coincides with Paradis concerning the a major Middle Preclassic (1200-500 BC) phase, but goes on to describe a Classic period hiatus, with renewed activity in the Epiclassic (AD 650/700-900/1000).[561]

Teotihuacanoid objects; 5) objects in a purely local style (i.e., Mezcala) (fig. 249a).[562]

Sometimes the masks from Xochicalco bear traces of inlay in the carved out eye holes (fig. 249b), although at other times the mask's eyes seem to be carved as closed (fig. 249b-first on left). If they display perforations, they are usually on the tab-like ear projections, which probably held ear ornaments, because their location more or less midpoint on the mask would have made them unsuitable as holes for suspension. Given current understanding of these pieces, it is worth turning to what is known about Teotihuacan and Maya masks to bring into clearer focus their possible meanings.

Pasztory (1993a: 184) has noted the ubiquitous presence of Teotihuacan masks in public and private collections. Only rarely have they been excavated archaeologically in Teotihuacan (figs. 246a-b),[563] where they have been interpreted as masks that were probably attached to a perishable framework that was dressed (fig. 250a) and would have stood in for the rarer, full-length human lapidary figures made entirely of lapidary stone (fig. 250b). The masks were not made to be worn by people, but were more likely deity or

[562] According to Matos (2003), the largest number—totaling some four hundred examples—of Mezcala and Teotihuacan-Mezcala style pieces known comes from Late Postclassic Templo Mayor offerings. However, it would appear the function of these pieces had changed by Late Postclassic Aztec times, because these greenstone masks and figurines were cached in massive buried offerings in the structure that represented the symbolic center of the empire.

See Nagao 1985; González 1987; González and Olmedo Vera 1990; López Luján 1989. The Olmecs also carved jadeite masks. These pieces served a dedicatory function, because groups of made masks have been found in offerings dated ca. 900-400 BC along with jade celts and sometimes with figurines, such as in Hueyapan stream near La Isla and from Arroyo Pesquero, a small river near La Venta (Lunagómez Reyes 2010: 166-167). Despite the find spot, the same author also suggests the mask from Hueyapan may have been worn, given the presence of eye holes and perforations on the sides, while he suggests a funerary function for the Arroyo Pesquero example, based on the lack of eye holes, although Olmec masks have not been found in these contexts to date.

[563] Cabrera Castro et al. 1982, 1: 110, 246. In 2012 archaeologists found the earliest mask known from Teotihuacan in a dedicatory offering in the Sun Pyramid, but its style is completely unlike what has been found to date; see also http://www.mexicoambiental.com.mx/mexico/arqueologia.html)

ancestor images.[564] The handful of excavated examples do not come from Teotihuacan apartment compounds, but instead have been found in administrative and temple buildings or elite residential areas, which suggests a function more connected to state organization and the higher levels of society,[565] an identification also tied to their manufacture. At a lapidary and shell workshop was identified on the outskirts of Teotihuacan, as well as in the city's core west of the Moon Pyramid, the state control of the city's technology style strongly imposed a standardized style on lapidary production leaving little room for variation.[566] Despite evidence of a canonical, identifiable style for Teotihuacan masks, a comparison of the two excavated examples alone shows there was latitude for difference within the style. What seems to be characteristic of all Teotihuacan masks are the deeply gouged out eye holes, which in some cases still retain shell and other stone inlay that give the inert mask a lifelike quality. Fragments of *tecali* masks have also been excavated at Teotihuacan. This material was from Tecali and Tepejí de Rodríguez in the state of Puebla, the area where the Teotihuacan tradeware, Thin Orange ceramics, was made.[567] Significantly Teotihuacan style masks have also been reported in Puebla[568] and in Guerrero,[569] regions identified as sources for lapidary stone.[570] In the case of *tecali* or

[564] Pasztory 2005: 103. In an alternative reading of the same material, Annabeth Headrick (2007: 55) has suggested these solid stone masks were fundamentally mortuary in function and were attached to mummy bundles, similar to a ceramic mask and bust found in Teotihuacan (fig. 250a).

[565] See Cabrera Castro et al. (1983, 1: 110, 246) on two excavated examples. Fragments of travertine masks and vessels, and basalt and serpentine masks and sculptures were found in the fill of the plaza and elite residential complex opposite the Sun Pyramid (Museo Templo Mayor exhibition *Teotihuacan: Tres pirámides en el paisaje ritual*, 2014).

[566] Turner 1992: 107, 103, 109.

[567] Cabrera 1995: 134, 165, 176.

[568] Plunket and Blanco cited in Cabrera 1995: 282.

[569] Florencia Müller cited by López Luján 1989: 27.

travertine masks from Xochicalco, some conform to a Teotihuacan style (fig. 245a), while others appear to be locally made pieces alluding to the Teotihuacan style (fig. 244c).[571]

In contrast to masks from Xochicalco and Teotihuacan, in the Maya region jade masks were crafted into exquisite idealized mosaic portraits tp be placed for eternity on the face of the deceased ruler in tombs (fig. 251).[572] These Maya masks also display a wide variety of styles and physiognomies, but again the constant is that the eyes are generally made of inlaid shell together with a darker stone for the iris that bring the mask's visage to life. A Zapotec burial also yielded a unique greenstone mask, the renowned jadeite bat mask,[573] which was not actually worn as a mask at all, but instead as a pectoral,[574] while other Mixtec mosaic masks have been found in from caves such as that of Santa Ana Teloxtoc, Puebla.[575]

It would seem that Xochicalco masks, even in the case of possible Teotihuacan heirlooms, differed in usage from Teotihuacan, Maya, Zapotec, and Mixtec masks. Instead,

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[570] It would be enticing to suggest Teotihuacan masks may have been status items connected to Teotihuacan's commercial pursuit of lapidary stone for the metropolis's artisan population, because these finds coincide with areas identified as potential rich sources of lapidary stone (Cabrera Cortés 1995: 134, 165).

Teotihuacan style masks have also been found in much later contexts in the Aztec Templo Mayor (López Luján 1989).

[571] No evidence of local *tecali* working has yet been found in Xochicalco. Although Tecali and Tepejí de Rodríguez have been identified as sources of the raw material, I am unaware of the identification of workshop sites in the region. However, evidence of the hollow drilling of *tecali* have been reported from Teotihuacan and Tula (Turner 1992: 100), suggesting the raw material was transported and worked locally.

[572] Filloy 2010; Martínez del Campo 2011; González Cruz, Ruvalcaba Sil, and Riquelme Alcantar 2012.

[573] Found in Burial XIV-10 in Structure H in the Central Plaza in Monte Albán, a dedicatory offering with five skeletons, this elaborate, highly polished jadeite mosaic bat mask has been dated to Monte Albán II or the Late Preclassic period (100 BC-AD 200) (Filloy Nadal and Velandia Silva 2011: 50). Otherwise lapidary masks appear to be rare in Oaxaca.

[574] Filloy Nadal and Velandia Silva 2011.

[575] Vargas 1989.

the masks may have been seen in a different light at Xochicalco, stemming from the city's different political and social needs. In the Xochicalco Structure A deposit with the broken stelae fragments, the context suggests awareness of the exotic nature and perhaps the antiquity of the masks, given the presence of a Teotihuacan Old Fire God sculpture in a context clearly postdating Teotihuacan (see discussion in chapter 4 on this sculpture) in which the mask was deposited as part of a dedicatory offering. At the same time, the high concentration of masks and other lapidary materials at certain strategic points in the city under conditions that do not appear to represent votive caches could well have been for redistribution in rituals to reinforce status, as suggested by González Crespo and Garza Tarazona (1995).

One of the unusual features of Xochicalco was the construction of rectangular "boxes" built into the floors of some rooms; some were lined with slabs, while others were covered with "stone mosaic" (fig. 252).[576] The purpose of these constructions is unknown, but archaeologists have noted that all of them have been found empty.[577] Were these onstructions used for mundane storage purposes or could they have been equivalent to modern-day home safes, where valuables could be kept? Were the masks used in some sort of ritual or display, or could they have been regarded as a valuable commodity to be treasured and therefore cached? Perhaps the answer hovers somewhere between these two extremes.[578] What is known about insignia and accoutrements for Late Postclassic Aztec times is that they were imbued with a power capable of transforming the living or inert

[576] González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 36.

[577] Ibid.: 36, 196, 236, 267, 311, 365.

[578] See Cecelia Klein (1986) for an alternative reading of masks in Mesoamerica.

wearer (i.e., stone sculpture or wooden framework) into the godhead itself.[579] However, it appears unlikely that these sometimes quite large, cumbersome pieces were worn. Insignia, presumably including masks, must have been imbued with considerable power, but what sort of power?

Returning to Mitchell's (2005) notion of what do images want, the question here is what was lacking at a center like Xochicalco? As a short-lived center lacking long-term roots, it lacked the legitimacy and authority of other places that had other means of claiming ancestral foundations, such as Teotihuacan with its monumental early constructions, Palenque or Copán with its dynastic records—whether real or fictitious—and other centers that were built on centuries of earlier construction. This was not the case at Xochicalco with its lack of evidence of earlier construction, which is the basis for Hirth's (2000a: 59-98) dating of the site. When the city was built, families relocated here (from where is still a matter of debate), because the area has been largely uninhabited. Complete and fragmentary masks have been found throughout much of the ceremonial core of the site, including González Crespo and Garza Tarazona's Sectors B, G, E, and H as well as the Acropolis, believed to be an elite residence (fig. 31). This distribution underscores use restricted to the highest ranks of society in contexts that suggest both administrative and residential use. In the absence of other material evidence of their legitimacy, could these masks have been used in a way similar to their use at Teotihuacan in embodying the ancestors that were otherwise absent? In Xochicalco masks do not appear to be overtly linked to mortuary functions, a fact that clearly differentiates them from Maya masks. Spatially, the masks found at Xochicalco speak of Central Highlands traditions. Stylistically, they range from those that conform to Teotihuacan canons to others that are

[579] Hvidfeldt cited by Townsend 1979; López Austin cited by Magaloni 2013.

identified with Mezcala traditions associated with the Guerrero region, which could have dated to the Middle Preclassic (1200-500 BC)[580] or to the Epiclassic (AD 650-900).[581] Temporally, it would seem that at least some, if not all, of the masks could have been conceived of as "ancient" by the people at that time, given the apparently deep roots of the tradition and particularly if they were in the Teotihuacan-style. Even if they dated to the Epiclassic period,[582] they might still have been perceived as ancient or ancestral. Lapidary, particularly jadeite, materials possessed an aura of antiquity. According to Taube (2005: 23), "the Mayas seem to have identified jade with antiquity," a notion that carried over to Aztec times.[583] In fact, some of the Xochicalco pieces suggest an awareness of the ancient Olmec style particularly in the treatment of the mouth in certain masks (fig. 248).[584] It would seem that lapidary stone, particularly jadeite, and other dense stones that could be polished to a lustrous sheen were valued for their beauty, the prestige they evoked, as well as their connection to the past. Whether through the glory of Teotihuacan or the more ancient legendary past known through the Olmec legacy, masks served to mirror real or fictitious ties with ancestors deployed to bolster elite authority, which may have been among the specific concerns in Xochicalco as a recently established center lacking deep historical roots. Whether the masks were actually used to assemble deity images, ancestral

[580] Paradis 1991.

[581] Reyna Robles 2003: 23.

[582] Reyna 2003: 18-24.

[583] Umberger (1987) has traced the development of an archaizing Aztec greenstone piece from the Templo Mayor back to a Xochicalco monument.

[584] Garza Tarazona and González Crespo 1995: 134-135 reported the discovery of Olmec style masks, which probably refer to masks with Olmecoid features. Some of the lapidary material excavated at Teotihuacan also incorporates Olmecoid features, mainly identified in the treatment of the mouth (Berrin and Pasztory 1993: no. 15) as also seen in fig. 248b from Xochicalco.

images, were kept as cherished power emblems of the past, or were distributed in state-level ceremonies, or some other purpose is currently unknown, but they suggest tantalizing possibilities to explore in the future.

Figurines

No lapidary figurines have been found to date at Cacaxtla. However, an enormous quantity of lapidary stone figurine fragments and complete specimens have been found at Xochicalco, as summarized in Table 6 in Appendix D. [585] Furthermore, these figurines display a wide variety of styles and stone types. In fact, the figurine material is more abundant than the mask corpus and was found in broader contexts throughout the central parts of the city (i.e., within the area excavated by González Crespo and Garza Tarazona's team and bounded by the site's three ballcourts; see fig. 31). Like the lapidary masks, these

[585] Other greenstone figurines (complete figurines or fragments, generally fragments, or single figurines) were found in Xochicalco in diverse contexts listed below. However, the chart in the excavation report does not illustrate the pieces and does not indicate the type or style.
Sector A: trash (2), Unit 3 cave (6); Unit 3 drain; Unit 3, east corner;
Sector B: Unit 1; Unit 1, east Structure 6, patio 3; Unit 1, Structure 1, Room 2 (3); Unit 1, Structure 2, Room C3 (17 fragments); Unit 1, patio entry; Unit 2, bench; Unit 2, Structure 1 (4); Unit 2, Structure 2, Room 2 and gallery 1 ; Unit 2, Structure 3 Room 1, exterior, on wall; patio; Unit 4, structure 1, contention wall;
Sector C: North ballcourt; west head; north platform, central part, patio;
Sector D, wall;
Sector E: surface, Unit 1, east patio; Unit 3, shrine; Unit 3, Structure 4; Unit 3, Structure 5, Room 2, northwest side;
Sector G: Structure 2 substructure; Structure 3; Structure 6, Room 3b; Structure 6, Room 3h; Structure 6, Room 4c; Structure 6, west exterior; Structure 6, patio 1; Structure 6 drain; Structure 6, patio 2; Structure 6, patio 3; Structure 6, pit 1; Structure 6, pit 7; Structure 7, Room 5; Structure 8, north room; Structure 8, south room; Structure 8, south corridor; Structure 9, Room 4; Structure 11, Room 3, plaza 5; Structure 12, large gallery; Main Plaza, surface;
Sector H: Structure 4; Structure 4, Room 4; Structure 5; Structure 5, Room 3; Structure 5, Room 4; Structure C, east contention wall;
Sector I: second stair; Structure 10, double gallery; Structure 10, lower level; Structure 4, portico; Structure 9, portico; Plaza 5;
Sector K: Structure 4, East Ballcourt;
Sector N, ramp;
Acropolis; Structure 4, Structure A *temascal*; Structure 8, Room 1; Structure 8, Room 11; Structure 8, Room 13; Structure 8, Room 3;Structure 8, Room 8; Structure 8, patio 1; Structure 8, patio 2; Plaza (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 118, 121-124, 126, 128-150, 152-157, 159-181), as well as in G6-3h, the G-3 large gallery, and H4 (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 214, 250, 262-263).
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pieces have been most closely tied with Central Highland traditions, including Teotihuacan, Oaxaca, and Guerrero, and not with the Maya region and the Gulf Coast.

Noguera (1961: 36, fig. 4) also reported finding a Teotihuacan-style stone figurine during his 1960 season, an identification supported by Sáenz's (1961: 42, fig. 8 OR p. 63; 1964a: 69, fig. 7) description of the discovery of Teotihuacan-style stone figurines. However, in both cases, the references appear to be what in other publications is described as "Teotihuacan-Mezcala" figurines, because lapidary figurines from Teotihuacan have also only rarely been excavated at the site and thus are rather poorly known. In an overview of the 1993-1994 excavations González Crespo and Garza Tarazona (et al. 1993-1994: 106) reported finding a total of 694 figurines, of which they classified 487 as "Xochicalco type," seventeen Guerrero type, two Olmec style, one Tejupilco type, and one Teotihuacan type, while the rest are classified as "undetermined." The "Xochicalco type" apparently refers to what is called "Teotihuacan-Mezcala" style in the literature (fig. 254), while the "Guerrero type" probably refers to more schematic pieces in Mezcala styles identified in Covarrubias's typology (fig. 257 cf. 256).[586]

Lapidary figurines appear in Xochicalco in diverse contexts that suggest they had a polysemic meaning. Numerous greenstone figurines carved in different styles have been found in offerings and burials at Xochicalco, often with figurines in different styles within the same context (Appendix D, Table 6, nos. 1-4, 9, 21) and diverse materials including jade, turquoise, shell, obsidian, *tecali*, and ceramic.[587] Some appear to have been found

[586] González Crespo, Garza Tarazona, De la Vega 1995: 231.

[587] Based on identifications in the literature, Teotihuacan style figurines have been reported for the Stela pit of Structure A (Sáenz 1961: 42), the Offering Chamber of the same structure (Noguera 1961: 35) and the associated burial (Sáenz 1961: 39). Teotihuacan-Guerrero figures have been reported for the Offering Chamber Burial of Structure A (Sáenz 1961: 39), and Mezcala style pieces form the Pyramid of the Feathered Serpent fill (Sáenz 1963: 10), from the Stela pit in Structure A (Sáenz 1961: 42), from the Offering Chamber

with paraphernalia (obsidian blades or points; flutes; censers; drinking vessels; other receptacles) suggesting manipulation in a ritual context (Appendix D, Table 6, nos. 7, 8, 10-12, 16, 17, 20), the result of a sacrificial ritual (Appendix D, Table 6, no. 19), or in the presence of Tlaloc (Storm God) vessels or other Tlaloc imagery (Appendix D, Table 6, nos. 6, 13, 16). Sometimes the most distinctive feature of the deposit are the quantities of figures (Appendix D, Table 6, nos. 14, 15), suggesting a hoard or a personal treasury, or in the presence of partially worked material, they might indicate a workshop (Appendix D, Table 6, no. 18). That being said, many pieces or fragments were found in isolation (Appendix D, Table 6, no. 5; footnote 19), which cloud a clearer understanding of their purpose.

Xochicalco lapidary figurines are generally solid, lacking any indication of perforation for suspension.[588] The three stylistic traditions most often cited—Teotihuacan, Teotihuacan-Guerrero, and Mezcala[589]—will be reassessed in the following discussion. The designations for different styles actually have little archaeological basis to substantiate them as accurate names for style regions, for very few pieces come from a clear provenience.[590] Therefore, the actual origins of these pieces remain nebulous. Furthermore, the application of these designations is not always rigorously used, so these names can be

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(Noguera 1961: 36) and the Southwest room of the same structure (Sáenz 1962: 46). In reality, the style identifications are open to revision, because in reality the number of figures truly resembling those from Teotihuacan fall into the more schematic "Teotihuacan-Guerrero" style category.

[588] The lack of any perforation for suspension is an important point, because in the case of Xochicalco, the figurines do not appear to be perforated and are on a scale that would suggest they were not worn, while the greenstone plaques do bear perforations, which suggests a different purpose. This observation was based on the study of pieces on display in the Museo Nacional de Antropología and in the Bóveda (vault) of the same museum (May 1984), because some of the "figurine" material from the Feathered Serpent Pyramid in Teotihuacan (studied November 2013) is perforated in the back, which have led researchers to suggest at least some of them may have been worn as amulets (Cabrera Cortés 1995: 280).

[589] See González and Olmedo Vera 1990 for a detailed discussed of Covarrubias' and later typologies.

[590] See González González 1987, González and Olmedo Vera 1990: 29ff; Cabrera Castro 1986: 198; Martínez Donjuán 1986: 74.

misleading. Although they may be useful in conjuring up general visual impressions of object types, these categories are perhaps not useful tools in discussing cultural affiliations.

Norberto González Crespo and Silvia Garza Tarazona refer to the majority of examples of greenstone figurines from Xochicalco as "Teotihuacan-Mezcala" style. They are generally small-scale male and female figurines with simple features (fig. 254), often with a wide rectangular headband or a T-shaped headdress. They appear to be carved from flat, rectangular pieces of diverse types of stone, identified primarily as lutite and phyllite, with smaller quantities of serpentine, schist, tuff, travertine, jasper, and diorite by González Crespo, Garza Tarazona and De la Vega (1995: 231). The pieces are worked with rudimentary techniques to delineate straight horizontal, vertical or diagonal lines on a flat surface. Xochicalco specimens do bear a certain resemblance to those from Teotihuacan (fig. 254 cf. 255) in their standing position and T-shaped headdress. In the case of female figurines, they are sometimes shown with a triangular shaped tunic, known as a *quechquemitl* in later times, and a long skirt[591] or a rectangular upper garment and a long skirt seen in Teotihuacan sculpture (fig. 250b). Males are usually depicted with arms beside the body, while the arms on female figurines are not visible.

Figurines from Xochicalco dubbed "Mezcala style" are generally the simplest and most schematic of all within the corpus. Features are rendered in summary form, often without any indication of headdress or clothing (fig. 257 cf. 256). These pieces are generally not as flat as the "Teotihuacan-Guerrero" type and sometimes features are indicated more by contours or shifts or in volume and were perhaps painted onto the figure. It is important to note that they do not constitute a unified stylistic tradition, nor can they be

[591] Museo Nacional de Antropología, Mexico, vault drawer B-10, nos. 15-97.

facilely linked to styles known "local" styles from the Mezcala region.[592]

Only one Teotihuacan-style figurine was reported from the most recent excavations, although it is unclear which piece it refers to.[593] Excavated figurines from Teotihuacan are completely unlike those found in Xochicalco. Extremely schematic figurines carved in slate with irregular features painted red were found in the tunnel in the Teotihuacan Sun Pyramid (fig. 258), but their minimalist and rudimentarily grooved features do not resemble the Mezcala technological style. Manuel Gamio also illustrates other pieces said to probably be from related excavations (fig. 259), which appear to represent female and male figurines in the Teotihuacan and Teotihuacan-Mezcala style. They already raise the problem of the difficulty of distinguishing between the different styles.

Other greenstone figure types found at Teotihuacan were excavated from Burial 14, the central grave, in the Feathered Serpent Pyramid (ca. 200-250).[594] Oralia Cabrera Cortés (1995) developed a ten-part typology and Sugiyama (2005) an eight-part typology for the forty figurines from the Feathered Serpent Pyramid; the significant factor here is the diversity of types more than the details distinguishing the two systems. All of the pieces depict male figures, some with headdresses (the T-shaped headdress the most typical) or ballplayer helmets, while others lack any indication of clothing (fig. 255b-d). What is surprising about these pieces is their diminutive scale, ranging from 2.3 to 6.5 cm tall, and the extreme fineness of some of the pieces despite their diminutive size, some as thin as 2 mm to 1.1 cm thick[595] and even have inlaid shell teeth.[596] Only one specimen was made of

[592] See González González 1987.

[593] González Crespo, Garza Tarazona, De la Vega 1995: 231.

[594] Sugiyama 2005:148-153, 40.

[595] Cabrera Cortés 1995: 265ff.

jadeite measuring only 2.7 cm long by 2 mm thick (fig. 255c), and it was a reused piece of material at that,[597] which suggests the difficulties that the Teotihuacanos might have had in accessing the raw material. Nevertheless, for present purposes what is most important about this deposit is the lack of figures conventionally known as "Teotihuacan," "Teotihuacanoid," or "Teotihuacan-Mezcala" in style. In fact, Rosa Reyna has identified the "Teotihuacan-Mezcala" type as not Mezcala style at all, but more likely from a different part of Guerrero that borders Oaxaca, southern Puebla, and Morelos, by citing the find of similar figurines from a funerary offering in central Puebla.[598]

Other types of greenstone figurines were found in dedicatory offerings in the Moon Pyramid in Teotihuacan.[599] Two diminutive Teotihuacan style seated figurines with T-shaped headdress (fig. 255e),[600]inlaid shell eyes, and removable earflares were found in Burial 3 (ca. AD 300), containing the bodies of four foreigners, one with greenstone ornaments.[601] What seems to be a Maya figurine (fig. 260) was found in Burial 5 (ca. AD 350) containing three individuals seated a lotus position, associated with rank particularly in the Maya region; the human bodies and the figurine were all bedecked with rich jadeite ear and necklace ornaments of types known from the Maya region.[602]

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[596] Ibid., 274.

[597] Ibid.: 269.

[598] Ibid.: 282; Cabrera Castro cites personal communication with Rosa Reyna and Plunket and Blanco (1989).

[599] Sugiyama 2004: 46, 48.

[600] These types resemble those reported by Daniel Rubín de la Borbolla for the same structure (1947) seen herein in fig. 255a.

[601] Sugiyama and López Luján 2006: 17, 28-31; Sugiyama 2004: 46.

[602] Sugiyama and López Luján 2006: 18, 33-39.

The so-called "Teotihuacan-style" greenstone figurines from Xochicalco do not seem to be Teotihuacan style at all, although they are derivatives of the Teotihuacan tradition in some ways. The Xochicalco pieces tend to be larger and at best schematic allusions to the Teotihuacan pieces. Therefore, the excavators seem to be correct in dubbing them "Xochicalco style," because this is where the largest number of them have been found to date.

Earlier extremely schematic pieces have been reported for Monte Alban IIIA (ca. AD 300-500) contexts[603] (fig. 261a-b), although their provenience remains unclear.[604] The identification is based on Miguel Covarrubias's typology,[605] long held as the authoritative model, because most Mezcala type pieces have not been found in archaeological context in their supposed area of origin. Instead, they have been discovered in a wide range of contexts, including caches, sepulchers, cave offerings, as well as domestic contexts.[606] Recently a number of lapidary anthropomorphic figurines have been excavated in the Mezcala River basin and greater cultural area spilling into the State of Mexico and Puebla.[607] However, it remains unclear that these pieces were actually made in the Mezcala

[603] Blanton 1993: 87; figurines in Caso 1965: 902; Paddock 1966: 179.

[604] Caso (1965: 903-904) asserts that the Monte Albán examples "are all similar to those discovered in the Temple of Quetzalcoatl" at Teotihuacan. However, this is perhaps an overstatement, for the figurines from the Temple exhibit much greater care and delicacy in carving than the Monte Albán examples.

[605] Miguel Covarrubias devised his typology and published it in "Tipología de la industria de piedra tallada y pulida de la cuenca del río Mezcala," in *El Occidente de México*, 86-90, Mexico City, Sociedad Mexicana de Antropología, 1948. Given the lack of archaeological excavations, he used experience garnered from twenty-five years of collecting (Lister 1971: 624) to devise a typology still used today (González and Olmedo Vera 1990; Reyna Robles 2006).

[606] González and Olmedo Vera 1990: 31-34.

[607] Ibid. 28, 30, 33. Reyna Robles (2006) reports on the excavation of greenstone figurines in diverse contexts: 1) three figurines and three heads from an Epiclassic context in La Organera-Xochipala (ibid.: 113-114); 2) male and female greenstone anthropomorphic figurines one with a Tlaloc on the back found on a bench-altar at San Miguel Ixtapan, municipality of Sultepec, State of Mexico (ibid: 127-128); 3) an offering containing

region. Evidence of a possible workshop area that had been looted was found in Cerro de los Olvidados of Guerrero,[608] although its date is unclear. The Mezcala River basin displays evidence of other types of connections with Teotihuacan and the Zapotec region, particularly for the Late Classic and Epiclassic periods (500-950), which implies greater interaction of some sort than has been acknowledged to date.[609]

In fact, schematic figurines, as well as plaques (to be discussed in the next section), are much more common at Monte Albán than anywhere else.[610] Nevertheless, Monte Albán has not been identified as the source for these types of figurines. Despite some resemblance between the Monte Albán and Mezcala pieces, González and Olmedo (1990: 82) identify the greatest similarities in groups made from the same types of stone; therefore, it is possible that the lapidary material was transported in the form of blanks or preforms to different areas where they were locally worked. This might explain the often highly schematic, simple working of the pieces suggesting not all areas were fortunate to have equally skilled lapidary artisans. The simple, schematic style, commonly referred to as Mezcala, could have been reproduced relatively easily, and therefore need not necessarily be identified with a centralized area of production, as long as the artisan was familiar with the tools and materials used to work lapidary stone. Nonetheless, the more elaborate pieces

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five Mezcala style serpentine anthropomorphic figurines from Cerro de la Guitarra, State of Mexico (ibid.: 129).

[608] González and Olmedo Vera 1990: 33.

[609] Evidence includes a distinctive local *talud-tablero* with inset "clavos" (nail) ornamentation resembling *chalchihuitl* painted decoration known from Teotihuacan (Reyna Robles 2006: 112, 115, 130), ceramic imitations (Ball's "homologies") of Teotihuacan and Zapotec ceramics (ibid.: 222), *candeleros* (ibid.), Teotihuacanoid or Mazapaoid terracotta human figurines (ibid.), a sort of Huehueteotl (Old Fire God) (ibid.: 70), and human and animal figurines comparable to Monte Albán IIIb-IV and Gulf Coast Remojadas (ibid.).

[610] Caso 1965.

would have required considerably greater expertise.[611]

A brief word on the Maya region is in order, despite the overall absence of ties with Xochicalco figurines and this region. Although the Mayas were renowned for working jadeite, almost all of it was fashioned into pieces that could be worn as status symbols and later interred in tombs. Rands (1965: 570-571) mentions the only unperforated figurines (which he also calls "statuettes") are known from Copán, as well as unperforated jade plaques from the same site. Moreover, the only figurines mentioned by Proskouriakoff (1974: 102-103, pls. 56d, 57) are a small corpus of dwarfs, some of which also have a perforation, so they could have been worn. Otherwise, of the extremely rare examples of lapidary figurines found in the Maya region, the few reported cases are simple, schematic pieces that resemble those discussed as "Mezcala" or "Mezcala-Teotihuacan" style (fig. 262) from Late Classic Palenque.[612] However, these pieces would seem to be of local production, based on minor differences in the approach to the figure and its accoutrements. For example, the slightly raised rim around the gouged out almond-shaped eyes and the lack of ear tabs and of any sort of headgear set this piece apart from Xochicalco and Monte Albán pieces.

There would appear to be a growing body of evidence that this Teotihuacan-Mezcala and at least some of the so-called Mezcala style pieces might have come from this

[611] More recent study of the Mezcala pieces in the Templo Mayor of Tenochtitlan also suggest local manufacture based on scanning electroscopic microscopy (SEM) that reveal uniform manufacturing traces among these objects and others made in the Mexica capital (Melgar Tísoc 2004). However, other scholars believe the evidence does not show the origin of the pieces, but instead demonstrates the Mexicas repolished the pieces that reached the capital before depositing them in Templo Mayor offerings (Leonardo López Luján, personal communication).

[612] This piece was reportedly found in the 1992 excavations carried out by the Proyecto Especial Arqueológico de Palenque (*Reforma*, July 17, 1996). Extremely schematic or rudimentary stone figurines have also been reportedly found in burials in the Quiché Maya area as well (Ciudad Ruiz 1986: 67).

Guerrero-Puebla-Oaxaca-Morelos border region as noted by Rosa Reyna,[613] while other pieces could have been made locally in diverse parts of Mesoamerica. In the case of Xochicalco, given its proximity to this core border area and the abundance of lapidary materials found at the site, it is possible that Xochicalco may have played a major role in developing this type of figurine. Furthermore, the evidence of empty stone boxes and looted offerings at Xochicalco[614] combined with evidence of Aztec awareness and conscious sculptural references to Xochicalco[615] make it entirely possible that the Aztecs or other tribute-bound polities closer to the ruins extracted this material from Xochicalco to be deposited in the Templo Mayor.

Even though the Aztecs cached these figurines in the Templo Mayor, it would seem their function was different at Xochicalco, given their extremely widespread distribution throughout the elite core of the city, usually in small quantities and not massive deposits. With the exception of some of the figures that display Storm God (Tlaloc) features, most of the Xochicalco figurines lack obvious features identifying them as deities, although the possibility remains that they could have been dressed as gods. They represent both males and females, which was also the case in Teotihuacan lapidary sculpture and clay figurines. In the metropolis, lavish lapidary sculpture in diverse styles has been interpreted as temple images for the highest levels of Teotihuacan society, while the wide variety of terracotta figurines have been identified with what may have been daily rituals conducted by the masses.[616] Based on excavations at Xochicalco to date, very few terracotta figurines have

[613] See Cabrera Cortés 1995: 282.

[614] González Crespo, Garza Tarazona, Alvarado León 1993-1994: 196, 236, 267, 311, 351, 365.

[615] Umberger 1987.

[616] Berrin and Pasztory 1993: 176-179; 222-235.

been reported.[617] Instead, many stone figurines of different styles have been found from throughout the central portions of the city (see footnote 571).

The deposits excavated by Sáenz combined a variety of figurine styles in offerings, which suggests awareness and intentionality in positioning pieces that embodied different traditions (Appendix D, Table 6, nos. 1-3). These three dedicatory offerings are particularly eclectic in their contents, which raises the possibility that their ritual deposition may have served as a symbolic act summoning the power of diverse traditions or may have constituted an expression of support from diverse realms through tribute or gift exchange, framing Xochicalco as a cosmopolitan center. At the same time as a number of deposits pair Xochicalco style (Teotihuacan-Mezcala) and Mezcala style pieces (Appendix D, Table 6, nos. 1-4), they also often pair male and female figurines, which is clearly the case in Appendix D, Table 6, nos. 1-2, although possibly nos. 3-4 as well, because gender is not noted and the figurines could have been dressed in different ways.[618] Often figurines are reported in pairs (Appendix D, Table 6, nos. 1-4 11-15, 19; Sector A and B), unless they appear in fill or are in such fragmentary condition that the original number is unclear. Figurine concentrations in certain buildings (Appendix D, Table 6, nos. 7, 17) suggest these pieces were concentrated in specific locations and were redistributed perhaps in personal rites in which the paraphernalia found with them could have activated them. It also remains possible that figurines played a role related to the ancestors, deities, or deified ancestors and

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[617] e.g., Litvak King 1967: 44-46; Garza Tarazona and Alvarado León 1993-1994: 26.

[618] If deities, they may have represented the male-female deity pair identified by Pasztory (1976) in the Xochicalco stelae.

that people acquired them to possess an ancestral or divine presence in their households.[619] Further analysis of the materials from the site-wide excavations will hopefully shed greater light on these possibilities.

Pendant Plaques

Greenstone plaques or pendants (not to be confused with beads or ornaments) constitute the next category, which seem to have no affiliations with Teotihuacan (unlike the figurine category), but instead with the south: the Maya region or Oaxaca. These pieces are flat and perforated at the sides apparently for suspension probably on the chest. A number of them have been recovered from the Cenote of Sacrifice at Chichén Itzá, where they generally represent frontal or profile heads, torsos or full figures, often wearing a headdress with narrow bands or a zoomorphic maw (fig. 140, 180, 196). There are no known representations of these plaques on monuments, nor are they known as part of burial furniture among the Maya.[620]

Only four lapidary plaques or pendants have been found to date at Cacaxtla,[621] while an abundance of lapidary plaques and pendants have been discovered at Xochicalco, as detailed in Table 7 in Appendix D. Unlike the other lapidary categories discussed above, the Cacaxtla and Xochicalco lapidary plaques resemble types known from the Maya and Oaxaca traditions, but not from Teotihuacan and the Gulf Coast regions.

The Building B battle murals at Cacaxtla depict individuals with Maya physiognomy clad in elaborate textiles, lavish feathers, and splendid greenstone ornaments

[619] Some of the figurines were carved with crossed arms. Finegold (2004: 39-40), citing Urcid (1993: 148), has interpreted this crossed arm position at Cacaxtla to represent venerated ancestors, an interpretation that might apply to some of the Xochicalco lapidary figurine material.

[620] Proskouriakoff 1974: 4.

[621] López de Molina and Molina Feal 1986: lám. 161; Nagao 2007.

(fig. 263), however lavish greenstone ornaments of this type have not yet been found at the site. In fact, overall the materials found to date, admittedly from the extremely small portion of the city that has been excavated, tend to be rather poor in quality and quantity, particularly when compared to the abundance of remains from Xochicalco.[622] The first of these pieces (fig. 264) is a small highly polished, dark greenstone pendant with a face worked with tubular drills to fashion the round shapes of the eyes and mouth, with curved linear incising of the closed eyelids and lips.[623] The pieces that bear the closest resemblance to this small pendant are greenstone plaques from Xochicalco (discussed below) and plaques from Epiclassic Monte Albán IIIB-IV (750-1250[624]) (fig. 266). However, specific details differentiate the Cacaxtla piece, such as the dark color of the stone and the way the Cacaxtla piece is fundamentally defined by the three circles made with the tubular drill, with no special effort to define the nose. These deviations, as well as the presence of unworked pieces of greenstone found at Cacaxtla,[625] suggest the head pendant could well have been made in Cacaxtla.[626]

The second Cacaxtla greenstone plaque is carved from a pale uniform bluish green, highly polished stone that bears traces of red pigment (probably cinnabar or hematite) that

[622] Although Hirth (2005) did find evidence of Late Formative (350 BC-AD 100) jade working in a domestic context at nearby Nativitas, about 2 km southeast of Xochitécatl.

[623] This piece was found in a sacrificial burial containing the skulls of six children in the Patio of the Altars at Cacaxtla (Delgadillo Torres and Santana Sandoval 1990: 49). Technically, this piece is not a plaque, but instead a small pendant, but given the scarcity of greenstone material from Cacaxtla, it is included in this discussion. Only some of the head pendant plaques in Proskouriakoff (1974: 121, Plate 50a; 123, Plate 51e; 125, Plate 52c) appear to have closed eyes.

[624] See Winter 1989 for these dates.

[625] Palavicini Beltrán and Reyes Zepeda 2005.

[626] Hirth (2005) has also reported on evidence of Late Formative (350 BC-AD 100) jade bead production in in the Nativitas area on the hill slopes 2 km southeast of Cerro Xochitécatl, where fragments of finely textured, apple green material perhaps from the Motagua Valley was found..

shows the torso of a frontal male figure (fig. 265a). Displaying greater complexity in carving, the figure appears to wear a headdress with a monster maw with curved upper lip, round eyes with other disks above, prominent found ear ornaments, and a necklace of round beads with a row of what might be feathers below. The shape of the piece is unusual. Symmetry was highly valued in these pendants, and the overall shape of the greenstone is irregular, but it does not appear to have been the result of breakage. Also unlike most greenstone plaques, the bottom ends in an unusual straight edge. The elongated tapering face, the continuous arc above the eyes, and the long pendants differentiate this piece from other known greenstone pieces, which again implies the likelihood of its local production.

The third example is a thin oval plaque also made of a pale, uniform bluish green stone (fig. 265b), in which the upper, carved surface of the piece has been flattened to form a fairly uniform surface. Typical of these plaques, it has a frontal almost full-length male figure wearing an unusual monster maw headdress with curled upper lip, an odd array of disks and almond shapes perhaps simulating the creature's eyes, with flaring incised lines above probably indicating feathers, as well as what might be a profile human head[627] on the right side of the headdress. It is perforated on both sides, so it could have served as an amulet or pendant. Like the second figure above, it displays a necklace made of round beads, a rectangular belt, and asymmetrical, rubbery bent legs. Unlike the two examples discussed above, the eyes are treated as an oval with a convex in the middle suggesting closed eyes, a typical feature of Xochicalco and Monte Albán pieces, but unlike greenstone plaques from the Maya region, where the figures eyes are rendered as open (fig. 140, 180a, 196, 251). Another odd detail is the treatment of the mouth as an oval with a slightly

[627] Profile heads on the sides of headdresses are characteristic of Maya jade plaques, but these heads are rendered as emerging from profile serpent heads (Proskouriakoff 1974: 162-165), appear to be absent in this Cacaxtla plaque.

concave line to indicate the upper and lower lips, while the other examples from Xochicalco (figs. 270a, c) and Monte Albán (fig. 265) clearly have a convex line, as if suggesting a frown. The nose is clearly shaped with attention to delineated the fleshy contours of the figure's nostrils. Although these plaques from Cacaxtla typically show the figure's hands positioned in front of the torso or abdomen, the treatment of the hands of this figure with fingers awkwardly curled around and pointing outward toward the elbows is a pose not employed in other plaques. Again, it would appear this piece was locally made in Cacaxtla.

The fourth Cacaxtla greenstone plaque is considerably larger than all the other plaques from Cacaxtla and Xochicalco, almost 19 cm tall (fig. 265c). It is made of an irregular slightly deeper green and white stone, also with perforations on the sides for suspension. Also odd is the way it was worked. The face of the stone was not smoothed into a flat plane before carving, so its bumpy, irregular upper surface must have been difficult to carve. As the other plaques, it shows a frontal, full-length male figure wearing a headdress that has the curled moustache shape framing the face, but it can no longer easily be read as a serpentine creature. This plaque shows profile human heads also with closed eyes on both sides of the central figure's face, a detail characteristic of Maya-style plaques (fig. 267) that is also seen in Xochicalco examples (fig. 270b).[628] However, the other details, such as the serpentine headdress with curled maw, eyes, and curls over the serpent's eyes are not clearly depicted in the Cacaxtla version, as though part of the composition was not fully understood, and therefore omitted. Also like third plaque, the eyes are rendered as ovals with a concave incision suggesting closed eyes and the division between upper and

[628] In the Maya region, the eyes of the lateral heads are clearly open (Proskouriakoff 1974: 162-165), but at Xochicalco, the central and lateral heads have closed eyes.

lower lip, a trait also seen in Monte Albán IIIb-IV greenstone pieces (fig. 266). The subject also wears a belt and loincloth, details that appear in Maya greenstone plaques, but not those from Monte Albán. Furthermore, the figure's bent arms are oddly positioned with claw-like hands awkwardly placed to the figure's sides, a pose occasionally also found greenstone plaques from Monte Albán.[629] Again, given its lack of stylistic parallels, it would appear this piece is of local production.

Therefore, based on this cursory examination of Cacaxtla greenstone plaques, it would appear that the concept of the greenstone plaque-pendant bearing a frontal human figure originated in the Maya region based on the abundant examples found in the Sacred Cenote in Chichén Itzá.[630] However, these pendant plaques were reinterpreted in the Central Highlands. If Taube (2005: 23) is correct that the Mayas associated jadeite with antiquity as precious heirlooms passed down from one generation to the next and as a means of communication with the ancestors, a similar value may have been preserved in the Central Highlands. However, the depiction of figures with closed eyes suggests death, perhaps depicting the notion of deceased elite ancestors.

Turning to Xochicalco, what is interesting is that greenstone plaques are the most recurrent lapidary element found in the burials and offerings, which were all probably dedicatory deposits, excavated by César Sáenz in the Feathered Serpent Pyramid, Structure A (Temple of the Stelae) and Structure C (Appendix D, Table 7, nos. 1-7). These deposits combined highly diverse contents apparently from a variety of sources. When deposited in such offerings, they occur in the absence of lapidary masks, but are often accompanied by worked and unworked shells and sometimes with slate disks covered with iron oxide,

[629] Paddock 1966: 158.

[630] Proskouriakoff 1974.

which might have been mirror backs or *tezcacuitlapilli*, round emblems associated with warriors. At Xochicalco, they have sometimes been found together with greenstone objects in other styles. Furthermore, they are most frequently found with human remains in secondary burial contexts.[631] Also striking is the fact that they are often placed in pairs at Xochicalco. Sometimes the two pieces conform to the same style or color of material, further suggesting a deliberate pairing, the significance of which remains unclear.

On the other hand, the greenstone plaques excavated by González Crespo and Garza Tarazona (et al. 1993-1994)[632] do not appear to be from discrete ritual deposits (Appendix D, Table 7, nos. 8-9), but rather the remains of the city's violent end. In one case (Appendix D, Table 7, no. 8), the plaques appear near an altar along with ritual paraphernalia that included large numbers of masks where a burned roof had caved in, apparently an area of ritual activity. In contrast, the second context included an unusually large number of figurines and ornaments (Appendix D, Table 7, no. 9). This deposit was discovered in a room with an altar and the sculpture of the head in the serpent helmet (Lord Serpent Helmet discussed in chapter 3) in addition to a large quantity of stone figurines and beads, which

[631] Greenstone plaques from Xochicalco burials have been reported for the Offering Chamber, Structure A (Sáenz 1961: 399; Structure C (Sáenz 1964: 13); two for the Feathered Serpent Pyramid (Sáenz 1963: 16), while offerings without human remains include the Feathered Serpent Pyramid (Sáenz 1963: 13); the Offering Chamber, Structure A (Noguera 1961: 35) and Structure C (Sáenz 1964: 13).

[632] Other lapidary plaques-pendants were reported from the locations indicated below. These pieces are not included in the present discussion, because they are not on display in the Xochicalco Site Museum and have not yet been illustrated for study.
Sector A: trash dump; Unit 3, cave (3); Unit 3, drain;
Sector B: Unit 1; Unit 1, Structure 2, Room 3 (6); Unit 1, patio (10); Unit 1, patio, southeast corner (12 complete; 220 fragments); Unit 2, Structure 1, Salon (4 complete; 38 fragments);
Sector C: talud and entrance;
Sector G: Structure 6, patio 2 and 3; Structure 6, patio 3 (fragments); Structure 8, south corridor;
Sector H: Structure 5, Room 3 (2 complete); Structure 5, Room 4; Structure 6, east side contention wall;
Sector I: Structure 10, lower level; Structure 4, portico, east side;
Structure 9, portico (3 complete; 2 fragments);
Acropolis: Structure 8, patio 2, Room 4 (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 118, 121-124, 126, 128-149, 154, 163-171, 173-175, 181).

led investigators to believe distribution of these pieces was controlled here, because there was no evidence of workshop activity.[633] Significantly, greenstone plaques were not as prevalent in the other areas excavated by González Crespo and Garza Tarazona; they seem to be concentrated in the area north of the Main Plaza, with few examples from the elite residence of the Acropolis and the southern more accessible part of the city.

Another distinctive feature of the greenstone pieces from these contexts is the diversity of styles, which can be divided into two basic categories. Known in greatest numbers from the Maya region, greenstone plaques can be generally divided into two types: profile figures (generally seated) and frontal figures (depicting heads alone or entire standing figures). All of these pieces are perforated to be suspended and worn. The profile type of Maya greenstone plaques (fig. 180a) has been found throughout Mesoamerica.[634] These portable profile specimens are believed to have been the prototype for the figures carved on Xochicalco's Feathered Serpent Pyramid,[635] although no greenstone plaque of this type has yet been found at Xochicalco. Instead, González Crespo and Garza Tarazona (et al. 1995: 236) reported terracotta plaques (fig. 268) and vessel fragments decorated in bas-relief depicting a seated individual in Maya style. The Reptile's Eye glyph, perhaps accompanied by the coefficient 9, on the plaque attests to the local (i.e., not Maya) production of these pieces. Although similar in conception to the Feathered Serpent

[633] González Crespo, Garza Tarazona and Molina Montes 1994:67-68.

[634] Profile seated figure compositions on jade plaques have been found in the Maya region at Toniná (Easby 1961: Fig. 2c9, Uxmal (Ruz Lhuillier 1955: Lám. XXV), Nebaj (Smith and Kidder 1951: Fig. 59b), Chichén Itzá (Proskouriakoff 1975: 178-179, 184-185), as well as beyond, in the Teotihuacan Valley (Gamio 1979 II: lám. 132), Monte Albán (Batres 1902: lám. 20), and even at Tula, although in the form of a carved shell (Schele and Miller 1986: 89, Plate 5).

Significantly, profile seated figures, with frontal bodies and profile head, are somewhat rare in Maya monumental sculpture, although they do occur at sites along the Usumacinta River, such as Palenque, Bonampak (Coe 1980: 95) and Juná (ibid.: 110). Instead, they are more prevalent in other portable arts, such as polychrome ceramics and Maya style greenstone plaques.

[635] Umberger 1987: 93-94.

Pyramid, these plaques were clearly not models, because the headdress displays significant differences. Additional plumes issuing from the zoomorphic headdress's nose and fall before the human wearer's face, the creature might be a serpent and not a supernatural crocodile, and the figure's the physiognomy differs as well.[636]

Frontal Maya greenstone plaques and Mayoid plaques, which were apparently local imitations, are ubiquitous throughout Mesoamerica (figs. 140, 196).[637] Based on a review of the types of Maya greenstone pendants or plaques,[638] they can be described as representing a frontal face with open eyes, often wearing an elaborate symmetrical headdress sometimes featuring a frontal serpent with lateral profile serpents spewing human heads[639] or what headdresses resembling plant growth (ibid.: 127, Plate 53b). More frequently, the headdress is reduced to its schematic details in increasing degrees of shorthand, such as the striated oval element in the center that seems to refer to the gaping serpent maw headdress.[640] This frontal plaque type seems to be the model for at least seven

[636] Curiously, above the headdress are what appear to be a profile earspool and a frontal round earspool, which Taube (2005: 43, 45) identifies in Xochicalco sculpture as jade symbols of breath and wind in the context of royal Maya ancestors depicted on the Feathered Serpent Pyramid. Although I agree that the figures on the lower talud of the Feathered Serpent Pyramid could represent the idea of ancestors, I still question the identification of the feathered serpent headdress, given the treatment of the teeth on the terracotta plaque's headdress. Instead of showing a serpent's prominent fangs, the teeth consist of a series of short, curved feathery shapes, that more closely resemble the repetition of the teeth on the crocodilian monster on the Feathered Serpent Temple in Teotihuacan.

[637] Maya, Mayoid and other jade plaque styles have been found at Palenque (Sáenz 1956: Lám. 20), Toniná (Easby 1956: Fig. 25), Nebaj (Smith and Kidder 1951: Fig. 58c), Chichén Itzá (Smith and Kidder 1951: Fig. 84a); Proskouriakoff 1974: Pls. 50a, 53b, 55a-b, 66-68), Finca El Paraiso (Guatemala Highlands--Smith and Kidder 1951: 37), Teotihuacan (Gamio 1979, 2: lám. 78), Monte Albán (Batres 1902: Lám. 20; Easby and Scott 19 : Fig. 164; Paddock 1966: Figs. 162-164; Caso 1965; Easby 1961: Fig. 6b), Tula (Acosta 1956: Lám. 47; Diehl 1983: Fig. 51), and San Salvador (Digby 1964)

There seems to be less of a relationship between these frontal greenstone plaques and Maya monumental sculpture, because pure frontality was relatively rare in Maya sculpture, e.g. Piedras Negras (Proskouriakoff 1974: 160-161), Copán and Toniná.

[638] See Rands 1965; Proskouriakoff 1974.

[639] Proskouriakoff 1974: 165.

[640] Ibid., 163, 133, 131, 121 Plate 50a.

of the greenstone plaques from Xochicalco.

Some of the pieces from Xochicalco mentioned might be actual Maya pieces, while the majority appears to be pieces made locally, although perhaps imitating Maya canons or prototypes.[641] After reviewing the greenstone pieces from Xochicalco, I believe only three of the pieces might be actual Maya specimens (figs. 269),[642] while the others appear to be local interpretations of Maya greenstone plaques. The full-figure piece is probably a tubular bead made from a bright green, also referred to as "apple green," stone that is finely carved with exquisite details (fig. 269b). The second piece is a small head pendant with an uneven surface also made of a bright green stone with white areas, similarly carved with finely rendered detail (fig. 269a). The third piece is also a head pendant made of a green and cream colored stone showing a head wearing a serpent headdress with the striated oval of the serpent maw and the creature's round eyes carved with deep even, softly beveled grooves eliminating the impression of crisp incised details (fig. 269c). Besides their fine workmanship, these three pieces show faces with open eyes, a trait characteristic of Maya greenstone plaques. On the other hand, the other greenstone plaques from Xochicalco seem to be based on Maya plaque iconography, but are rendered with crisp, sharply defined incised details with little of the subtle modulation of details seen in the first group of pieces. Some of them display more elaborate versions of the serpent headdress (fig. 270a), sometimes with the human figures apparently of sacrificial victims with ropes to the sides of the headdress (fig. 270b), or are reduced to more schematic compositions with simpler

[641] Litvak King (1970: 134-135) also noted the similarities between Xochicalco greenstone plaques and examples from the Maya region (e.g. Palenque, Temple XVIII, Tomb 2) and Monte Albán, where Leopoldo Batres found a cache of Maya jades, including both profile and frontal types (1902: láms. 20, 22; Paddock 1966: 157).

[642] These three pieces were found in different locations: the Feathered Serpent Pyramid, Burial 2; the Structure C Burial; and the Structure C Offering, respectively.

headdresses (fig. 270c). In the case of all of these pieces, the carving lacks the sensitivity of the Maya pieces and in all instances, the faces are clearly rendered with closed eyes. Furthermore, the stone color varies, ranging from an extremely pale bluish green with traces of ochre, to half pale green and half ochre, to all ochre[643].

Comparison of the Cacaxtla and Xochicalco pieces suggest the two centers each had their own lapidary carvers, because the pieces are sufficiently different in details of carving to suggest both centers were aware of Maya jade plaques, which they each interpreted in their own way, but the artists did not set out to copy Maya plaques or those from other sites in the process. In fact, many of the Mayoid greenstone plaques found throughout Mesoamerica may have been locally produced at different centers, particularly if the raw materials were transported as blanks that could have been worked locally.

The question remains regarding their use and whether the locally produced versions differed fundamentally from their Maya prototypes. In the case of Maya greenstone profile figural plaques from the Cenote of Sacrifice in Chichén Itzá, Coggins and Shane (1984: 70) have noted that they were often cached as opposed to buried and that they were not depicted as worn in monuments, which suggests they were not personal ornaments. On the other hand, when these Maya plaques are found in other parts of Mesoamerica, they are said to have served as Maya prestige items in different cultural regions.[644] On the other hand, they were apparently also copied in different sites. To deal with the quandary presented by these greenstone plaques in Mesoamerica, after elegantly observing that style "does not necessarily covary with language or ethnicity," nor does it allow for defining

[643] However, one of these simple, schematic locally made pieces—a small plaque from the Feathered Serpent Pyramid Offering 1, Museo Nacional de Antropología, Bóveda, Caujón B-11, 15-705—seems to be made from a bright green stone, which suggests the raw material was procured and worked locally.

[644] Schele and Miller 1986: 78, 89, plate 6.

temporal boundaries given its widespread distribution spanning almost a millennium throughout Mesoamerica, Urcid (2010: 127, 129, 150-154) characterizes a pair of plaque-pendants from the Dumbarton Oaks collection that bear some resemblance to pieces found at Cacaxtla, Xochicalco, and many other centers as representations of "an ideal of rulership, portraying the ruler as warrior and/or diviner."

In the case of Xochicalco, these plaques form part of obviously eclectic deposits (Appendix D, Table 7, nos. 1, 3, 4, 5) or assemblages that incorporate pieces from faraway coastal areas (Appendix D, Table 7, nos. 2, 6, 7) found in burials or offerings in some of the city's foremost buildings: Feathered Serpent Pyramid, Building A, and Building C. These pieces would appear to be connected to rulership or statehood in the anonymous tradition of Central Highland centers. However, at least part of their message appears to be in tune with Epiclassic efforts in Xochicalco and Cacaxtla to evoke their cosmopolitan identity, their awareness of trends and their participation what was happening in other parts of Mesoamerica. These values may have been manifested in public rituals involving the ceremonial interment of these materials. [645]

However, why do the images on greenstone plaques from Cacaxtla and Xochicalco seem to represent dead individuals, while those from the Maya region are clearly shown as alive? It seems unlikely they represent sacrificial victims in themselves. If they were intended to represent sacrificed objects, they could have been broken or covered with hematite or cinnabar in symbolic sacrifice. Maya greenstone plaques were not merely copied in Xochicalco, Cacaxtla, Monte Albán, and other centers, but they could have been. It would seem the decision was deliberate to portray the figures as dead. Was it part of a

[645] These Epiclassic ritual deposits may have been antecedents to the burial of massive offerings centuries later in the Aztec Templo Mayor (Nagao 1985; López Luján 1994).

strategy evoke ties with Maya rulership, but to add a layer of time, an impression of deeper ancestry, to conjure the image of more ancient ties through the depiction of death? It is a curious aspect of these pieces that merits further exploration.

Tecali (Alabaster) Vessels

Tecali (also referred to as alabaster, onyx-marble, onyx, and travertine[646]) is a lapidary stone that was esteemed for its translucence and light-colored tonalities. Wrought into thin-walled vessels, these have often been found in offerings, tombs, or other sacred deposits. The material has been sourced to the state of Puebla, around the town of Tecali and Tepejí de Rodríguez.[647] Yet remarkably they have been found especially at sites throughout the Maya region, as well as at Cacaxtla and Xochicalco.[648] Given the source of the raw materials, it is possible that these luxury pieces originated in the Central Highlands. However, the most finely worked specimens with thin even walls come from Maya contexts. Sometimes they are enhanced by Maya-style carving or the addition of polychrome painting on a stuccoed ground, which raises the question whether they were instead pieces produced by the Maya. Currently, we do not know whether these vessels were made in a small number of locations near the source or whether the material was

[646] Diehl and Stroh (1978: 74) comment on the indiscriminate use of the term *tecali* to refer to travertine, alabaster, marble, and onyx, but note that Cook de Leonard (1971: 211) has shown that *tecali* is only synonymous with travertine. Woodbury (1965: 169) also states that *tecali* is sometimes mistaken for onyx, but that they are not synonymous. Resolution of this designation is beyond the scope of the present study, but is worth clarifying in future study of these materials.

[647] Cabrera Cortés 1995. 134. Other possible sources have been identified in Oaxaca in the Xicotlan and Chila areas (Diehl and Stroh 1978: 74).

[648] *Tecali* vessels were found at Monte Albán (Caso 1965: 903; 1969: 149-151). More finely worked, thin-walled vessels have been found at Tikal Burial 116 under Temple I (Sáenz 1963, 21, lám. III); Yaxchilán Tomb 2 (Miller and Martin 2004: 113); Toniná (Becquelin and Baudez 1982, 3: fig. 221a, c; Uxmal (Ruz Lhuillier 1954: 54); Cenote of Sacrifice at Chichén Itzá (Coggins and Shane 1984), Kaminaljuyú (Kidder, Kennings, and Shook 1946: figs. 153a-b); and Teotihuacan (Berrin and Pasztory 1993: 183).

transported for pieces to be work locally.[649] What we do know is that the pieces were found in many centers in contexts attesting to their prestige, especially in Maya centers. Given the lack of uniformity in ornamentation, it is possible the undecorated vessels were acquired or received as gifts, and may have been decorated in diverse local contexts.

Fragments of at least three alabaster vessels with traces of plaster that suggests they were originally polychromed were found in offerings or deposits that contained human sacrificial remains at Cacaxtla.[650] One almost complete vessel was found in Xochicalco in addition to several fragments, which are detailed in Table 8 in Appendix D.

One of the more complete *tecali* examples from Cacaxtla displays the same type of vessel shape characteristic of many of these vessels (fig. 272). Like similar vessels found in an elite tomb in Yaxchilán, they display fine craftsmanship and an appreciation for the delicately banded grain of the material itself. However, while the Yaxchilán piece is rendered with a narrow projecting bank at the rim, the Cacaxtla piece lacks such attention to detail and seems to have thicker walls.

In contrast, the Xochicalco *tecali* vessels are exquisitely carved, often bearing the delicate rim quite like that of the vessels found in Yaxchilan (fig. 271a-b cf. 273). Perhaps the most remarkable *tecali* piece from Xochicalco is the polychromed tripod *tecali* vessel (fig. 271a) that was found in Offering 1 in the Feathered Serpent Pyramid (see Appendix D, Table 8, no. 1 for context).[651] It bears a vertical panel where pigment[652] was applied to a

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[649] Experimental archaeology work employing the methods of Adrián Velázquez Castro and Emiliano Melgar Tísoc could shed greater light on these doubts.

[650] López de Molina and Molina Feal 1986: 74; Delgadillo Torres and Santana Sandoval 1990: 49.

[651] Although the tripod vessel was a hallmark of Teotihuacan ceramics, these polychromed *tecali* vessels appear to be an Epiclassic prestige ítem.

stucco ground. The painted panel on the vessel mirrors the image of a descending bird (perhaps a quetzal or a macaw?) that also appears in numerous *almena* roof ornament sculpture in Xochicalco (discussed in chapter 3) in a remarkably similar composition. Furthermore, the glyph below the bird resembles Glyph A identified by Caso (1967: 172, fig. 8). The correlation in iconographic details might hint at the local production or at least decoration of this vessel.

Tecali vessels appear to have been highly prized pan-Mesoamerican luxury items. Although they appear throughout Mesoamerica, they appear in Xochicalco in eclectic offerings in the site's most important buildings: Feathered Serpent Pyramid and Structure A. Their significance for the present discussion is that they constitute evidence of Xochicalco's and Cacaxtla's participation in a far-flung network of prestige objects that were sought and acquired by numerous cities in the Epiclassic period, in this case perhaps from the state of Puebla region. Xochicalco in particular flaunted its international ties by depositing such showy non-local pieces together in ritual deposits presumably in highly visible dedicatory ceremonies conducted at the city's preeminent monuments.

Obsidian Eccentrics

"Eccentrics" refers to pieces that do not have an obvious utilitarian or decorative purpose.[653] In Mesoamerica eccentrics were not only made from obsidian; some of the largest and most elaborate examples from the Maya area[654] were crafted from flint, a less glassy, brittle substance. These pieces were chipped or flaked into the shape of

[652] De la Fuente, Arellano et al. (1995: 172) point out the red and blue-green painting is not characteristic of the Teotihuacan painting tradition.

[653] Hirth, Flenniken, and Andrews 2000:144 citing Stocker and Spence 1984 have suggested small obsidian eccentrics may have been affixed to clothing.

[654] See Miller and Martin 2004: 148-149.

supernaturals, especially K'awiil, the serpent-footed god of lightning, because the Mayas believed that where lightning struck, flint was created (fig. 276).[655]

Cacaxtla yielded obsidian and other stone in the form of projectile points, blades, eccentrics, beads, and pendants; comparing this corpus to the range of artifacts found at Xochicalco, it would seem the Cacaxtla materials represent a ceremonial more than utilitarian assemblage.[656] The Cacaxtla obsidian materials posed difficulties in analysis, because most of the pieces did not fit into any known typologies, which made the site all the more anomalous.[657] Obsidian included mostly gray and some green varieties (the latter generally identified with the Pachuca mine, under Teotihuacan control), although more precise sourcing studies have not been undertaken. Furthermore, Hirth (2005) studied obsidian material from the hill near Cacaxtla, Xochitécatl, and found an Epiclassic (AD 650-900) cache with obsidian debitage, of which 87.8 percent of the obsidian was grey, and only 12.2 percent green from the Pachuca source. The proportions of obsidian from these sources might also apply to Cacaxtla.

Most of the obsidian eccentric remains come from Cacaxtla offerings[658] associated with burials of sacrificial victims. It is not clear whether the projectile points may have played a role in the death of the buried individuals, or whether they may have been deposited more as symbolic offerings. Baus de Czitrom (1986: 529) has compared lithic

[655] Miller and Martin 2004: 150.

[656] Andrews and Hirth (2006) analyzed materials from the Xochicalco civic-ceremonial core and identified the concentration of military implements, such as projectile points, blade-hafted points, and eccentrics as the type of tools consumed in ritual and elite activities, in contrast to prismatic blade sections, debitage from manufacture, cores, and small bifacial and unifacial artifacts more characteristic of utilitarian usage (Hirth, Flenniken and Andrews 2000, 2: 137).

[657] López de Molina and Molina Feal 1986: 70.

[658] Delgadillo Torres and Santana Sandoval 1991.

weapons depicted in the Building B battle mural with extant typologies and actual archaeological remains, noting similarities and correspondences. However, it should be pointed out that most of the offerings containing obsidian remains date to stages postdating the murals;[659] deposits considered coeval with the murals do not contain obsidian or other stone weapons. Flint and obsidian objects occur randomly in the same contexts, suggesting that there may not have been a symbolic distinction between these two materials, in contrast to distinctions made in later periods.[660]

Nine miniature obsidian eccentrics were found in Cacaxtla burials with human sacrificial remains.[661] These include a crescent, trilobes,[662] bifurcated serpentine,[663] and quatrilobal forms. As in the case of Teotihuacan, it is assumed that these pieces served symbolic, as opposed to utilitarian, functions which are not fully understood. Another set of larger obsidian eccentrics—two disks for the goggle eyes, four pointed u-shaped eccentrics for the teeth, and a larger hooked piece for the nose, apparently found with two greenstone disks—were arranged in an offering to represent the Storm God's face (fig. 274a),[664] which will receive further comment below.

Also noteworthy are spectacular large, curved obsidian scrapers, perhaps used in

[659] Stage 4 of the burials described by Delgadillo Torres and Santana Sandoval (1991) reveal the most abundant and complex offerings. These seem to come from the phase covering or directly over the stage of the murals of Buildings A and B.

[660] See Nagao 1985: 62ff.

[661] Delgadillo Torres and Santana Sandoval 1991.

[662] Like those from Tula, see Stocker and Spence 1974.

[663] See Teotihuacan, see Cabrera C., Sugiyama and Cowgill 1991: fig. 10.

[664] Brittenham 2008: 369, fig. 66.

relation to pulque technology.[665] However, these too were found in burials[666] and they terminate in a sharp point, rather than in a sharp spoon-like shape, as in the case of Teotihuacan scrapers presumably used in pulque production.[667]

Obsidian eccentrics, miniatures, and other ornaments have also been found at Xochicalco. These were accompanied by numerous blades, projectile and spear points and were found in offerings detailed in Table 9 in Appendix D.[668] These are presumed to be ritual contexts, based on their location and their contents; utilitarian obsidian will be discussed in chapter 8.

The highest concentration of obsidian eccentrics came from Sectors B and G, followed by Sector C,[669] the area north of the Main Plaza, the Main Plaza itself, and the area near the North Ballcourt respectively (fig. 31). In Xochicalco obsidian eccentrics were found in eclectic deposits constituting dedicatory offerings (Appendix D, Table 9, nos. 1, 2), in deposits with large eccentrics that formed Tlaloc masks (Appendix D, Table 9, nos. 5, 7, and possibly 3) similar to those from Cacaxtla (figs. 274a-b), or near altars containing large quantities of objects apparently for use in rituals (Appendix D, Table 9, nos. 4, 6). Types of Xochicalco obsidian eccentrics sufficiently complete to permit identification include crescent-shaped, trilobal and dog-shaped (fig. 275).[670] Miniature projectile points were also found, clearly serving more of a symbolic than functional significance based on

[665] Francisco Rivas Castro, personal communication 1992.

[666] Delgadillo Torres and Santana Sandoval 1990.

[667] Gamio 1979, 2: 214, 216.

[668] A necklace with nineteen obsidian beads was also found in the Feathered Serpent Pyramid burial (Albaitero R. 1993-1994, informe 16-175: 191).

[669] Albaitero R., 1993-1994, Informe 16-175: 193.

[670] Using type names given by Stocker and Spence 1974.

their diminutive size. Other obsidian blades might have been used in autosacrifice, to extract blood to be sprinkled on paper in containers for offerings, a common Mesoamerican practice.

Studying obsidian from Xochicalco's civic-ceremonial core, Andrews and Hirth (2006) identified implements consumed in ritual and elite activities, which differed from tools found in domestic contexts. They noted the high frequency of weaponry (blade hafted points, projectile points, lanceolate blades, bifacial tools, and eccentrics), particularly in Structure X3-5,[671] which is identified as a possible centralized storage place. As for Xochicalco eccentrics, some resemble types from ritual contexts at Teotihuacan, while some might have been used in public ritual.[672] Furthermore, most of the eccentrics were imported as finished products crafted from Otumba and Zacualtipan obsidian, which they suggest formed part of a different system than the one that supplied obsidian cores from Ucareo, Michoacán, for the city's utilitarian needs (ibid.).

By and large, Xochicalco and Cacaxtla materials form part of the Central Mexican continuum for obsidian eccentrics in Central Mexico. However, the large obsidian eccentrics forming the Tlaloc mask appear to be an Epiclassic innovation. While elaborate chipped eccentric flints and obsidians are highly characteristic of Maya offerings,[673] the small scale specimens from Cacaxtla and Xochicalco bear closer resemblances to Central Highland traditions, particularly those of Classic Period Teotihuacan and Early Postclassic

[671] This is equivalent to González Crespo and Garza Tarazona's H-4.

[672] Andrews and Hirth 2006: 257.

[673] W. Coe 1959.

Tula.[674] The three types of obsidian eccentrics found at Tula—trilobal, crescent shaped, and dog shaped[675]—were also the types found at Teotihuacan, Cacaxtla, and Xochicalco. At Tula the eccentrics were found in structural fill in residential compounds, while at Teotihuacan, they were often reported in residential structure fill, and also sometimes in burial or other ceremonial contexts. Notably absent from Cacaxtla and Xochicalco collections are the gingerbread type obsidian figures, ubiquitous in offerings, particularly burials, at Teotihuacan. Cabrera Castro (1990: 97) suggests the latter might represent frontal figures with arms crossed over the chest. If so, then perhaps the role of these obsidian eccentric shapes subsumed by lapidary figurines at Xochicalco; obsidian and lapidary forms might have served as representations of ancestors.

However, the notion of producing large obsidian eccentrics to form Tlaloc "masks" appear to be Epiclassic innovations seen at Cacaxtla and Xochicalco. In this context, it is interesting to return to the image of Maya flint eccentrics mentioned at the beginning of this section. Miller and Martin (2004: 150) describe K'awiil as the most frequent subject of Maya flint eccentrics. This identification is most fitting, given that K'awill—also known as the manikin scepter and God K—represented the axe wielded by the Chaahks or Maya rain gods.[676] Is it mere coincidence that Maya eccentrics embody the Maya lightning deity and that Central Mexican eccentrics represent the Storm God himself?[677] Can it be seen as it a translation of sorts or an equivalence, each uttered in distinct visual languages? Both

[674] A small number of obsidian eccentrics have also been found in Oaxaca, but they are rare.(Winter 1989: 358-359).

[675] Stocker and Spence 1973.

[676] Velásquez García 2005:37.

[677] At Teotihuacan the Storm God's lightning bolt was probably represented in enormous eccentric obsidian pieces (Sugiyama and López Luján 2006: 46, fig. 21). I propose that Epiclassic centers often sought to reformulate Teotihuacan ideas to give them renewed power.

obsidian and flint eccentrics symbolized the power of lightning; the Maya form morely obliquely through allusion to K'awiil and the Central Mexican one more directly by referring to the Storm God himself. However, just as there was a political dimension to K'awiil in the Maya as a symbol of the transfer of power to a new heir,[678] the Storm God was not merely the master of rain. Palavicini Beltrán (2004: 212ff) cites Pasztory's (1974) discussion of Tlaloc B, associated with warfare and blood, as an entity embraced by Maya elites from Teotihuacan inspiration as an emblem for rulership, particularly referring to the ruler's responsibility to secure prisoners for sacrifice to fertilize the earth with the ultimate precious liquid: blood. I would add to her interpretation that the obsidian connection with the Storm God might be related to the Epiclassic and Postclassic idea of creating Tlaloc braziers or censers.[679] The Storm God was not only associated with water, but through obsidian also with fire. Obsidian has often been considered a fiery stone, based on its igneous origin, and its use in contexts to extract blood. Flint also had an inherent connection with fire, because it could be used to make it. Therefore, obsidian eccentrics would have been a fitting means to convey the warrior aspect of the Storm God, in the case of Xochicalco, manifested in the largest pyramid at the site.

The obsidian materials from both Xochicalco and Cacaxtla express both continuity and disjunction between Epiclassic and Classic period traditions. On the one hand, some practices continue (e.g., the production of eccentrics), but others change. Both centers deposited obsidian eccentric "masks" and Xochicalco began to produce Rain God censers (discussed below) in what appear to be Epiclassic iconographic innovations to express this

[678] Velásquez García 2005: 38.

[679] Also known from Tula, Chichén Itzá, Balankanché Caves, and later in the Templo Mayor; e.g. Acosta 1954: 72, lamina 23; Matos 1981: foto 8), one of which Palavicini Beltrán illustrates (2004: 213, ill. 8).

deity's role in warfare and sacrifice.[680]

Shell

Judging from Mesoamerican contexts, seashells have long been valued for their beauty, as they are sometimes cached in unworked form, or are crafted into personal emblems of status or divinity. Their association with bodies of water made them ideal symbols of the sea as in the case of the Templo Mayor offerings,[681] as well as of the dark, watery underworld among the Mayas.[682] The Teotihuacanos and Mayas fashioned conch shells into trumpets bearing other painted or carved iconography[683] and shells are sometimes linked to specific deities, such as Maya God N or Pauahtun, depicted as an elderly deity emerging form a shell,[684] or with the Aztec Wind God Ehecatl-Quetzalcoatl.[685]

Perhaps Cacaxtla's greatest wealth of non-local materials was in the form of shell. Most shell material bears traces of human intervention (cutting, perforating); a few specimens were deposited without altering their original form, although they were generally colored with red pigment. A total of 157 complete or fragmentary worked shell pieces and 223 unworked fragmentary or complete shells have been reported, although not described,

[680] It is difficult to determine whether Cacaxtla or Xochicalco or another center could have been the origin of this new imagery. On the one hand, Cacaxtla has a more impressive corpus of non-utilitarian obsidian pieces than Xochicalco. On the other hand, Xochicalco has what seems to be a more elaborate iconographic system that prominently features the Storm God. It remains for future research to shed greater light on this matter.

[681] López Luján 1994.

[682] Schele and Miller 19 1986.

[683] Berrin and Pasztory 1993: 205; Schele and Miller 1986: 83, plate 27.

[684] Schele and Miller 1986: 54.

[685] Castillo and Solís 1975: lámina 38.

for the site.[686] Of these, the authors note that they are mainly worked ornamental objects or unworked pieces deposited in offerings. It can perhaps be assumed that the few published examples and specimens available for study, kept, or exhibited in the Centro Regional de Tlaxcala and the Cacaxtla Site Museum, are the most complete and impressive examples. These will be the basis for the following discussion.

Oliva porphyria, snail shells with distinctive triangular markings, are the most abundant shell specimens found at Cacaxtla.[687] These were found as part of an offering in the Sunken Patio (fig. 277a).[688] Identified as from the Pacific coast, these shells are also the most frequently represented shell species in the watery border of the Building A murals[689] (fig. 277b) and are also shown worn as ornaments in the Building B murals (fig. 277c). This species is probably also represented in ceramics, as part of the attire of the central figures on Cacaxtla's two polychrome effigy vessels (fig. 277d-f).[690] The probable use of these shells as elements of personal adornment is supported by the presence of large round perforations in the archaeological specimens, probably to suspend the shells in personal attire.

Other species found in the Sunken Patio offering included a *Spondylus*, *Chama*

[686] López de Molina and Molina Feal 1986: 75.

[687] López de Molina and Molina Feal (1977-78) erroneously identify the species *as Oliva reticularis greenwayi*, an Atlantic coast variety, an identification rectified by biologist Oscar Polaco (personal communication 1985).

[688] López de Molina and Molina Feal 1986: 75.

[689] Polaco 1985.

[690] Actual specimens of the same species have also been found at Huapalcalco, an Early Postclassic site in Hidalgo, as well as fragmentary snail shell decorations from ceramic vessels (Enriqueta Olguín personal communication, 1986). Terracotta snail shell ornaments are also known from Teotihuacan censers (Múnera and Sugiyama 1993; Berlo 1984).

fragments, a *Nerita scabricosta*, a *Thais*, a sea urchin and two barnacles.[691] All of these shells bear traces of red pigment, a common ritual practice preceding interment in burials or offerings, and perhaps related to the symbolic killing of the objects.[692] It is interesting to note that none of these (probably) Pacific coast species—no matter how valued or ritually important they might have been—are depicted in the site's murals, although other Atlantic and Pacific coast species have been identified in the murals.[693] The identification of species from both coasts has led to speculation on the nature of Cacaxtla trade contacts. However, more to the point would be to regard this identification as evidence of the knowledge of the artists who painted the murals given the specificity of details permitting identification.

Shells are also well represented in the archaeological record at Xochicalco in worked (beads and other ornaments, trumpets) (fig. 278) and unworked form in burials and offerings (fig. 279) associated with construction at the site as seen in Table 10 in Appendix D.[694] Melgar Tísoc (2007: 87S) identified twelve species—nine from the Pacific coast and three from the Caribbean or Gulf Coast—in the shell materials from Feathered Serpent Offering 1 and Burial 2. The vast majority of the pieces were from the Pacific and a noticeably smaller number from the Caribbean. He also noted that earlier (ca. AD 600)

[691] Polaco 1986, personal communication. These pieces postdate the architectural phase with the mural paintings and appear to be Pacific coast species: *Spondylus* in Melgar Tísoc (2007: 87S), *Nerita scabricosta* in Wikipedia at http://en.wikipedia.org/wiki/Nerita and *Thais* according to Vermeeij (2001).

[692] Nagao 1985: 60-61.

[693] See Polaco 1986 for the scientific names. Although these shells have been identified generically, more specific identifications of species and provenience have not yet been made.

[694] See Sáenz (1961: 39, 43; 1962: 27; 1963: 13, 16; 1964: 12, 13) for descriptions of these burials and offerings.

Xochicalco deposits contained shells exclusively from the Pacific Coast,[695] while later (AD 750-800) contexts had both Gulf Coast and Pacific species and also displayed a greater variety of artifact types and manufacturing techniques.[696] As for unworked shells, Pacific coast *Spondylus* appears frequently in offerings,[697] while Pacific and local freshwater shells have been identified among materials from the residential slope excavated in 1984.[698]

As noted in the discussion of lapidary plaques, often these occur in the same contexts as seashells and shell ornaments in Xochicalco burials and offerings (Appendix D, Table 10, nos. 1-6). Moreover, a number of these deposits are eclectic in their contents (Appendix D, Table 10, nos. 1, 3 and 7 with notable variety; 2.4 and 5 with variety).[699] Interestingly, the eclectic nature of a number of the dedicatory offerings at Xochicalco echo the cosmopolitan nature of the city's Feathered Serpent Pyramid.

Perforated *Oliva* type shells are the most common ornamental forms of worked shell. However, these are not depicted in monumental arts, although occasionally *Oliva* shells are represented in ceramics.[700] Among the large shell trumpets from Xochicalco, some are elaborately carved.[701] Similar carved shells have also been found at

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[695] Melgar-Tísoc (2007: 88S) also correlates the greater amounts of Pacific species with Hirth and Cyphers (1988) identification of closer ties with northeast Guerrero, the Balsas depression, and the Valley of Toluca, and the fact that its principal obsidian source was Zinapécuaro, Michoacán.

[696] Melgar Tísoc 2007: 88S-89S.

[697] Sáenz 1961: 39; 1962; 27; 1963: 13.

[698] Oscar Polaco, personal communication, February 1985.

[699] Some shells bear traces of cinnabar or other red pigmentation, although this is not a ubiquitous practice.(Sáenz 1964: 13). Another shell ornament fragment, found in the drainage pipe of the patio of Structure A (Museo Nacional de Antropología, Bóveda, 15-1009, cajón B-11), is carved with a series of parallel lines resembling bird wings, bearing a dark pigment accentuating the design.

[700] Museo de Cuauhnahuac, Cuernavaca, 1985 exhibition.

[701] Feathered Serpent Pyramid Offering 1 from Sáenz 1963: 13.

Teotihuacan,[702] as well as stuccoed and painted versions.[703] One shell pendant, carved in the form of an arm, was found in one of the few primary burial contexts at the site in the Chamber of the Offerings of Structure A,[704] suggestive of a tradition of war trophy skeuomorphs.[705] Perforated and worked mother of pearl was found in a residential area during excavations carried out by the local Centro Regional del INAH de Morelos in 1984.[706]

Both Cacaxtla and Xochicalco yielded shell material in both worked and unworked form from offertory contexts sufficiently similar to indicate participation in a shared perhaps Pan-Mesoamerican tradition of religious practices and beliefs that attested to the widespread interaction of distant parts of Mesoamerica. Shell material from Pacific and Atlantic coasts were found in Xochicalco deposits, while Cacaxtla materials appear to be largely from the Pacific, which might suggest Xochicalco's greater interest and ability in tapping Epiclassic exchange routes especially for prestigious materials. Although both coasts were important sources of shell materials, they were not overtly acknowledged in the monumental arts in Cacaxtla and Xochicalco, except perhaps in tangential ways that would perhaps not have been obvious to all viewers, such as the depiction of Gulf Coast species in the watery borders of the Cacaxtla Building A murals.

Ceramic Effigy Urns and Censers

I have chosen this category of ceramic remains, because Cacaxtla and Xochicalco

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[702] Rubín de la Borbolla 1947: figs. 4-6.

[703] Berrin and Pasztory 1993: 205.

[704] Sáenz 1962: 27.

[705] Jade carved into the form of a human arm have also been found in the Maya region (Rands 1965).

[706] Exhibition, Museo de Cuauhnahuac, Cuernavaca, 1985.

developed innovative forms, some of which suggest inspiration from the Maya region, but that nonetheless were distinctively local products. Censer bases with lateral flanges and elaborate figural compositions are known from the Maya region; the most well-known tradition comes from Palenque (fig. 152), where these tall cylindrical censer bases were deposited in dedicatory offerings once their use life as ritual objects was deemed over,[707] while feline effigy funerary urns were often deposited in caves in the Maya region.[708] As pieces more elaborate than ordinary ceramic ware for everyday use, they tend to have rich iconography and display diversity in styles and subject matter.

At least four lidded urns have been found at Cacaxtla. The most complete objects in this category from Cacaxtla are a pair of elaborate, polychrome effigy urns, bearing traces of red, blue, white, black and yellow pigment (figs. 280a and b).[709] Both pieces were presumably dedicatory offerings cached at the time the respective buildings were renovated. The vessel and lid shape appear to be distinctive of Cacaxtla. Resting on a tall, annular base, the sloping, thick, uneven walls and lid of each urn contrast with the well-modeled figures,[710] while the lid has a four-or-five petalled flower "handle," a recurrent

[707] Cuevas García 2004: 253.

[708] Examples include the Teapa Urn found in Ixtapanjoya cave, in the municipality of Teapa, Tabasco, near the Chiapas border and funerary urns were deposited in caves in the Guatemala Highlands (Instituto Nacional de Antropología e Historia, 2013 exhibition in the National Palace, Mexico City).

[709] Similarities in vessel shape, style, and content suggest they form a pair, although they were found in separate deposits: one from an offering in the fill of Building E (López de Molina and Molina Feal 1980: 51) and the other from the fill of what is now called the Red Temple (Rosalba Delgadillo n.d.). The first was found empty (López de Molina and Molina Feal 1986: 29; Delgadillo Torres 2007:467-468), but the other had organic remains and perhaps contained shells (Delgadillo Torres 2007:467-468, 475-476; Delgadillo Torres and Santana Sandoval n.d.:30-33).

[710] cf. Santana, personal communication, March 1984.

motif at Teotihuacan, but one not commonly used on vessel lids.[711] Both urns bear human figures in high relief with a richly garbed, central figure (one with avian costume, the other with bat-jaguar costume and butterfly headdress[712]) grasping or flanked by cacao pods sprouting on a vine (resembling the Red Temple cacao plant, fig. 155), while attended by a smaller, scantily clad, sometimes deformed figure (with club feet or hunchbacked) on either side. The central figure on all three urns has red hair and bangs, resembling other figures depicted in Cacaxtla mural painting (figs. 281, 228, 215). On Urn I he wears a bird helmet and wings; on Urns II and III, he seems to have a butterfly headdress identifiable by the curled proboscis. On Urns I and III he wears a beaded necklace with a pendant plaque, while on Urn II he has a different sort of collar. His loincloth in all three cases is framed by olive shells. The flanking figures on Urns I and III appear to be more skillfully handled than the figures on Urn II; the heads of the latter are executed in different proportions that make the heads seen unusually small small and awkward. One of the pair of attendant figures on each of the urns has "mohawk" type hairdo, while the other has small tufts of hair on different parts of the head, both styles seen on hunchback figures in Teotihuacan figurines (fig. 282). On Urn I, one of them blows a conch shell, while the other makes a hand gesture near his mouth and holds a long, straight staff. The flanking figures on Urns II and III are more damaged, so the original hand positions are unclear, although they both seem to be touching the prominent shell pendant hanging from their necks.[713] The close similarities between Urns I and III suggest they were made by the same artist, while Urn II

[711] Urn I has a single four-petalled flower "handle" on the lid, while Urn II has a five-petalled flower in the center and probable originally had four smaller four-petalled flowers placed around it, although not all of them have survived.

[712] I am grateful to Kryzsztof Sakowicz for bringing another Cacaxtla urn to my attention that has a central figure wearing a butterfly headdress and bat wings on display in the INAH Regional Museum in Tlaxcala.

[713] This gesture oddly echoes those of a pair of seated figures on Maya censer lids (Miller and Martin 2004: 134-135).

is by a different hand.

Urn IV deviates from the scale, proportions costumes, and composition. Considerably larger than the other two urns, Urn IV is broader and squater than the other figures. His necklace consists of a series of rectangular plaques and he wears a loincloth and skirt-like garment. He holds a triangular pouch and an undulating lightning bolt staff. No other figures appear on the vessel; instead it is framed by projecting flange plaques.

Other iconographic details link the urns specifically to Maya-style monuments from Cacaxtla, but not to the entire corpus of the site's monumental arts. The composition echoes the central, frontal figure flanked by vegetation in the Building E relief (fig. 59a), while bird-and-feline-costumed figures appeared prominently in the murals of both Buildings A and B (figs. 109, 19-20). Even though the central figure sometimes displays T-shaped dental mutilation, the physiognomy on the urns contrasts strongly with the faces of the Once Señores and the large three dimensional clay sculptural fragments from Cacaxtla (see chapter 3 and Appendix C), which suggest the hand of different artists who must have been trained in different styles.

The naturalistic treatment of the human figures, costume details, the presence of dwarves, and the possible use of Maya blue evoke the Maya style just as the murals, yet the clay is clearly of local origin.[714] However, just as the murals appear to be Maya, closer scrutiny reveals significant differences. The posited prototypes from the Maya region are objects that are actually considerably different. The oversized heads and squat bodies, the butterfly headdress, the "mohawk" and asymmetrical coiffures are all ideas connected to Teotihuacan, but they are rendered in a style not known from Teotihuacan. In overall style,

[714] Andrés Santana, personal communication, March 1984.

technique, and the concept of full-length figures rendered on a ceramic vessel, these pieces bear some resemblance to censer bases from a cave in Tapijulapa, Tabasco, now in the Museo Regional de Antropología "Carlos Pellicer Cámara" in Villahermosa (fig. 283).[715] One of them shows a seated supernatural flanked by other beings that resemble the flanking figures on Urns I, II, and III.[716] These cave censers depict a frontal, central sometimes supernatural figure on a vessel with lateral flanges covered with ornate detail. Instead, the Cacaxtla vessels were clearly of local production, but they suggest the presence of non-local craftsmen, based on the skilled handling of some of the appliqué figures. However their identity remains unknown.[717]

Xochicalco has yielded a larger number and variety of censers, which commonly have pedestal or tripod supports, cylindrical body, basal flange, and two flat, rectangular flanges or tabs at the sides (figs. 284a-b, 285b). Some examples that were tripod bowls have lids.[718] Unlike the Cacaxtla urns, the typical Xochicalco vessel usually has squatter proportions, with long, lateral flanges, an annular base and sometimes three supports, and simpler compositions focusing on a single central figure. They display a diversified range in the stylistic treatment of effigy figures and appear to come from various types of deposits, sometimes with eclectic contents (Appendix D, Table 11, no. 1) or with ritual paraphernalia (Appendix D, Table 11, nos. 3, 4, 10), but in many cases contextual information was not available.

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[715] Fondo Editorial de la Plástica Mexicana 1964: figs. 382-383.

[716] I thank Karl Taube (personal communication, July 1986) for bringing this to my attention.

[717] Nor do the style and iconography of the vessels resemble those of ceramic pieces from the nearby hill of Xochitécatl.

[718] González Crespo, Garza Tarazona, Alvarado León 1993-1994: 51, 78.

Xochicalco censers can be divided into three categories: human, other supernatural, and feline. Three fairly complete urns bearing human figures have also been found (fig. 285a), while a number of head and body fragments suggest these may have pertained to a more generalized tradition at Xochicalco. The lack of obviously supernatural features suggests the figures might represent human as opposed to supernatural characters. Some show females with diverse headdresses (e.g., a twisted band resembling headbands worn by some Xochitécatl figurines), round earplugs, *quechquemitl* (triangular mantle), a skirt, and sometimes with a necklace (figs. 285b). Some of these figures display t-shaped dental mutilation and hold long, slender unidentified objects (perhaps plumes?) in their hands (figs. 285c-d).

Other urns depict male figures in diverse attire. For example polychrome fragments of a male head and arm perhaps represents a warrior[719] as well as arm and leg fragments of another clay warrior holding a round shield and wearing sandals and a fringed skirt. An unusually tall urn shows a man holding a triangular pouch[720] and staff and wearing a turban-like headdress, earplugs, a blue bib-like disc around the neck, a simple loincloth, and sandals (fig. 285a). The staff is incomplete, so it is unclear whether it is a spear-like weapon, a walking or planting stick, or a symbolic device perhaps like the rattle staffs used later by the Aztecs. Unlike the female figures, he fully exposes his teeth, showing upper

[719] These were found in the Offerings Chamber, Structure A. Sáenz (1962: foto 18) also found arm and leg fragments from the same object, which he suggests was originally an effigy vessel.

[720] The triangular pouch is often said to be a priest's copal bag, however this is not clear in this case. The seated figures on the *tablero* of the Feathered Serpent Pyramid also carry triangular pouches, although they do not carry any staffs. Cabrera Cortés (1995: 315) has suggested the bags depicted in Teotihuacan murals might have contained pieces for offerings, such as the greenstone pieces found in Burial 14 in the Teotihuacan Feathered Serpent Pyramid, where traces of bags were discovered.

and lower rows, with no hint of dental mutilation.[721]

More recent excavations uncovered a surprising variety of censers, such as the censer (Appendix D, Table 11, no. 9) that depicts a richly garbed male figure with an enormous serpent headdress with bifid tongue, while another shows a seated full-length male figure with traces of Maya blue and shown with hands resting on bent legs that also bears a bifid tongue pendant from his headdress, but the head has been broken off (figs. 286d).[722] These serpent headdresses with bifid tongue were also depicted in the Lord Serpent Helmet and chapter 4 on stone sculpture.

Other urns seem to depict deities or supernaturals. The head of an old male with wrinkled face emerging from a gaping serpentine helmet or beak-like mouth with bifurcated tongue pendant adorns another censer (fig. 284a). [723] Whether it represents the Old Fire God, one of the old Maya deities, or even an elderly human is unclear. However, another ceramic brazier (fig. 284b) clearly depicts the Storm God with his characteristic goggles, curled upper lip, and prominent fangs. This type of cemser continues into the Early and Late Postclassic periods.

Two other censers from Xochicalco depict strange supernatural faces that in some way conjure Maya deities, but perhaps misunderstood or else entirely different creatures

[721] The bands of blue curlicues framing the figure and on the lateral flanges are reminiscent of the fret designs that form the background for Xochicalco's descending bird *almenas*, Cacaxtla's Once Señores and the Tlaloc *almena*, as well as the Teapa Urn lateral ornaments, perhaps intended to evoke the smoke of copal, blood, and other offerings believed to have been burned in censers.

[722] Garza Tarazona and Alvarado León 1993-1994/16-175/ch. 1: 20, 23.

[723] It is worth mentioning in this context the large number of molds also found at the site, many of which depict a profusely wrinkled male face, perhaps a deity. Often any image displaying age is identified as Huehueteotl, the Old Fire God. However, the headdress of the urn differs from the headdress worn on the mold-made heads, which suggests they do not necessarily represent the same character. Clay heads of a wrinkled old male figure were also found in Cacaxtla, but their original purpose is unclear. Miller and Simon (2004: 227) note that all Maya sun gods are depicted with aged faces, but the deeply creased clay faces from Xochicalco and Cacaxtla do not seem to have any other distinctive features permitting identification.

(figs. 286c-d). The pair have a curled element at the top suggesting feline ears, characteristic of the Maya Jaguar God of the Underworld, a prominent fleshy nose, large vacant eyes in one case with scroll eyebrows, and large mouths, in one case with a flaring upper lip and two fangs, and both have an oversized bifurcated tongue. These seem to be local versions of the ornate cylindrical censer stands from Palenque, many of which depict the Sun God of the Underworld (fig. 152, 287a) or akin to simpler versions that have been found in Zopo Cave, Chiapas (fig. 287b-c). The Palenque and Zopo Cave examples also display the feline ears, the scroll eyebrow, the large vacant space for the deity's eye, a fleshy nose, and sometimes a prominent mouth with T-shaped dental mutilation or a shark tooth and symmetrical curvilinear designs around the mouth that sometimes resemble a row of fangs.[724] Could Maya ceramic censers have been a source of inspiration for the Xochicalco ceramic censers? The absence of other imagery at Xochicalco that resembles these censers suggests the artists were getting their ideas from outside of the site. The Xochicalco censers, particularly figs. 286c-d have an experimental, unresolved quality, despite the fact that fig. 286d is the largest censer base found to date at the site. On the one hand, a degree of resemblance cannot be denied. Clearly there was an understanding at Xochicalco of cylindrical censer bases with some sort of feline imagery and where were such pieces to be found? In the Maya region. On the other hand, the Xochicalco censers are sufficiently removed from the Maya versions to suggest visual knowledge of these pieces

[724] A monumental stone sculpture from the Xalla compound in Teotihuacan combines the bifurcated tongue and a jaguar creature (Fash, Tokovinine, and Fash 2009: 209, fig. 6), but the Xalla figure does not share other features with these censers. The authors speculate it may be a Teotihuacan version of the Classic Maya Jaguar God of the Underworld (ibid.: 210). It is unclear if the Xochicalco entity is a conflation of Teotihuacan and Maya iconography.

was not direct.[725] Curiously, some of these Xochicalco pieces are even made on roughly the same scale as the Palenque pieces, reaching 80 cm to almost a meter, while the Palenque censer stands often range from 85 to 110 cm in height.[726]

The most puzzling and oddest example of a Xochicalco effigy vessel seems to represent a slightly personified butterfly (fig. 288) with prominent disk eyes, antennae, wings with disk designs, a knotted belt, along with small arms, legs, and a loincloth. Although butterfly-warrior iconography was known from Teotihuacan and Escuintla censers,[727] the idea of the butterfly has been transformed into an extraterrestrial creature at Xochicalco.

Numerous censers feature a feline identified as a puma or sometimes as a bat effigy urn, modelled with the head in fairly high relief (fig. 289).[728] The creature's gaping mouth usually reveals sharp teeth, and long tongue, but always has an elaborate knotted rope or collar worn around the neck as if a wreath. The prominent knotted collar and other knotted emblems are a recurrent feature of feline iconography at Xochicalco, which are perhaps emblems of sacrifice.[729] The prevalence of these creatures in diverse media—censers, both

[725] I would suggest that it is as if the Maya originals had been described verbally to a Xochicalco artist, who misinterpreted or simply reinterpreted the description from a lack of visual knowledge of the original pieces. Cowgill (2013: 143) had a similar response to a Cerro Portezuelo Storm God vessel: "It looks like the work of an artisan who had never seen one before and was told to make a copy of a Teotihuacan 'Storm God' vessel but was unable ot get a close look at the real thing."

[726] Miller and Martin 2004: 226-228.

[727] Berlo 1984.

[728] Urns with jaguars alluding to the Jaguar God of the Underworld (or the nocturnal sun) have often been found in caves in the Guatemala Highlands (Instituto Nacional de Antropología e Historia, 2013 exhibition in the National Palace, Mexico City), although they seem to lack the prominent knotted neckcloth or rope known from Xochicalco examples.

[729] The use of knotted ties has been associated with sacrificial victims in the Maya region (Schele and Miller 1986), symbolism assumed to apply at Cacaxtla as well. In excavations in the Moon Pyramid at Teotihuacan, Saburo Sugiyama (2004; Sugiyama and López Luján 2006) has uncovered a number of chambers with dedicatory offerings, including abundant animal remains, including large felines. However, I am unaware of

three-dimensional stone and terracotta sculpture (see chapter 4), and with actual animal parts kept as trophies—suggest the preeminence of this creature in warrior cults.

In both Xochicalco and Cacaxtla, there appear to be artisans working on large-scale, labor-intensive, innovative vessel types—urns at Cacaxtla and censers at Xochicalco—that employ imagery that sometimes draws on Maya sources. Both Xochicalco and Cacaxtla display innovation in the content and style of effigy ceramic materials in some ways that mirror processes discussed in the monumental arts from both sites (see chapter 3). I would speculate that the Cacaxtla ceramic examples display sufficient knowledge of the Maya style to evoke it in its urns, while the Xochicalco censers seem to be inspired by Maya ideas more than visual prototypes and are rendered in local styles. Like Cacaxtla, most effigy and figurine material from Xochicalco appears to have been produced at the site.[730] At the same time, other effigy material from Xochicalco also appears to be steeped in local tradition with some potential holdovers from Teotihuacan times (Old Fire God and Storm God vessels), although they are reconfigured in such a way that they could not be confused with pieces from Teotihuacan.

Discussion

This overview of diverse categories of potentially portable elite and ritual materials suggests many different implications that could have operated on the level of individuals—whether patron, user-viewer, maker—or of society as a whole, First I would like to focus on the idea of the maker, the artists who made these pieces. In her discussion of Olmec and

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the extent to which a sacrificial interpretation can be applied to the variety of images from such diverse temporal and geographical contexts. What is interesting in the case of Xochicalco is the abundance of feline imagery in sculpture, including a large number of stone felines with a skeletal body in addition to a monumental terracotta feline comparable to specimens and imagery known from Zapotec sculpture from Oaxaca.

[730] An exception might be the male figurine head with dotted scarification near the eyes and around the mouth (Litvak King 1967) resembles figurine material from Veracruz.

other Mesoamerican masks, Esther Pasztory (2000: 271) has noted that masks underwent a "complex series of translations, . . . The term 'translation' puts emphasis on the translators who were charged with finding idioms in the language of the current time and practices for the language of the past." In other words, the emphasis is on the agency of the artist in making the decisions implied by coming face to face with the raw material. Pasztory goes on to observe, "Translation may try to minimize change, but change is unavoidable due to new circumstances" (ibid.). This can be understood both geographically (i.e., dealing with object types or iconography in a different location) and temporally (i.e., creating pieces that refer in some way to the past or by combining elements from the past using an "updated" visual language).

Artistic styles and technological styles are highly portable, borne by the creators' memory and hand, contingent on their awareness of nonlocal developments, or by the eye and memory of other travelers who could have had the opportunity to see treasures from distant lands. This awareness, in turn, would have been conditioned by artisan mobility and by the movement of portable pieces. The archaeological record that informs scholars today on the latter is by necessity partial. Nevertheless, traces of portable remains suggest the movement of raw materials, sometimes of high quality (e.g., such as the lapidary blank found in Cacaxtla; shell from distant coastal sources in both centers) and of luxury items (e.g., *tecali* vessels), and greenstone worked locally sometimes in a style evoking the Maya region (e.g. lapidary plaques from Xochicalco and Cacaxtla). At other times materials were worked in what constituted local innovations (Cacaxtla and Xochicalco obsidian Tlaloc "masks" and ceramic censers), while in other instances pieces could have been heirlooms or looted "antiques" (e.g., Teotihuacan masks in Xochicalco). It is unclear exactly where some pieces, such as the Xochicalco "Teotihuacan-Mezcala" figurines, were made. Their

proliferation at Xochicalco might make the site a reasonable candidate, if not as the source, then perhaps as a participant in their distribution. Their presence elsewhere (e.g. Monte Albán) cannot be denied and current evidence precludes the possibility of determining where these pieces might have been made. Therefore, the only portable luxury items with a clear foreign provenience are a small number of Maya lapidary pieces and possibly raw material (greenstone) from Xochicalco, raw materials (greenstone) in Cacaxtla, and *tecali* vessels from both centers. Otherwise, much appears to be locally produced or of unknown provenance.

The image of Maya connections boldly proclaimed in the monumental arts finds a degree of support in the realm of portable elite and ritual goods, some of which communicate an effort to conjure Maya glory (e.g., greenstone plaques). There is little room for doubt that the rulers at both centers yearned for some of the aura of luxury and status that surrounded Maya courts, but they had to be content to evoke it in ways that were within their respective means. Besides deploying the power of monumental artwork to convey the image they wished others to have of them, they relied on the production small-scale personal items of prestige that could foster unity and belonging through status items intended to convey shared ancestry. Objects such as lapidary masks, figurines, and plaques could have served this purpose by combining references to local and far-flung traditions. Other local Central Highlands traditions with deeper roots were the production of obsidian eccentrics, but both centers took bold steps in innovating Tlaloc "masks" made of eccentrics, although the idea could have been inspired by Maya eccentrics. Other pieces formed part of a pan-Mesoamerican network of status items, which included lapidary

effigies of ballgame equipment,[731] greenstone plaques, seashells, and *tecali* vessels.

Chapter 8: Portable Utilitarian Goods

While chapters 2 to 6 explored monumental art works and chapter 7 examined specialized luxury or ritual pieces, this chapter touches on artifacts normally studied by dirt archaeologists—domestic ceramics and lithics (primarily obsidian)—and not by art historians. The materials in this chapter were made for massive, quotidian use in contrast, materials discussed in chapter 7. Instead, their production was to meet everyday needs shared by all members of the community in a context of basic subsistence and survival. The materials conformed to certain stylistic parameters, often dubbed "technological style," which were indeed open to change, but generally speaking, the pieces were made in sufficient quantities and with sufficient speed as to preclude time-consuming contemplation

[731] This material was not included in this chapter, but deserves further study in the future given evidence of its widespread distribution throughout Mesoamerica.

often implied by innovation and fine craftsmanship. From the point of view of the potters and specialized stone tool makers, the original impetus of their work was primarily to fulfill functional needs. However, this does not mean that objects for everyday use were incapable of bearing complex meaning or serving as identity markers,[732] particularly in the case of Mesoamerica which according to Pasztory (1989: 35) "appears to have had a more rigidly defined sense of stylistic boundary than many other parts of the world, including Western Europe." This category of material culture tends to be wielded by archaeologists in identifying horizons, peoples, and extrapolating behavior in the archaeological record, particularly in the absence of documentation in the Americas. Specifically, my intention here is to briefly survey evidence of non-local interaction reconstructed by archaeologists on the basis of obsidian and ceramics.

In the reconstruction of cultural history, archaeologists have long relied on changes in pottery forms and decoration correlated with chronological phases or time markers, transforming these pieces into material representatives of peoples, and by extension, of cultures that have long since perished. Standardization or variation in style, extent and nature of distribution, and similarity of chemical composition are among the characteristics of ceramics that have led investigators to postulate economic interaction, political relations, conquest, and migration. In instances identified as conquest or migration, archaeologists look for a rupture or change in ceramic sequence (Smith 1984). However, this type of evidence does not occur at Xochicalco and Cacaxtla,[733] despite the invocation of the Olmeca-Xicalanca conquest or migration in the case of Cacaxtla to explain the significance

[732] See for example Wilbert 1975; Reichel-Dolmatoff 1978; Stark 1999.

[733] Cyphers and Hirth 2000; López de Molina and Molina Feal 1977: 48.

of the site. Instead this category of material culture speaks of more mundane interaction that contrasts with the carefully orchestrated programs of monumental works and small-scale lavish materials of visual display.

Ceramics

Cacaxtla

One of the problems in dealing with Cacaxtla ceramics is most of the material comes from construction fill, rather than from contexts that could shed light on chronology and usage. Only a few complete vessels have been found at the site, and because of the fragmentary state of sherds, it was often difficult to reconstruct original vessel forms. The period covered by this ceramic sample is said to span prior to AD 650 and after AD 1000. Almost all of the ceramic groups identified by López de Molina and Molina Feal (1986: 43-66, 68-70, láms. 61-130) have a distribution spanning the entire proposed sequence.[734] Nevertheless, based on identifiable vessel forms and the relative coarseness of most ceramics, they are believed to represent a full range of service or utilitarian wares (plates, bowls, cups, gourd-shaped vessels, and griddles,[735] as well as small and large jars) by and large produced locally.[736]

The most relevant group for the present discussion is the category of bichrome ceramics. Variant 2A (*roja mica sobre café*; Mica Red [slip] on Brown) has a fine grained paste, is relatively evenly fired, and is commonly found in the form of footed bowls

[734] Exceptions are Group J (Frescoed Wares) from pre-650 to 1000 A.D.; Group C (Textured Decoration Wares), G (Polychromes), H (Negative Wares), and N (Thin Orange) from AD 650-1000+; G1 (Incised Polychromes) from pre-AD 650, 850-1000*; and Group P (Fine Paste Wares) from AD 850-1000 (López de Molina and Molina Feal 1986).

[735] Significantly, the presence of griddles in the archaeological record has been interpreted as evidence of tortilla consumption, in contrast to the Maya preference for tamales (Taube 1989).

[736] López de Molina and Molina Feal 1986: 68.

(*cajetes*), spoons, and jars with vertical handles bearing a simple red band around the rim and undulating lines adorn outer vessel walls.[737] Particularly abundant in domestic contexts, it is suggested to be slightly later in date than two other bichrome variants (1A [no name] and 1 [Red on Orange; *rojo sobre anaranjado*]), which suggests it was not an intrusive ware Neutron activation analysis on sherds from these variants showed that local clays were used; in fact López de Molina and Molina Feal (1986: 68, 70) state that the best clays of the locality were used to make these variants.

This group of bichrome variants belongs to a ceramic type known as "red on buff" ceramics, which Armillas (1946: 144) suggested to be ancestral to Coyotlatelco wares, which has been commonly reported for the Epiclassic period (AD 750-900) throughout Central Mexico. López de Molina and Molina Feal (1986: 69) suggest that Red and Buff and Coyotlatelco wares might be connected to the Olmeca-Xicalanca, a group described in historical chronicles, but poorly known archaeologically (see chapter 1), although Cobean and Mastache Flores (2001) and Hers (1987) cite a lack of evidence supporting any ethnic identification linking the ware to this group. This type of Coyotlatelco conforms to what Dumond and Muller (1972) have called Complex A, a simplified version of this ware that appears beyond Basin of Mexico centers, in the Puebla-Tlaxcala valley and western Morelos;[738] see further discussion below under Xochicalco.

In the realm of ceramic resemblances labeled "homologies" by Ball (1983), some of Cacaxtla's local ceramic types are said to resemble certain late Teotihuacan ceramic forms

[737] Red on Buff is the third most abundant ware reported by the salvage archaeology project (Espinoza García and Ortega Ortiz 1985-1987, 2: 299).
[738] Cyphers 2000, 2: 12-13.

or designs.[739] Forms said to be shared with Teotihuacan include cups (Variants 22A, 22), urns (32), and bowls (13 and 13A), while geometric, incised (Variants 13, 13A, 22A, 22) or stamped glyphic designs (Variant 32) have been identified as decorative similarities. Only one report recorded the actual discovery of fragments of Teotihuacan polychromed, stuccoed vessels in the area of Building F at the southern end of the excavated zone.[740] However, of the few fragments of ceremonial ceramic types reported, most are imitations of Teotihuacan wares,[741] produced with local clays.[742] For the most part, the Cacaxtla versions are not exact copies of Teotihuacan ceramics, but instead appear to be local variants of Teotihuacan types ("homologies"), shared throughout southwestern Tlaxcala.[743] This and other evidence, such as the scarcity of Thin Orange ware, the Teotihuacan trade ware and time marker par excellence, suggest that contacts with Teotihuacan were not direct, despite its relative proximity.[744] Furthermore, of the Thin Orange wares mentioned in the 1986 typology, sherds from two of the three Thin Orange variants (30 and 30A) underwent neutron activation analysis and both were identified as made from Gulf Coast

[739] According to López de Molina (1977a: 8), these include Variant 13 (Teotihuacan Brown Incised) and Variant 13A (Teotihuacan Incised Brown), Variant 32 (Stamped Orange), Variant 22A (no name, but part of the incised bichrome group) and Variant 22 (Teotihuacan Incised Orange) (Ibid.: 8).

[740] From López de Molina and Molina Feal 1977-78, II: Diario de Campo, 6-VI-77, H'-46. However, frescoed variants (104, 104A, 25F) that one might imagine are connected to the Teotihuacan frescoed tripod vessel tradition are not clearly linked with the Teotihuacan style in the Molinas' 1986 report, perhaps indicating the hastiness of the earlier comment.

[741] López de Molina and Molina Feal 1986: lám. 30.

[742] Andrés Santana, personal communication, March 1984.

[743] López de Molina 1980b: 297.

[744] Rattray (1980) has suggested Thin-Orange may have been made elsewhere and redistributed from Teotihuacan or perhaps the raw material was brought to the metropolis and worked there.

Significantly, Cacaxtla's small corpus of terracotta figurine material (e.g., López de Molina and Molina Feal 1986: láms. 127-145) also lacks much in the way of connections to Teotihuacan figurines. However, future archaeological work of the many levels underlying the portions of Cacaxtla visible today might finds that could change this panorama.

clays and in the case of Variant 30, perhaps from the Tuxtlas region,[745] data that seem to further distance these wares as stemming from the Teotihuacan sphere of influence. Variant 13, supposedly with Teotihuacan affiliations, also underwent the same analysis and its clays were identified as local in origin. Santana (1990c) illustrates a Teotihuacan-style plano relief fragment with Reptile's-Eye glyphs (fig. 290): a small one in a rectangular cartouche beside a larger round R-E medallion with four-petals framing it over a band of cut shell or scroll band. Espinoza García and Ortega Ortiz (1985-1987, 2: 466-468, 470) illustrate brazier fragments with blood droplet, bundle, hood, T-R, and S curl emblems also known from Teotihuacan. Apparently of local production, these examples suggest the high mobility of certain signs primarily moved through portable goods such as ceramics. According to Von Winning (1987, 2: 73) the R-E glyph was one of the most ubiquitous signs decorating Teotihuacan ceramics and its prominence in Epiclassic contexts may have resulted from its high visibility in ceramic sources.

Parallels with Early Postclassic (after AD 900) Mazapa wares have also been postulated,[746] primarily based on vessel form and general ware color (red on buff). These Mazapa-type ceramics have a great time depth at Cacaxtla and they are found in all construction epochs at the site.[747] Mazapa-type ceramics also occur in Postclassic contexts

[745] López de Molina and Molina Feal 1986: 71.

[746] Mazapa ceramics, especially red on buff or yellow with wavy or thick linear decoration, have traditionally been considered Toltec Horizon markers. However, recent studies have demonstrated that the significance of Mazapa wares may be based on geographical factors rather than chronological ones. Mazapa ceramics are rare at Tula, and are more abundant to the south in the Puebla-Tlaxcala Valley in the basin of Mexico (Cobean et al. 1981: 195, 196, 200). Chronologically they appear to pre-date Aztec ceramics and appear to be Early Postclassic in date, at least partially coeval with Coyotlatelco and Cholulteca II.

[747] López de Molina 1980b: 297.

at Cacaxtla.[748] Neutron activation analysis performed on a small sample of fifteen to eighteen sherds from Cacaxtla revealed that the sherds most abundant in the sample formed a group chemically different from the other sherds and were considered to be local types.[749] This "Cacaxtla type" is so similar to the Valley of Mexico Group in clay composition that it may be difficult to differentiate trade wares from Cacaxtla and the Valley of Mexico, nevertheless, local ceramic types can still be distinguished from Valley of Mexico wares based on other visual traits (e.g. quality of manufacture, vessel shape and decoration).

Tradewares at Cacaxtla occur in small quantities and come primarily from the Gulf Coast and Southern Puebla, as well as from Tehuacan and possibly Oaxaca.[750] Of the few examples of foreign wares, both luxurious and utilitarian types were represented.[751] The following discussion is based on Harbottle's preliminary tests, as well as on analyses of the wares by the site's excavators.

Viewing trade wares chronologically, during the Classic/Tenanyecac Period (AD 100-650), commercial ceramics came primarily from southern Puebla, while some fine paste wares came from the Gulf Coast.[752] During the following period, the Late Classic-Early Postclassic/Texcalac phase (AD 650-1100), there was a shift toward the Gulf Coast represented by a greater concentration of fine paste wares. The introduction of pseudo-or

[748] López de Molina 1981: 171. Comparisons with Mazapa style wares are not mentioned in the Molina's 1986 typology for unclear reasons.

[749] Garman Harbottle cited in López de Molina and Molina Feal 1977-78.

[750] López de Molina 1977a: 8; López de Molina 1980b: 298.

[751] Daniel Molina Feal, personal communication 1984.

[752] López de Molina 1981: 171.

false plumbate also occurred at this time.[753]

In terms of quantity, the majority of the tradewares come from the Gulf Coast region.[754] Variants 34 (Mica Orange), 30 and 30A (Thin Orange) are attributed to the Gulf Coast[755] and the hallmark three fine paste groups of Veracruz (A, B, and C) are present at Cacaxtla.[756] Most trade ceramics resemble types from the Tajín or Tuxtlas region, and some are similar to ceramics from Nappatecuhtlan and Potrero Nuevo in southern Veracruz.[757]

Of the trade wares from southern Puebla and further south,[758] these ceramics have been compared to ceramics from Tehuacán[759] and Oaxaca.[760] The Molinas' 1986 typology mentions Variants 25C (a gray ware variant with no name) and 28 (no such variant listed) as two wares made from Oaxacan or Tehuacán Valley (southern Puebla) clays.[761] Perhaps

[753] Ibid.; Molina Feal 1978: 57; López de Molina 1980b: 298; López de Molina and Molina Feal 1980: 51. Plumbate is regarded as a Postclassic ware perhaps manufactured in Guatemala or Chiapas (Cobean et al. 1981: 198). Four variants (117 [no name]; 65 [Brown Mica]; 85 [False Plumbate}; 34 [Orange Mica]) constitute the "False Plumbate" family. Variant 34 (Orange Mica) was made from Gulf Coast clays (López de Molina and Molina Feal 1986: 171) and not Guatemala or Chiapas clays. Armillas (1946: 145) mentions that Alfonso Caso told him of a beautiful plumbate piece from one of the towns near Cacaxtla and speculates that originally it may have come from this Cacaxtla; however, there is no further information on this piece.

[754] Connections in elite material remains linking Cacaxtla and the Gulf Coast were not observed in the materials discussed in preceding chapter. Even the shells discovered in Cacaxtla appear to be primarily from the Pacific Coast (see chapter 3).

[755] López de Molina and Molina Feal 1986: 70.

[756] López de Molina 1980: 298; Harbottle in López de Molina and Molina Feal 1977-78.

[757] Ibid.

[758] López de Molina 1981: 171; López de Molina and Molina Feal 1980: 51; Molina Feal 1977: 31.

[759] López de Molina 1980b: 298; Molina Feal 1978: 57.Tehuacán is the southernmost point on a route that might have included Tepexi de Rodríguez and Tecali, the latter two areas mentioned as sources of *tecali* in chapter 4.

[760] López de Molina 1980b: 298; López de Molina and Molina Feal 1980: 51; Molina Feal 1978: 57.

[761] López de Molina and Molina Feal 1986: 70.

other variants within the gray ware group (which includes 12 variants) might also have a similar provenance; however, they have not yet been tested for their clay composition.[762]

Early published references mention possible connections with the Maya or Campeche regions.[763] However, these appear to be contradicted by later reports. Molina Feal (personal communication 1984) says that no sherds from the Maya region were found at Cacaxtla. According to Santana (personal communication, March 1984) a few fragments of Fine Orange have been found, but are perhaps imitations ("homologies"), rather than Fine Orange "identities" (i.e., actual pieces); Fine Orange wares are not mentioned at all in the 1986 Molina typology.[764]

The image that emerges of Cacaxtla on the basis of utilitarian ceramic evidence is that it was a center aware of what was happening in Teotihuacan and other parts of Mesoamerica, but that it was not necessarily in direct contact with these other regions. Its ceramics included imitations of wares from Teotihuacan, but did not include trade wares. Instead, Cacaxtla's contacts were with southern Puebla and the Gulf Coast, and later primarily with the Gulf Coast.

The ceramic evidence suggests over-riding cultural continuity from at least Middle Classic to Postclassic times based on continuous local traditions of orange and polished brown wares. Preclassic pottery found at the peripheries of Cacaxtla correspond with major types already established for the area of Tlaxcala and Huejotzingo, further reinforcing

[762] Ann Cyphers (2000, 2: 111) warns that gray ceramics are often used to point to Oaxaca origins, although they could easily be from other Central Highlands areas (e.g. Izúcar de Matamoros and the Tehuacán Valley of Puebla; Amatzinac in the Valley of Morelos), so perhaps the Molina data should be viewed with caution.

[763] López de Molina 1978: 69; Molina Feal 1978: 57; Abascal et al. 1976: 19.

[764] The other problem with Fine Orange is that its origin is not always clear; see discussion below on Xochicalco.

Cacaxtla's participation in a localized cultural tradition.[765] The postulated connections with Teotihuacan early in the sequence also support local developments, as opposed to foreign intrusion. López de Molina (1979: 146) and Molina Feal (personal communication 1984) view precisely this continuum in archaeological materials as evidence to support Cacaxtla's identification as Olmeca-Xicalanca capital.[766] Thus the bulk of ceramic evidence supports cultural continuity rather than disjunction or intrusion, while trade wares suggest subtle shifts in commercial patterns and external contacts.[767]

Xochicalco

Like Cacaxtla, Xochicalco also displays overall continuity in ceramic types. The following discussion focuses on the Gobernador phase (AD 650-900), which represents the occupation of Xochicalco.[768] Characteristic vessel shapes include enormous storage vessels, globular pots with small necks, shallow cooking vessels, lids, griddles, braziers, footed bowls, plates, water vessels, vases, pitchers, long-handled censers, and large ceremonial braziers or censers.[769] Despite the tendency to identify Xochicalco as the hub of

[765] López de Molina 1980b: 297. No sources describe Early Classic ceramics at Cacaxtla or nearby, so perhaps there was a hiatus (cf. Serra Puche 2005).

[766] The murals are commonly viewed as signaling a cultural rupture resulting from an Olmeca-Xicalanca invasion. According to Molina Feal (personal communication 1984), the hypothesis that the Olmeca-Xicalanca founded the site of Cacaxtla helps to explain the differences in material culture between Cacaxtla and the nearby hill of Xochitécatl.

[767] If any disjunction is postulated, it would appear to fall between Late Classic and Early Postclassic periods. During this transition, constructions become coarse, ceramic production falls, and the former ceremonial-residential center was used for defense or cultivation (Molina Feal 1977: 4). Given the understandably disruptive nature of social and political instability, could Early Postclassic fortifications represent Olmeca-Xicalanca intrusion? Why would ceramics decrease at this time?

[768] The following discussion of Xochicalco ceramics is based primarily on the work of Kenneth Hirth, Jorge Angulo, and Ann Cyphers (Hirth and Cyphers 1988; Cyphers 2000). For a discussion and critique of earlier classifications and chronologies for the Valley of Xochicalco, see Hirth and Cyphers (1988: 15-16, 31-33) on the work of Noguera, Saenz, Litvak King, Senter and Müller.

[769] Garza Tarazona and Alvarado León 1993-1994, 16-175; Cyphers and Hirth 2000: 126.

a long-distance trading network, Hirth noted the dearth of evidence of a ceramic workshop at Xochicalco[770] in spite of the availability of local clays and proposed that rural villages surrounding the city produced the city's pottery.

The Early Gobernador Phase (Phase G; 650-800 A.D.) is well represented in the ceramic sample and is radically different from previous phases, despite some continuities.[771] Overall there is a greater ceramic diversity and there seems to be a change in forms within long-common ceramic types.[772] Only small amounts of imported ceramics (only about 4-5 percent) were found in Xochicalco in contexts that suggested they could be easily acquired by all levels of society.[773] Granular ware from Central Guerrero[774] has been identified as an important trade ceramic in this phase,[775] in addition to imported wares probably from nearby[776] and other wares of unknown origins.[777] Contacts with Teotihuacan

[770] Only a cache of pottery molds to decorate elaborate effigy braziers was recovered as an offering near structures M6-AJ and M6AK (González Crespo, Garza Tarazona, and De la Vega 1995 cited in Hirth 2000, 1: 165).

[771] Hirth and Cyphers 1988: 44.

[772] For example, Xochicalco Smoothed is now commonly made into amphorae, gourd-shaped vessels and jars; while Xochicalco Polished is now made into a variety of bowls, gourd-shaped bowls, amphorae, *floreros* ("flower vase" shapes), and frying pan incense burners, a new form in the sequence.

[773] Cyphers and Hirth 2000: 131.

[774] However, other researchers, probably the volume's co-author Hirth, suggest the term "granular ware" actually refers to different types, some of which may have been produced in Morelos (Cyphers and Hirth 2000, 2: 126).

[775] Cyphers 2000: 12.

[776] These types produced nearby are Tembembe Crusty Orange and Tembembe Plain (Cyphers 2000, 2: 12).

[777] The imported wares mentioned are: Fine Paste Gray, Pale Gray, Fine Paste Orange, Micaceous Orange, and Micaceous Gray (Cyphers 2000: 12), as well as Fine Paste Orange (Cyphers and Hirth 2000, 2: 126). Cyphers is cautious in identifying an area of origin for these wares; see footnote 11 on gray wares.

expressed in ceramics are weak for this phase,[778] Instead, an increase in Granular ware was noted, particularly in amphora form which probably contained other products (perhaps honey, resin, insects, oils, reptiles, cacao, or other perishables)[779] brought from Guerrero, and the empty vessels were re-used afterwards.[780]

The Late Gobernador Phase (Late Phase G; AD 800-900) essentially represents a continuation of numerous Early Phase G characteristics. The same predominant types continue, while a number of new wares appear in small quantities.[781] In general, there is less variety in vessel forms than in the previous phase, as well as fewer types represented. Foreign ties are not very clearly defined for the Late Gobernador Phase. Granular ceramics exhibit many stylistic similarities with Xochipala (Guerrero) wares, while there are some minor similarities with Prado and Corral phases of Tula.[782] Some wares are said to resemble Teotihuacan Metepec phase types, such as polished orangeware with grooves.[783]

Utilitarian ceramics lack evidence of direct contact between Xochicalco and Teotihuacan. Overall Hirth (2000, 1:199) sums up Xochicalco's ceramic ties with Teotihuacan and the Valley of Mexico as "infrequent." Nevertheless, prior studies were

[778] Even for the earlier Fogón phase (AD 200-650), archaeologists noted some minor ceramic homologies with Teotihuacan in Western Morelos, which decrease in the Gobernador phase (AD 650-900) (Cyphers and Hirth 2000, 2: 125).

[779] Litvak King (1970: 139) notes the Guerrero and Río Balsas region would have traditionally been a supplier of cacao, greenstone, feathers, and cotton, and therefore attractive trading partners for Xochicalco, which together with the Valley of Morelos was a traditional source of cotton in pre-Hispanic times.

[780] Cyphers and Hirth 2000, 2: 126.

[781] These include Matte Striated (*mate con estrías*); Mia Scraped (*mia raspado*); Thin Orange "C"; Light Gray (*Gris claro*); Red on Brown (*rojo/bayo*) (Hirth and Cyphers 1988: 45).

[782] Hirth and Cyphers 1988: 45.

[783] Cyphers 1980: 35.

based on vague similarities[784] or were cited primarily as a means of dating Xochicalco to the Classic period to suggest that Xochicalco played a role in the decline of the metropolis.[785] However, these identifications were based on superficial visual similarities, as opposed to studies of materials that could have revealed whether the pieces were "identities" (actual imported wares) or "homologies" (locally made pieces in similar shapes or with similar designs). For the earlier Classic period (AD 200-650) when the largest local settlement was at Tlacoatzingo, most of the Teotihuacan-style ceramics was produced locally instead of being imported from the Basin of Mexico (González Crespo, Garza Tarazona and Molina Montes 1994: 34), because Xochicalco wares bore a resemblance to known Teotihuacan types, but vessel shape, paste, surface finish, and quality of workmanship indicate local imitations and manufacture, accompanied by a concomitant absence of actual trade wares.[786]

Most Gobernador phase ceramics are monochrome, but an important category of bichrome red-on-buff wares often referred to as Coyotlatelolco-style ceramics appears in Xochicalco and other parts of the Central Highlands at this time.[787] Although often seen as a hallmark of the Epiclassic (Mastache and Cobean 1989), Coyotlatelco was far from not a

[784] Senter 1981.

[785] See Litvak King 1970: 131-132; 1972. Litvak King (1970: 132) cites Noguera's description of "cylindrical vessels with small conical supports" that bear some degree of formal resemblance to Teotihuacan, although the treatment and clay are different and a vague similarity between Xochicalco Orange B and Teotihuacan vessel shapes. He (Litvak King 1972: 59) also claims Thin Orange and Orange B attest to Teotihuacan interact, although Hirth and Cyphers (2000, 2: 113) have pointed out significant differences between Teotihuacan Thin Orange and Thin Orange B.

[786] Hirth 2000, 1: 67, 96.

[787] Cyphers and Hirth 2000, 2: 126. Cyphers (2000, 2: 12) has summarized the three principal interpretations of the origin of Coyotlatelco ceramics: 1. It was introduced by invaders from the Bajío (northern) region; 2) it developed from Classic period Teotihuacan styles; 3) it resulted from Olmeca-Xicalanca interaction dating to Teotihuacan times.

monolithic tradition.[788] After Dumond and Müller (1972) discerned two types—Complex A (with simple red geometric decoration often limited to red borders) and Complex B (with more complicated decoration, including scrolls, stepped designs, and triangles)—Cyphers pointed out that the two types have different spatial distributions.[789] Complex B was found in the Basin of Mexico, Toluca, the Tula region, and northwestern Tlaxcala sometimes in conjunction with Complex A. In contrast, the simpler Complex A has been identified in Xochicalco and Cacaxtla ceramic assemblages,[790] and with areas not formerly under Teotihuacan control.[791] The implications of this distribution are that Xochicalco and Western Morelos were clearly in a different sphere of interaction than the area where Teotihuacan impact had been the strongest in earlier times (ibid.: 15).

Early reports of similarities between Xochicalco ceramics and those of the Maya region[792] were overstated and probably influenced by the "Maya" character perceived in monumental sculpture. Cyphers (2000, 2: 13) questioned these references to Maya ceramic

[788] Cyphers and Hirth 2000, 2: 126; Solar Valverde 2006. Crider (2013: 109) has noted that Coyotlatelco pottery was not used in large quantities at major Epiclassic centers such as Cacaxtla and Xochicalco, although it does appear at Tula Chico, an opinion reinforced by Salomón Salazar (2006: 356) and Canto Aguilar (2006: 373).

[789] Cyphers and Hirth 2000, 2: 126

[790] Cyphers 2000, 2: 12-13.

[791] Cyphers (2000, 2: 13) notes that with the exception of García Cook (1981), many studies lump together the two complexes together, so that the full spatial extent of the two types still remains to be determined. Complex A has also been found in Teotenango, Cerro Tenayo, Hueoxtoc Cave, Prado phase Tula, and the northwestern portion of the Puebla-Tlaxcala region (Cyphers 2000, 2: 13). She interprets this Coyotlatelco distribution to the presence of Mexicanized Maya or Mayanized Mexican peoples, perhaps the Olmeca-Xicalancas, in the Central Highlands from Early or Middle Classic times (ibid.: 13, 16), citing Chadwick (1966). See chapter 1 and Appendix A for further information on the Olmeca-Xicalanca.

[792] Noguera 1945: 140, 142, 143, 144, 147-148; 1947: 281, 285, 290, 294; 1961: 56; Müller 1974: 58, 60; Vázquez Rodríguez-Saro 1984: 383. Comparisons with Maya ceramics span virtually the entire Maya region: Uaxactún (Noguera 1945: 147-148), Guaytán (Motagua region, ibis.: 147), Chichén Itzá (ibid.: 142); Campeche (ibid.: 148; Müller 1974: 58); the Puuc region (Müller 1974: 60); Tabasco (ibid.: 58); and the Guatemala Highlands (Noguera 1947: 294).

traits and on the basis of her ceramic collection she states unequivocally: "no imported ceramics from the Mayan area have been identified with certainty in our stratigraphic sample" (Hirth and Cyphers 1988).[793] Instead, Cyphers (2000, 2: 13-14) concludes that most of the isolated traits identified as Maya in the literature are actually characteristic of locally made pottery and are present earlier in Central Mexico than in the Maya region.

The origin of other trade wares is disputed. While Cyphers is reluctant to identify sources of a number of ware types,[794] Hirth (2000, 1: 202) is more inclined to believe that the identification of fine-paste wares from the Gulf Coast and gray wares from Oaxaca is "probably secure because these types were well-known from other sites in Central Mexico and were suspected of being trade wares at the time they were discovered," although he goes on to acknowledge Maya trade wares are "less secure."[795] Nevertheless, he avers that "a considerable quantity and variety of ceramic trade wares were arriving at Xochicalco, documenting its participation in broad interregional exchange networks during the Gobernador phase."

Gulf Coast material has also perhaps been found at Xochicalco. Florencia Muller (1974) identified Fine Orange I material as from the Gulf Coast region of Campeche or Tabasco,[796] an interpretation reinforced by finds made by Sáenz (1961, 1962c), Litvak King (1972: 60-61). Garza Tarazona and Alvarado León (1993-1994/16-175: 7-8) have also

[793] Cyphers (2000, 2: 13) also mentions the "Maya ceramic plaque" published by González Crespo, Garza Tarazona, and Alvarado (1995: fig. 23), but this piece is clearly not Maya, because it contains a Reptile's Eye glyph in a cartouche, typical of Xochicalco, but not the Maya region.

[794] See footnote 21.

[795] Hirth (2000, 1: 201) acknowledges the difficulty of assessing these references to long-distance ceramic trade wares, because they were not well described or illustrated and are no longer available for study.

[796] This is cited in Hirth 2000, 1: 200-201.

cited Fine Orange X, Y, and Z in their sample and note that the sherds are concentrated primarily in sectors A and B, particularly B1,[797] and more sparsely in other areas. Gulf Coast homologies have also been posited by Noguera (1945: 151; 1947: 290) and Muller (1974: 57, 60). Litvak King (1972: 60) cites Noguera's (1945: 148-9) comparison of Xochicalco blackware and analogous ceramics at Tajín, while Sáenz (1962: 69) also identified blackware (vessel shape, black color, rhomboid motifs in "champ levé" as corresponding to Tajín culture.[798] González Crespo, Garza Tarazona and De la Vega (1995: 236) have also referred to contact with Veracruz, specifically mentioning a footed vessel from Nopiloa, Veracruz.[799] However, no Gulf Coast wares appeared in the sample that served as the basis for Cyphers and Hirth's typology (1988; 2000, 2) and in Cypher's (2000) discussion of Xochicalco ceramics.

As for contact with the Valley of Oaxaca, evidence is slim. Litvak King (1972: 62) noted similarities between human effigy figures from Structure A and Zapotec effigy urns, such as a censer with a relief depicting a bat akin to those found in Monte Albán II and III contexts (ca. AD 200-700) while others[800] cite resemblances between Xochicalco and Monte Albán gray wares in general. However, Cyphers (2000, 2: 111) and Garza Tarazona and Alvarado León (1993-1994/16-175: 7) do not share the same opinion.[801]

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[797] Sectors A and B are directly north of the Acropolis and the Main Plaza; B1 is on the west end, closest to sector A.

[798] Cyphers (personal communication 1984) doubted the identification of ceramic similarities with Tajín ware. This discrepancy could be the result of the different locations where the samples studied by the various archaeologists were collected.

[799] Garza Tarazona and Alvarado León 1993-1994/16-175: 9.

[800] Sáenz 1961: 29; 1962: 60, 69-72; 1962: 66; Sáenz 1964: 15-18, láms. XIV-XVII; Muller 1974: 59; González Crespo, Garza Tarazona and De la Vega 1995: 236; Hirth 2000, 1: 202.

[801] Garza Tarazona and Alvarado León (1993-1994/16-175: 7) note that "Mica Gray" (Gris mica) was probably locally produced, but note that it is also found in Huapalcalco (Hidalgo) and Puebla; therefore, its origin is unclear.

Although the precise origins of Xochicalco's principal trade wares—Micaceous Gray, Micaceous Orange, Tembembe Crusty Orange, and Tembembe Plain—have not been identified, none of these types came from areas with a well-established, well-known ceramic traditions, such as the valleys of Mexico, Puebla, Oaxaca, and Tehuacan.[802] Nonetheless, Micaceous Gray is suggested to come from Guerrero or possible the Mixteca Baja. While Tembembe Crusty Orange might have come from Valley of Toluca. Other imported granular types such as Rose-on-White and Cream Paste Granular were also perhaps made in Guerrero, given the region's longstanding tradition of granular ware, although Hirth notes some granular ware was locally made (ibid.). These general connections have been backed by González Crespo, Garza Tarazona and De la Vega (1995: 236).

While earlier investigators identified primary ceramic ties with the Maya region, Oaxaca, and the Gulf Coast, and to a lesser extent with Guerrero, Cholula and the Valley of Mexico, recent studies indicate that the majority of non-local ceramic trade was carried out principally with Guerrero, to a lesser extent with the nearby Valley of Toluca and Oaxaca, and to an even lesser extent with the Gulf Coast. How can this disparity be explained? In part the difference in sample may relate to the fact that earlier archaeologists collected material from the ceremonial core, the supreme elite area of the zone, while more recent studies are not necessarily limited to such an elite corpus. Another difference is the greater methodological rigor of recent researchers in carefully analyzing the nature of the sample before even deciding whether to include it in the analysis. A third possibility is that perhaps earlier investigators were pre-disposed to look for certain kinds of relations based on the

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[802] Hirth (2000, 1:198-199.

most visible remains at Xochicalco, namely the site's large-scale architecture and sculpture, which definitely create the impression of a Maya style.

Obsidian

As the principal material employed in making cutting tools in Mesoamerica, obsidian has been a raw material that was traded long distances since early times. Some obsidian sources, such as Otumba (or Barranca de los Estetes), were exploited from Formative times[803] to Late Postclassic Aztec times (AD 1325-1521) (Clark 1989:307). Other sources, such as Pachuca (or Cerro de las Navajas), were specifically linked to the rise and commercial and perhaps even political expansion of Teotihuacan.[804] Settlements often did not procure obsidian from the sources geographically closest to them, as Pires-Ferreira (1975) has shown in her study of Early and Middle Formative period (1500-500 BC) Oaxaca; participation in diverse exchange routes enabled access to a wide range of goods—such as shell, iron pyrite, and obsidian—from varied sources. Furthermore, the physical quality of the material that made it more or less apt for working from various sources meant some types were more highly valued than that of other sources.[805]

Cacaxtla

Little is known about obsidian procurement, production, and trade for Epiclassic Cacaxtla, but Hirth (2005) reported on a deposit of production debitage found cached in a ceramic vessel near burials on the nearby hill of Xochitécatl. Most of the material in this deposit was grey obsidian (87.8 percent) and a small amount of green obsidian (12.2

[803] Pirres-Feirrera 1975.

[804] Santley 1989. Although Clark (1986) believes the idea of portraying obsidian as the engine driving Teotihuacan's growth has been overstated.

[805] Pires-Feirrera 1975: 25-27, 84; Clark 1989: 306-307.

percent), the latter probably from the Pachuca source. Hirth notes the Maya practice of burying obsidian waste near or over tomb burials has also been reported at Dos Hombres, Lamanai, and Tikal, but suggests the cache represents "a shared symbolic ideology about obsidian, the underworld and death" and does not represent direct contact with the Maya. Another significant aspect of this deposit was Hirth's observation that core rejuvenation was not practiced here and instead the debitage was the result of working half-conical cores. This contrasts with Xochicalco, where core rejuvenation was the most common practice and obsidian arrived in the form of narrow, polyhedral cores.[806]

According to López de Molina and Molina Feal (1986: 70, 73, 74) the most noteworthy result of analysis of obsidian artifacts from Cacaxtla is that the majority of objects do not fit into known typologies, which meant for the most part they had to be catalogued as "atypical." A total of 1046 lithic pieces were studied, including 822 fragments and 224 complete pieces, in which most about 74 percent were made from obsidian, and the remaining of other types of stone such as quartz or flint. None of the lithic materials (flint, obsidian, greenstone, and onyx) was available in the immediate vicinity, and therefore had to be imported, although the studies to determine the sources of these materials have not yet been conducted. However, this assessment is not shared by the salvage archaeology project in connection with roofing the site (Espinoza García and Ortega Ortiz 1985-1987, 2: 318-320). They report predominantly black obsidian (85.3%) compared to gray (12.28%) and describe prismatic blades, projectile points, scrapers, and graters, and awls; the blades and projectile points fit into known typologies and no special remark is made concerning the other material.

[806] Hirth, Flenniken and Andrews 2000:143.

Xochicalco

Most of the utilitarian cutting tools from Xochicalco were crafted from obsidian instead of flint, as a result of the poor quality of local flint (Albaitero 1993-1994/16-175: 189). In addition to a small percentage of ornaments, ritual pieces, debitage, and raw materials (obsidian cores), the majority of the material was fashioned into work implements, including projectile points, blades, awls, and knives (ibid.: 189-190).

Hirth identified Xochicalco's three main obsidian sources: principally Ucareo (Michoacán), with smaller amounts from Zacualtipan (Hidalgo) and Otumba (State of Mexico).[807] This reflects a major change from the Classic Period, when the Valley of Mexico sources (Otumba and Pachuca) dominated all of western Morelos.[808] Hirth's (2000, 1: 195-198) discussion of the changes in obsidian procurement suggests Xochicalco sought obsidian not from the nearest sources, but from sources that made it possible to bypass the Valley of Mexico, which continued to supply obsidian even after AD 650, either by going northwest into the State of Mexico and Michoacán or perhaps through the Valley of Toluca. Hirth (2000, 1: 205) notes the same pattern with ceramics. This suggests Xochicalco did not seek to maintain ties with the metropolis after its decline, but instead elected a commercial strategy to shun it.

Despite the decline of Teotihuacan's preeminence in the Epiclassic, evidence suggests obsidian workshops continued to operate in the metropolis at this time,[809] although amounts of Pachuca and Otrumba obsidian fell. Instead, in the Epiclassic period Xochicalco

[807] Hirth 2000, 1: 195; Hirth, Flenniken, and Andrews 2000:144.

[808] Hirth and Angulo 1981; Hirth 2000: 197.

[809] Hirth 2000, 1: 197.

strengthened its ties with West Mexico, by acquiring Ucareo obsidian (200 kilometers away) through networks that probably went northwest into the State of Mexico, perhaps through the Valley of Toluca via Teotenango, and Michoacán in what must have been a deliberate effort to avoid Valley of Mexico obsidian sources.[810]

Hirth (2000, 1: 166, 170) identified seven obsidian workshops centered in a few residential groups on the South Hill and on the northern fringes of the city in the North Fields. This is significant, because its distance from the ceremonial core suggests production was not controlled by the state (ibid.: 174) in contrast to production at Teotihuacan. Furthermore, Hirth suggests that obsidian production at the site was limited to a small number of families who probably were able to supply the demand for all the site's inhabitants, as well as those in the surrounding areas (ibid.: 174). What is particularly interesting is the apparent lack of highly specialized skill on the part of the craftsmen; Hirth, Flenniken and Andrews (2000, 2: 144) note that the obsidian "craftsmen were not particularly skilled in percussion techniques." This meant the artisans were forced to use more laborious pecking and grinding techniques to extract blades from the medium- to small-sized obsidian polyhedral cores that entered the site to decrease the risk of damaging the obsidian cores, which were precious commodities from distant sources that could not be wasted. Given the lack of skill on the part of Xochicalco craftsmen in percussion techniques, the authors propose Xochicalco craftsmen procured obsidian cores through intermediary sources such as merchants or that the "Xochicalco craftsmen were itinerant obsidian workers who procured cores from other areas and reduced them as they produced

[810] Ibid.: 197, 198.

blades on their return to Xochicalco" (ibid.:144).[811] The blade cores were almost half the diameter and about a third of the length of blade cores reported from the Ucareo, Michoacán, source for the Postclassic (ibid.: 144), which reinforces the idea of itinerant obsidian specialists transporting used obsidian cores that grew smaller on the journey (ibid.: 144). Larger pieces, such as blades, were probably made from preforms that also reached Xochicalco through trade (ibid. 142).

A few words on Teotihuacan obsidian sources and production serve as a point of comparison for this discussion. Teotihuacan produced obsidian in the central workshops in the ceremonial-administrative core of the city that worked under state direction (Michael Spence cited by Hirth [2000, 1: 175]). Furthermore, Teotihuacan craftsmen employed different techniques of working obsidian than those of Xochicalco (ibid.). Instead, Xochicalco obsidian work resembles what has been found at Teotihuacan rural sites, Classic period sites at Teuchitlan and Ahualulco, Jalisco, West Mexico and during the Middle and Late Classic periods at Chalchuapa in El Salvador.[812]

Turning now to the Maya region, there are highly different visions of the role of obsidian there. Sidrys (1976: 449) has concluded that "obsidian in the Late Preclassic-Early Classic [300 BC-AD 600] was a status good reflecting religious and political behavior. Its everyday use was largely restricted to elite households, although by the Late Classic its usage may have been more widespread." After discussing the massive obsidian cache

[811] This idea has potential implications for the working of other materials at Xochicalco, such as greenstone. Given the demand for greenstone masks, figurines, plaques, and personal ornaments, there may have been prospectors who traveled to other regions in search of raw materials. The overall poor quality of the worked greenstone pieces (with the exception of those of Maya or possible Teotihuacan manufacture) makes one wonder whether, like obsidian workers, these craftsmen were not full-time specialized artists trained and experienced in working these materials in the tradition of Teotihuacan or Maya craftsmen. Instead, they were less experienced and hence less adept.

[812] Hirth, Flenniken and Andrews 2000, 2: 143).

practices among the lowland Maya, he notes, "The lustrous quality of obsidian (associated with gemstones) together with its distant sources made it a fascinating and desirable commodity, irrespective of its potential usefulness" (ibid.: 460).[813] As for sources of this obsidian in the Maya region, Moholy-Nagy (1989: 381) mentions Pachuca (Hidalgo), Otumba (State of Mexico), Zaragoza (Puebla), Zinapécuaro (Michoacán), and Ucareo (Michoacán) as the principal sources of obsidian at Tikal, in addition to Highland Guatemala as a source. Furthermore, another relevant aspect of obsidian working in the Maya region is that it was sometimes conducted in the same workshop as jade craftsmanship, based on evidence of a Late Classic workshop in Guaytán, Guatemala.[814]

Discussion

The primary interest in the discussion of ceramics and other portable remains is to compare or contrast evidence of non-local interaction with that of monumental works. Available ceramic information from the two sites is disparate; nevertheless, a few general comments can be made. Both sites appear to exhibit a considerable degree of ceramic continuity through time, despite minor changes in types that seem to represent an outgrowth of local ceramic traditions.

A more complex issue is the matter of non-local ceramic interaction as represented directly by actual tradewares or indirectly through stylistic resemblances ("identities" or "homologies" respectively; terms from Ball 1983). Although the majority of pottery is of local manufacture at both sites, some actual tradewares have been identified. Cacaxtla's principal foreign wares have been linked through analyses of clay composition with

[813] Moholy Nagy (1989: 381, 385) disagrees with this perspective and asserts that Mexican obsidian at Tikal is predominantly utilitarian, and that apparently everyone used it and occurs especially in the form of prismatic blades and point-knives, although her Table 1 does show an unusual amount of obsidian found in caches and burials.

[814] Walters 1989.

northern or southern Veracruz and southern Puebla or Tehuacán, while imported wares at Xochicalco have been linked principally with Guerrero, and to a much lesser extent with Oaxaca. There is also scant evidence of Cacaxtla trade with Oaxaca, and of Xochicalco interaction with Veracruz.

Numerous ceramic homologies have been described linking the two sites with Teotihuacan (or the Valley of Mexico) and Maya style wares. At both sites there are some similarities with Teotihuacan vessel shapes or decoration, but by and large these are local copies or derivative emulations of Teotihuacan wares. Likewise, no evidence of Maya ceramics have been found at either center. In the case of Xochicalco, the majority of "evidence" occurs in the form of vague homologies. However, in many cases the posited similarities are so generalized in nature (e.g. some aspect of vessel shape or decoration) that the question arises of to what extent may these traits might signify social or cultural relations.

What is the relationship, if any, between Xochicalco and Cacaxtla ceramics? The connection appears to revolve around the Coyotlatelco, "red on buff," ceramic complex. Whether the ware represents an invasion of peoples from the Bajío region, whether it is simply an outgrowth of the extant Teotihuacan style, or whether it might be an ethnic identifier of the Olmeca-Xicalanca[815] is unclear; any of these theories are possible at this time, due to lack of evidence supporting any one of these hypotheses over another. Further complicating the issue is the difficulty of dealing with the reconstruction of cultural phenomena, such as migrations and other itinerant phenomena (e.g. itinerant potters as suggested by Cyphers [personal communication 1984]), and the identification of ethnic groups with material remains evidenced through the archaeological record.

[815] Cyphers 2000, 2: 12.

In terms of obsidian, both Cacaxtla and Xochicalco were part of exchange networks that brought obsidian to cover utilitarian and ceremonial needs. Xochicalco procured obsidian from faraway mines in Michoacán and Hidalgo, even though Valley of Mexico sources would have been much closer. High quality obsidian was available closer to home, but Xochicalco elected to avoid interaction with Teotihuacan, which continued to exploit obsidian. On the other hand, small amounts of Pachuca green obsidian have been found at Cacaxtla, which raises the possibility that Cacaxtla was involved in different trade networks. Nevertheless, the source areas for this important utilitarian and ritual material were not reflected in the monumental arts or in the portable prestige items from both sites.

Xochicalco's trading partners for obsidian were Michoacán and Hidalgo, while the case for Cacaxtla is currently unclear. However, Xochicalco's ties with these areas appear only on the level of trade goods in the form of utilitarian commodities and goods, such as pottery and obsidian implements. The art styles and iconography of these areas, which are not well known, did not impact any level of production (highly visible monuments, elite ritual and status pieces, and items for daily use). Actually, more to the point, these other areas were not known to have well-defined artistic identities, perhaps because they were mainly areas tapped as sources for raw materials, but were not known for major urban centers. This exemplifies Pasztory's (1989: 36) insightful observation that "Such styles emerge only when external articulation of ethnic identity is necessary for a variety of political and economic reasons," which in the case of these source areas of raw materials or trade goods, must not have been the case.

The idea of itinerant craftsmen has been raised in Hirth's discussion of obsidian workers, although their lack of skill in obsidian percussion techniques has also been

noted.[816] This could have been a new breed of entrepreneurs who might have been a blend of prospectors- adventurers-traders-rudimentary artisans in the changing times following the decline of more centrally controlled and regimented raw material procurement and production under Teotihuacan. If the hypothesis that itinerant obsidian craftsmen at Xochicalco is correct, then it opens the possibility for a more nuanced understanding of Epiclassic phenomena. Instead of proposing massive waves of migrations of mysterious groups, it offers an interpretation on a human scale. It also raises the possibility that itinerant craftsmen could have been involved in the working of other materials and the production of other pieces.

[816] Hirth, Flenniken, and Andrews 2000: 144.

Conclusions and Paths for Future Research

What the ancient artists at Cacaxtla and Xochicalco chose to make visible and what they have left us to surmise through their lacunae, their silences, their acts of making things invisible pose a complex challenge to observers more than a millennium after their demise. The artists and rulers of both Xochicalco and Cacaxtla went to great lengths to develop prominent, identifiable visual identities in the monumental arts for their cities. Pasztory (1989: 36-37) has convincingly argued that the development of art styles served purposes not only of social cohesion, but also of boundary definition in circumstances of intense interaction rather than isolation. This scenario applies to what is known of the Epiclassic period. It was an age of intense interaction, competition, and conflict, while it was also a time of shared participation in a vast network of elite prestige and ritual goods.

I would suggest that Mesoamerica was indeed in many ways an interconnected world. The movement of goods from faraway corners of Mesoamerica by individuals or groups brought prestige items as well as knowledge. Palygorskite clay for Maya blue and the knowhow to prepare it, jade and other lapidary stones such as tecalli, obsidian, and sea shells were some of the materials that were brought to Cacaxtla and Xochicalco, often as raw materials although sometimes perhaps as finished pieces. Clearly this physical and material interconnection did not occur in a vacuum. As human participants—whether traders, dignitaries, artists, potters, craftspeople, prospectors, pilgrims or other travelers—walked these paths, they brought both goods and memories of what they saw with them. This is not to say that all members of society would have had the same access and awareness; it would have applied to those who had the opportunity to travel.

This interaction had a particular impact in the Epiclassic period. The waning

prestige of Teotihuacan could have led to "an ideological, political, and even moral repudiation of things associated with the Teotihuacan state, if not the city itself . . . it is plausible that many Epiclassic groups made a point of distancing themselves from the symbolism of that state" (Cowgill 2013: 141). In this setting, the rulers of cities such as Cacaxtla and Xochicalco sought to differentiate their polities from Teotihuacan, at the same time that they sought to distinguish their cities from others. As a result, the monumental arts at these two centers showed a process of searching manifested by diversity and experimentation. The process of identity-building must have resulted from the joint efforts of rulers and artists. Political authorities might have had an idea of what they wanted to achieve, but it was the artists who commanded the visual repertoire and the technological expertise to assemble it. Rulers and artists drew on what they knew from other parts of Mesoamerica, particularly the Maya region. However, they did not merely copy. Sometimes they employed a stylistic approach and at others, an iconographic feature. When visual similarity was close to a specific image or style, it suggests some form of direct familiarity with original models (e.g., traveling artist or portable material). However, when the similarity was more a concept or an idea given an unusual visual treatment that bears only a tenuous visual resemblance at best, it suggests indirect awareness or other possible mechanisms of transmission.

However, this interconnectedness does not mean all regions shared all knowledge and beliefs. Some ideas and practices were dispersed and widespread (e.g. rain deity, old fire god, greenstone pendant plaques, tecalli vessels) suggesting pan-Mesoamerican observance and understanding. Whereas other traditions remained ensconced, better deployed and appreciated by locals than outsiders (e.g. corn-man imagery; battle scenes; use of lapidary masks and figurines). At the same time, other traditions may have been

adopted and transformed (e.g. Maya censer bases deposited in caves) in Cacaxtla and Xochicalco for diverse purposes.

Architecturally, Cacaxtla and Xochicalco offer little in the way of evidence of relations or ties with specific parts of Mesoamerica, as well as with each other. Both centers make minor reference to Teotihuacan in the use of details (e.g., *talud-tablero* and jade bead sign ornamentation), but they transform these elements. In fact, they seemed to be more interested in differentiating themselves from the former center of power and glory than in emulating it. Instead they innovate and create new uses for what might have begun as traditional Classic period forms. Although some details (Cacaxtla's geometric latticework and Xochicalco's early niche-like *talud-tablero* articulation) evoke architectural details from Gulf Coast El Tajín, these details appear in isolation and in different architectural contexts, suggesting potential inspiration and reformulation more than actual emulation.

The case of sculpture shows greater complexity at both sites. The small corpus from Cacaxtla and the enormous collection from Xochicalco display surprising diversity, which reveals two related aspects: an openness to non-local inspiration and often fairly up-to-date knowledge of visual developments in other parts of Mesoamerica. Although the creators of monuments from both cities seem to have drawn on non-local elements, primarily in iconography, rarely did they copy these traits. Instead, they reformulated what they might have seen or perhaps heard about to make it distinctively their own. The resulting imagery recalls iconographic elements (e.g. feathered serpent headdresses, feathered serpents, macaw heads, felines, balloon headdresses, and the Reptile's Eye glyph and the Trapeze-and-Ray sign) that are rendered in a local style and repurposed with a local iconographic inflection, which cannot be identified with other known centers. Interestingly, many of the visual referents of the time appear to be derived from Maya imagery, sometimes known

from portable pieces (e.g. jades, elite ceramics), but at other times from monuments that were erected at different sites throughout the Southern Maya Lowlands, especially the eighth-century Usumacinta and Pasión river basins (Helmke and Nielsen 2013, 2: 367). Portable elite goods could have served as mechanisms facilitating awareness of practices in other parts of Mesoamerica, while human mobility, whether in the form of traders, artists, members of the elite, prospectors seeking raw materials, or curious travelers could have had access to monuments in other parts of Mesoamerica. If contact was not direct, verbal descriptions based on memory could also have served a purpose. The quality and usefulness of these impressions and memories varied depending on the individual; artists and those who were sensitive to matters of craftsmanship could have provided much sharper observations than someone with a less trained eye, as Baxandall (1985) has noted. In the realm of two-dimensional stone sculpture, Xochicalco artists deployed their greatest innovation and creativity. They developed a writing system, based partially on signs known from Teotihuacan, but enriched with additional glyphs resulting in veritable hieroglyphic inscriptions. Although not on par with the complexity and sophistication of Maya glyphs, writing became a prominent focus of Xochicalco monuments, which V. Smith (2000a, b) believes contained both calendrical and historical information. In fact, hieroglyphic monuments are the hallmark for Xochicalco's state style developed to its fullest in two-dimensional relief sculpture. In a parallel process, Xochicalco sculptors working three-dimensional media also innovated by carving or modeling new types of monuments never before seen, such as emaciated felines and sacrificial stones that might have been a prototype for the later Mesoamerican chacmool, or unique pieces that seem to lack any parallel (e.g., the Creator and the Marker).

Despite the shared use throughout Mesoamerica of Maya blue, which implied long-

distance interaction to acquire the material by both centers, mural painting played different roles at Xochicalco and Cacaxtla. At Xochicalco, sculpture, particularly two-dimensional sculpture, was the premier art form, while mural painting was generally practiced on a small, often more intimate scale, such as on altars.[817] In the few examples that have survived, Xochicalco murals are geometric, repetitive, or if figurative, they are modest in scale and hieratic in composition, following the tradition of Central Mexican processions or bench reliefs that depict figures that converge on a central element. In contrast, the Cacaxtla artists created dramatic, stage-like backdrops through mural painting for elite ritual activity. Often located on exteriors facing open spaces or framing entrances or corridors, their bold palette and scale constituted lavish scenarios, ideal for the positioning of the elite. In the tradition of Maya prisoner stairways, the Cacaxtla prisoner step probably had similar symbolic connotations for the elite who trod on the bodies of deformed, partially skeletal victims, in an effort to reinforce their courage, glory, and might. At the same time, given the prominent non-local visual language of the murals, the Cacaxtla artists had to grapple with issues such as maximum intelligibility in using Maya-based content that was not part of traditional subject matter that local audiences would have been accustomed to seeing. The jarring alien Maya iconography was somewhat tempered by the inclusion of Central Mexican signs, sometimes known from Teotihuacan's visual system.

References to Teotihuacan in murals at both cities are minor and are largely limited to the Storm God, the feathered serpent, which was only a secondary creature for much of the life of the great metropolis, and an incipient writing system. Meanwhile, some of the details of the murals at Cacaxtla reveal a degree of deviation from Maya sources stemming

[817] The exception might be the Pirámide Gemela, the twin to the Feathered Serpent Pyramid, but unfortunately its content is unknown.

from confusion on the part of the artists or perhaps the result of the demands of patrons to use motifs they did not fully understand. Surely some of the signs or symbols were unintelligible—and hence invisible—for some of the public. This situation perhaps hastened the decision to conceal the murals, which were given a ritual burial.

While public monuments evoke a legacy with implied Maya roots blended with smaller references to Teotihuacan, or sometimes to Oaxaca or the Gulf Coast region in what Foncerrada de Molina (1980) has elegantly termed as "cosmopolitanism," a different image of these two centers can be gleaned from smaller scale artifacts. Xochicalco—as the larger, apparently more prominent of the two centers, certainly the more thoroughly excavated of the two sites—yielded quantitatively and qualitatively more portable elite and ritual pieces, although both sites reveal similar types of remains in this category. Lapidary materials, particularly greenstone, partake of the cosmopolitan rhetoric of the monumental arts by showing the awareness and participation of Cacaxtla and Xochicalco in a pan-Mesoamerican network of prestige status markers. The overall similarity in some goods (*tecali* vessels, obsidian eccentrics, shell) reinforces this interpretation.

Other materials display distinctive practices at these two centers. Portable luxury and ritual items from Cacaxtla and Xochicalco reveal apparent shifts in usage of some types of objects from earlier Preclassic and Classic (1200 BC-AD 650) times. For example, lapidary masks seem to occur in contexts unlike those of Teotihuacan and the Maya region. I propose lapidary masks were possibly linked to ancestry and antiquity and that they fulfilled a particular local need for legitimacy at Xochicalco as a newly established center. At the same time, Xochicalco lapidary figurines drew on the idea of some Teotihuacan pieces, especially tiny figurines wearing a T-shaped headdress found in the Feathered Serpent Temple and the Moon Pyramid in Teotihuacan. However, the Xochicalco pieces

differ from the large-scale lapidary sculpture and the exquisite diminutive figures from Teotihuacan. Instead, it consists of medium-sized (15-35 cm) pieces, which were deposited in elite offerings. Xochicalco might have fostered a new industry in the production of this type of figurine in the nearby Guerrero-Pueble-Oaxaca-Morelos border area. These pieces often represent the Storm God, as well as male and female figures. Quantities and distribution patterns at Xochicalco suggest lapidary figurines may have been used in elite household rituals. The repetition of male-female pairs in many contexts raises the question of whether they could have represented ancestors, given their lack of obviously supernatural features.

Finally, lapidary pendant plaques were apparently a tradition that originated in the Maya region, but the pieces found at Cacaxtla and Xochicalco were locally made and were perforated to be worn. Although of Maya inspiration, the Epiclassic pieces differ from Maya pieces in that they clearly represented deceased individuals with closed eyes. These plaques, as well as greenstone in general, might have been valued as ancestral treasures, representing the long-deceased ancestors.

The category of terracotta effigy vessels reveals the area of greatest innovation for the two cities. Cacaxtla developed an innovative a lidded urn format with modeled polychrome human figures linked to the dichotomies and themes manifested in the murals of Buildings A and B. Xochicalco censers were also highly diversified with some possible inspiration from the Maya cylindrical censer bases known from the Palenque region and caves throughout the Maya region. Xochicalco also developed never-before-seen entities such as pieces vaguely resembling the Jaguar God of the Underworld and odd butterfly censers. At the same time, other censers began to bear the effigy of the Storm God, combining his watery associations with his newfound igneous nature expressed in the

brazier format. This is also expressed in the form of large obsidian eccentrics created to form Storm God faces. To date it would appear that these are unique to Cacaxtla and Xochicalco.

Finally, interaction expressed in utilitarian goods tells a different story about Cacaxtla and Xochicalco's non-local ties. Foreign utilitarian ceramics were identified from the Gulf Coast, southern Puebla, Tehuacan, and Oaxaca in early contexts at Cacaxtla. In later times, there were larger numbers of Gulf Coast tradewares particularly from the Tajín or Tuxtlas regions. Despite the general stylistic appearance of the Cacaxtla mural program, no Maya ceramic pieces were found; only some Fine Orange perhaps from the Gulf Coast was recorded. Even the pottery resembling pieces from Teotihuacan were apparently local imitations. In contrast, Xochicalco's tradewares displayed ties with Guerrero, and perhaps with the Gulf Coast and Oaxaca, again not with Maya centers. In her assessment of the Maya dimension in Xochicalco ceramics, Cyphers (2000, 2: 13-14) commented: "None of these similarities mentioned above point to direct interaction as the cause for their occurrence . . . curiously, individual traits rather than whole types or assemblages are what were transplanted." Significantly, her comments on ceramics are applicable for the processes at play in Xochicalco's monumental and portable elite arts, in what appear to be a city-wide practice or aesthetic. What is noteworthy is the decision to focus so prominently on features of Maya monuments, prestige goods, and ceramics.

Both Cacaxtla and Xochicalco also yielded a simple bichrome type of pottery that resembles what is referred to as Coyotlatelco A, bearing simple red decoration. The distribution of Coyotlatelco A and more complex Coyotlatelco B seems to define to distinct areas of interaction: Cyphers (2000, 2: 13; Cyphers and Hirth, 2000, 2: 126) has linked Coyotlatelco A with Cacaxtla and Xochicalco, Western Morelos, as well as parts of Puebla-

Tlaxcala, while Coyotlatelco B has been identified with the Basin of Mexico, the Valley of Toluca, the Tula Area and Western Tlaxcala, identified as the "reduced extent of Teotihuacan influence and its economic system during the Epiclassic" (Cyphers 2000, 2: 13). Although both sites contained some of the same luxury and ritual items, Xochicalco's ties were more to the west and south, while Cacaxtla's were more to the east and south.

As for the story told by the obsidian trade, much more can be said of Xochicalco given the lack of obsidian reports from Cacaxtla. Xochicalco's principal obsidian sources were not the closest to the city. Its priority seemed to be to avoid resorting to sources formerly under Teotihuacan control. Hirth (2000) has proposed the existence of itinerant obsidian merchants and perhaps even itinerant craftsmen in the changing post-Teotihuacan commercial network. The idea of itinerant craftsmen seeking raw materials, working them, and transporting them reinforces the importance of small scale, portable goods as a potential source of images and ideas along with their human makers and bearers.

Teotihuacan had long been a center of power and prestige in the Central Highlands. However, when it comes to Xochicalco's relationship with Teotihuacan, there appears to have been some ambiguity. Litvak King (1970b) has portrayed Xochicalco as a competitor to Teotihuacan in a scenario in which Xochicalco's commercial activity could have been one of the factors that led to the decline of the metropolis. This might explain the intentional avoidance of procuring obsidian from Teotihuacan sources, and instead pursuing the material from more distant mines (Michoacán and Hidalgo). An underlying current of previous competition could have fueled resistance to things associated with Teotihuacan. Although by and large this was true, it was not completely the case, which brings the discussion back to Xochicalco ambiguity.

Another possibility is that some of the people from Teotihuacan migrated to other

cities that arose in the Epiclassic, such as Xochicalco, Teotenango, Cantona, and Xochitécatl-Cacaxtla (Serra Puche and Lazcano Arce 2011: 161), which might help to explain some of the continuities in the form of Teotihuacan masks and the Huehueteotl (Old Fire God) sculpture at Xochicalco. Although it might be argued that if Teotihuacan migrants resettled in Xochicalco, why more Teotihuacan elements, particularly those associated with food culture or religious practices, did not appear there. In other words, the types of evidence that has been used to identify barrios of foreigners at Teotihuacan itself, such as the stelae and funerary urns from the Oaxaca Barrio (Millon 1988: 129-130) or the round constructions and ceramics that suggest residents from the Gulf Coast (Rattray 1988), and Spence (1992), had no counterparts at Xochicalco.

Instead, the people of Xochicalco deposited Teotihuacan heirlooms in offerings while the city's monumental arts made subtle reference to select iconographic details from the great metropolis, but surrounded with a Maya aura. In fact, I would suggest Xochicalco adopted elements from early parts of Teotihuacan's history (references to the Old Temple of Quetzalcoatl; lapidary figurines) or pieces that had even earlier roots in Central Mexico (e.g. the Old Fire God), which were perhaps "safely removed in time" (Cowgill 2013: 141). By recombining them with more or less coeval Maya features, Xochicalco created a new breed of prestige that tapped two types of ancestral legitimacy: that of the once great metropolis of Teotihuacan and that of the glory of Maya city-states. Similarly, Cacaxtla did not make overt efforts to copy or emulate Teotihuacan, except perhaps in early architecture and ceramics. Its monumental arts also drew heavily on Maya style and iconography, but it may have been tailored for maximum clarity for an audience not fully familiar or literate in Maya iconography.

The quotation, transformation, and reframing of forms and ideas from earlier times

and from other areas that can be traced in Epiclassic monumental arts raise the issue of translation, particularly as Esther Pasztory (2005: 103) has employed the term.[818] She has adapted it to refer to "the continuous reinterpretation of forms which have in them at least as much change and innovation as is often necessary to translate a statement from one language and context to another. Through a process of translation, a form may last hundreds of years, but the relationship may be unrecognizable in terms of its appearance." Specifically applying it to the discussion of the avatars of the mask form, Pasztory (2000) speaks of the shift from one image to another, or a shift in medium, or a shift from three-dimensional to two-dimensional, and so forth. By using this term, she underscores the agency of the "translator" or "artist" who faced the challenge of "finding idioms in the language of the current time and practice for the language of the past" (ibid.: 271) and brings understanding down to the level of individuals, artists faced with the task before them. In employing this terminology, I would add that visual translation is equally fraught with some of the same difficulties of verbal and written translations. In some cases, some visual solutions in Mesoamerica did not translate well into another context. For example, bellicose murals may have been an effective way of bolstering elite legitimacy in the Maya region, but the dramatic and gruesome vision of martial conflict in Cacaxtla's Building B battle murals (chapter 6), were not as effective as they might have been for the local audience. Or some aspects of iconography, such as the Xochicalco's Jaguar God of the Underworld-Serpent censers (chapter 7) or Cacaxtla's God L-God N in the Red Temple

[818] Walter Benjamin (1968) also explored the subject in a different vein when speaking of the impossibility of translating one of Baudelaire's works, given the translator's inability to translate the "poetic" quality of the original, and thus, the result is a "transformation and a renewal of something living—the original undergoes a change. . . . a maturing process" (ibid.: 73). Its complexity resides in the need to convey not merely the superficial meaning of words, but rather their broader resonance in a culture stemming from an overall cultural context in a way that the reader/viewer could replicate the experience produced by the original language.

murals (chapter 6), might have been misunderstood, as the result of confusion of the image by the artist. At the same time, some ideas might quite simply have been lost in translation (e.g. Xochicalco's butterfly censer, chapter 8, fig. 288). How could this confusion have arisen? Different scenarios are plausible. If Brittenham (2008) is correct about the possibility of more than one generation of painters, the first being trained in the Maya style, later generations or apprentices would have less of a command over the iconography and technique than earlier generations. This fits well with Braswell's (2003: 18) assessment that migration "often *entails* a change in identity" to refer to the implicit process of cultural assimilation. Distance in time and space from a homeland can produce diverse results: a strong adhesion to tradition, a peculiar hybrid of the migrant's background with the terms of the new circumstances, a gradual loss of a clear understanding or recollection, a renunciation of the past to embrace present circumstances. The permutations are multiple.

Alternatively, the introduction of nonlocal ideas or imagery depended on the form or means of introduction. In ancient times, works could have been seen, sketched, etched into the mind of the artist or more vaguely remembered in the memory of viewers perhaps with less well-trained eyes. Could a sculpture such as the Marcador from Xochicalco been inspired by a keen memory or a vivid description of the Tikal marker (fig. 163, 164)? It is in the realm of possibility. Or could the Xochicalco Jaguar God of the Underworld censers have been informed by a perhaps less keen memory or a poor description (fig. 286c-d, 287a-c, 152)? That is also possible.

Other images resulted in highly successful innovations, such as the Storm God obsidian eccentric "masks" (figs. 274a-b) from both sites and the Xochicalco Storm God censer embodying the dichotomy of water and fire in a single object, which continued into Aztec times. The imagery of lapidary pendants seems to deviate from their original sources

as well, by emphasizing the depiction of death in contrast to their apparent prototypes from the Maya region that clearly portray life (figs. 270, 267). However, another translation from Maya lapidary pendants resulted in the seated figures on the lower *talud* of the Xochicalco Feathered Serpent Pyramid (figs. 181-185). This Mayoid image was so successful that it was also translated into clay plaques at Xochicalco (González Crespo, Garza Tarazona, de la Vega et al. 1995: 236) (fig. 268) and back into greenstone later in Aztec times (Umberger 1987).

§

There are a number of avenues of additional work that can be pursued in the future, some specifically related to these two centers, and others of a more general nature. I would suggest some specific inquiries not included in this dissertation, because of the limited quantity of information available. Materials such as carved bone, turquoise, lapidary ballgame effigies, and terracotta figurines were not included in the present study, but merit study as well.

Another area that requires further research is the relationship of Cacaxtla to the nearby hill of Xochitécatl. Were they indeed part of a single city-state? Why is Xochitécatl's imagery so utterly different from that of nearby Cacaxtla? Further excavations are needed and can shed more light on this matter and provide additional materials to test the validity of some of the interpretations presented herein.

Much of the material from Xochicalco has not yet been published or made available for study. Once it becomes more accessible, scrutinizing it can provide greater clarity to some of the proposals made in this dissertation. The discussion of lapidary materials in particular could be enhanced by studies of stone origins and scientific studies that might shed greater light on matters of craftsmanship, technological style, and how the Xochicalco

material compares or contrasts with pieces from nearby Guerrero.

The Epiclassic period has been interpreted as the time of the spread of a world religion focusing on Quetzalcoatl, the feathered serpent (Ringle, Gallareta Negrón, and Bey 1998) that supposedly included sites such as Cholula, Cacaxtla, El Tajín, Xochicalco, and Tula. Instead, I would question the belonging of all of these centers to a monolithic ideology and I believe that bringing El Tajín into the comparison of Cacaxtla and Xochicalco could produce interesting contrasts. A comparative analysis combined with an examination of contextual information offer a means of framing the material in order to distinguish one center from another, instead of showing how they were the same.

Some deities seem to disappear from pantheons (e.g. the Old Fire God, the Great Goddess), but this does not seem to be the case of the Storm God. Another potential avenue of inquiry would be to trace Storm God imagery from Preclassic, if it exists, to Classic to Postclassic times in Mesoamerica, but distinguishing between what truly constitutes the Storm God as opposed to warrior imagery intended to legitimize rulership in the Maya region.

Another worthwhile approach would be to consider another area of world art characterized by intensive interaction (e.g. the Silk Route) or itinerant artists (Persian miniature painters) to compare processes of interaction and memory, as well as the resulting effects in artworks. In these other contexts, documentary sources are available to determine if comparable processes observed in other parts of the world could shed greater light on what was happening in Epiclassic Mesoamerica.

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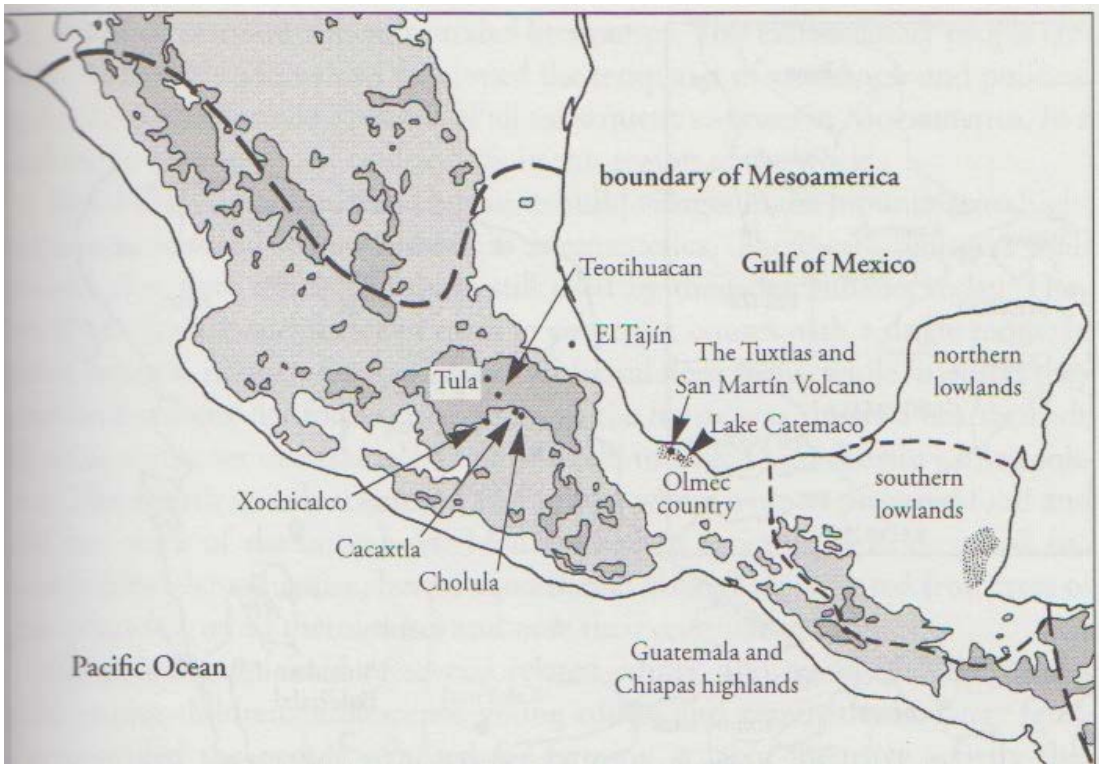


Figure 1. Map of Mesoamerica showing topography over 2,000 and 3,000 feet (Schele and Mathews 1998: 15, fig. 1.1).

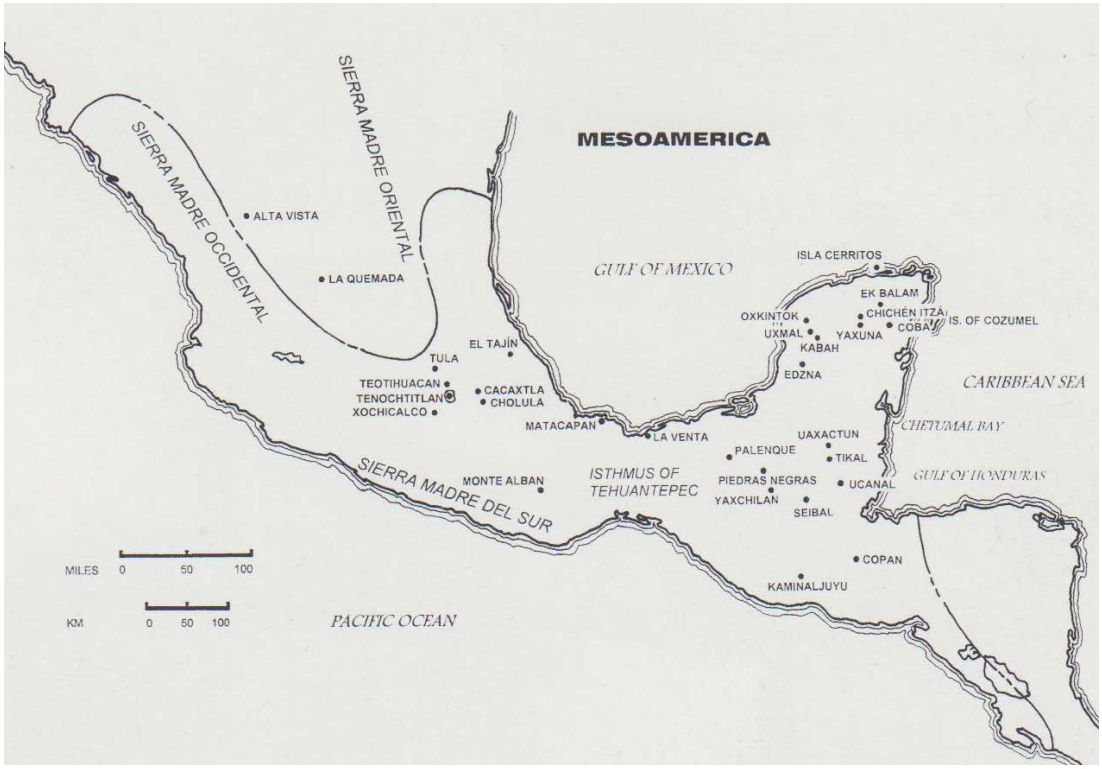


Figure 2. Map of Mesoamerica east of Isthmus of Tehuantepec (Kristan-Graham and Kowalski 2007: 14).



Figure 3. Map of Maya region in Mesoamerica east of Tehuantepec (Kubler 1984: 16).



Figure 4. Cacaxtla, Building A, detail of portico figures (postcard, photo by Jürgen Bavoni).



Figure 5. Aerial view of Cacaxtla's Gran Basamento (Sánchez del Real 1987, n.p.).



Figure 6. Xochicalco aerial view; the Feathered Serpent Pyramid is the gray building on highest level (De la Fuente et al. 1995: 14),



Figure 7. Xochicalco, Feathered Serpent Pyramid (De la Fuente et al. 1995: 26-27).

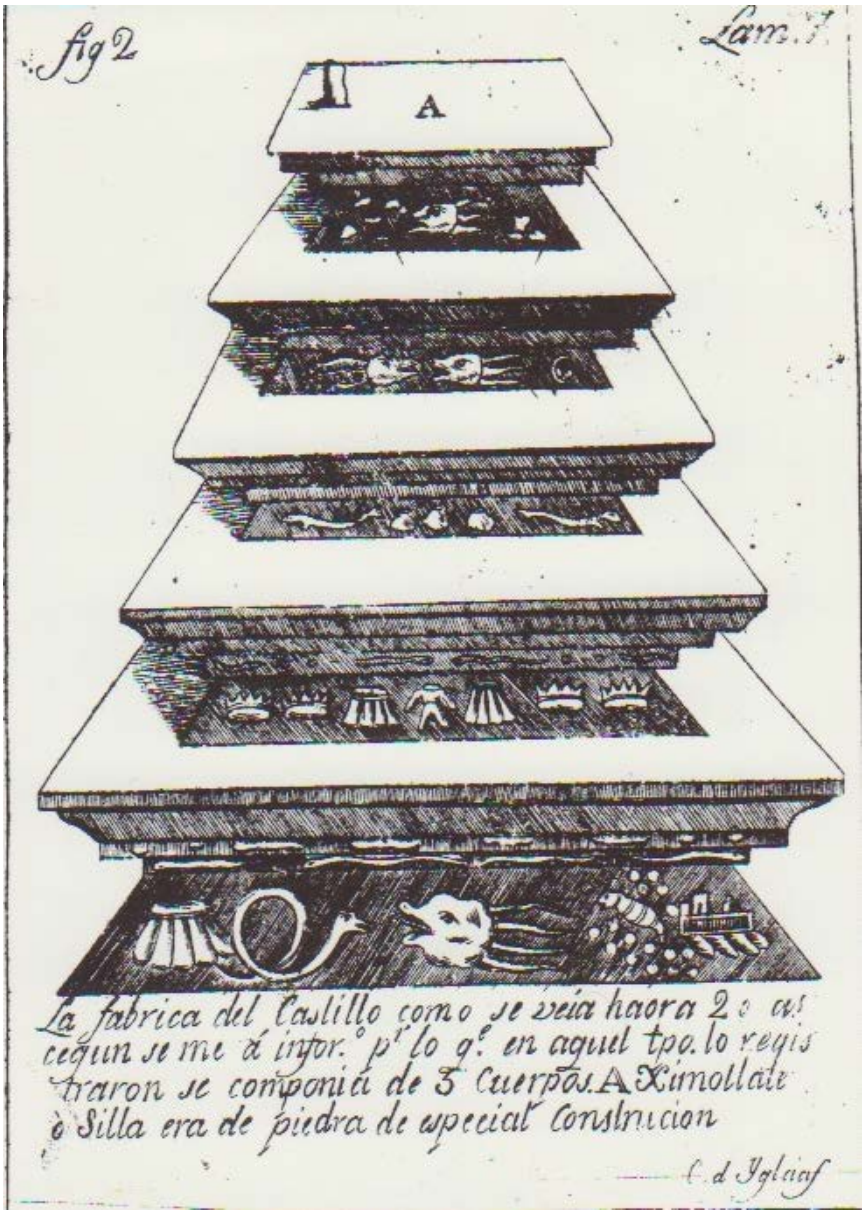


Figure 8. Reconstruction of the Xochicalco Feathered Serpent Pyramid according to José Antonio de Alzate (1791: lamina 7, figura 2).

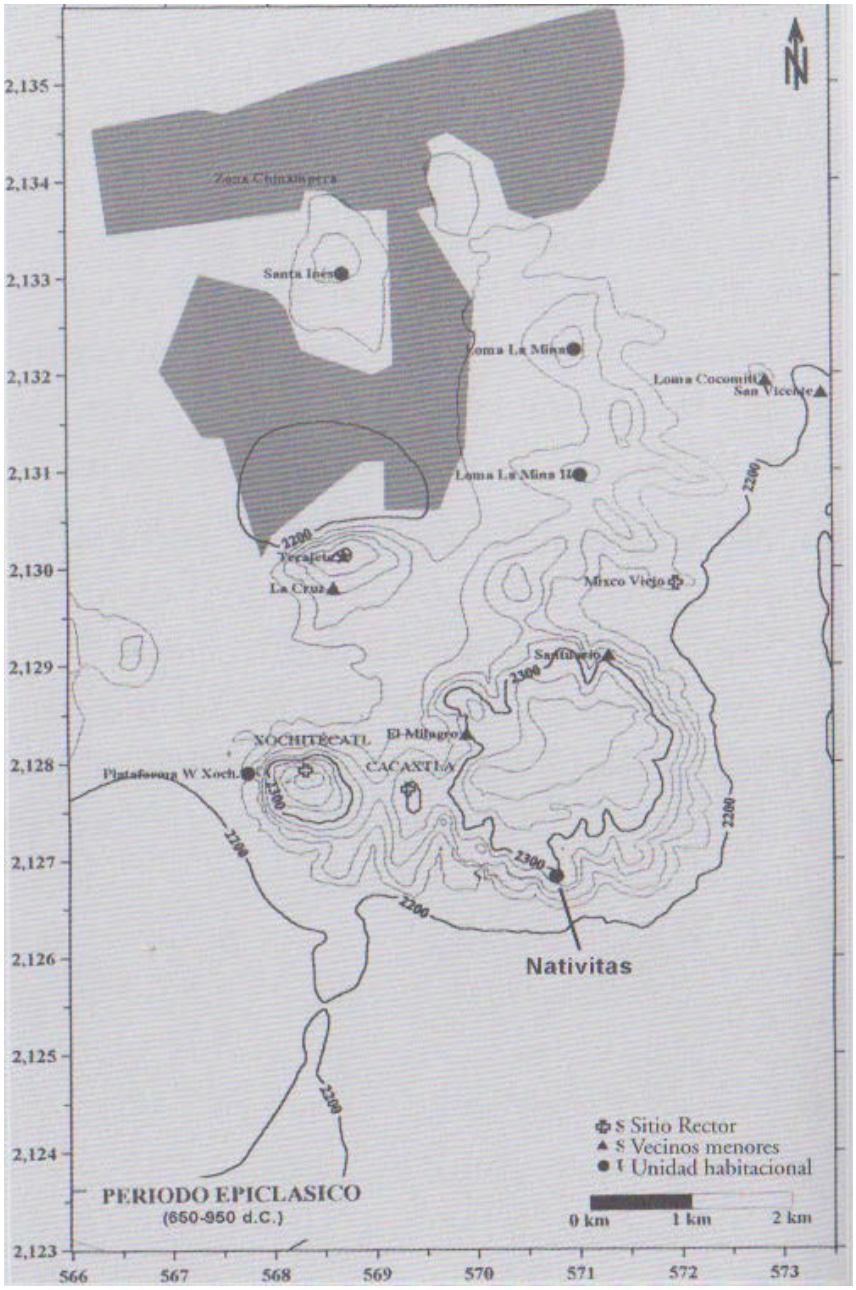


Figure 9. Cacaxtla environs in the Epiclassic (Serra Puche and Lazcano Arce 2011: 38, fig. 27).

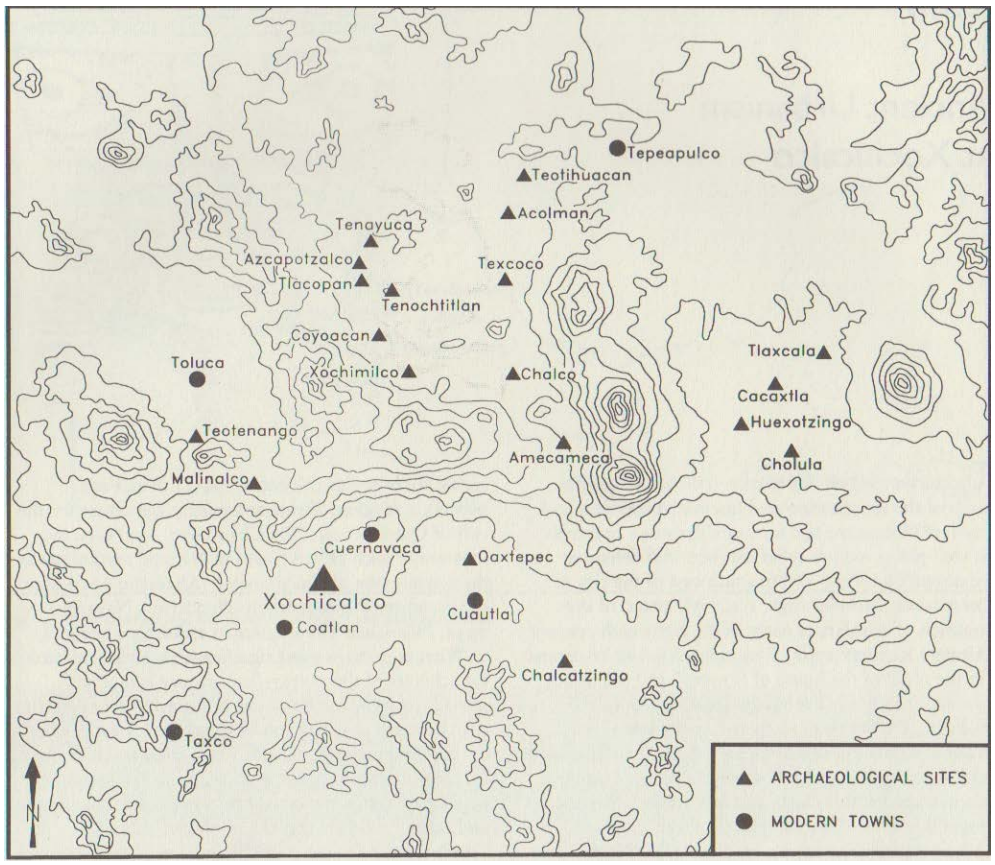


Figure 10. Central Highlands archaeological sites (Hirth 2000, 1: 4, fig. 1.2).

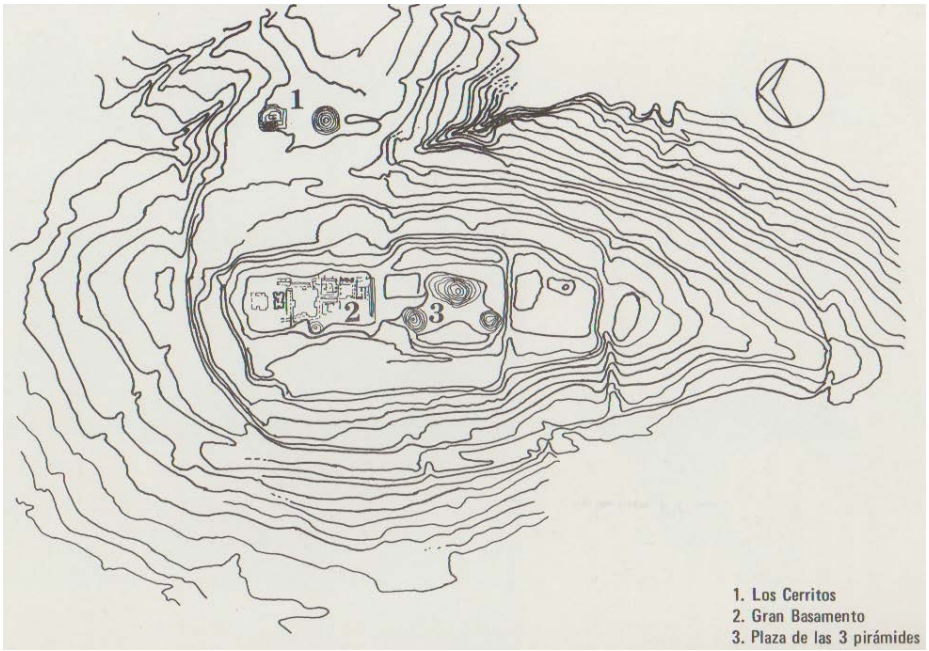


Figure 11. Map of areas of Cacaxtla (López de Molina and Molina Feal 1980: 14).

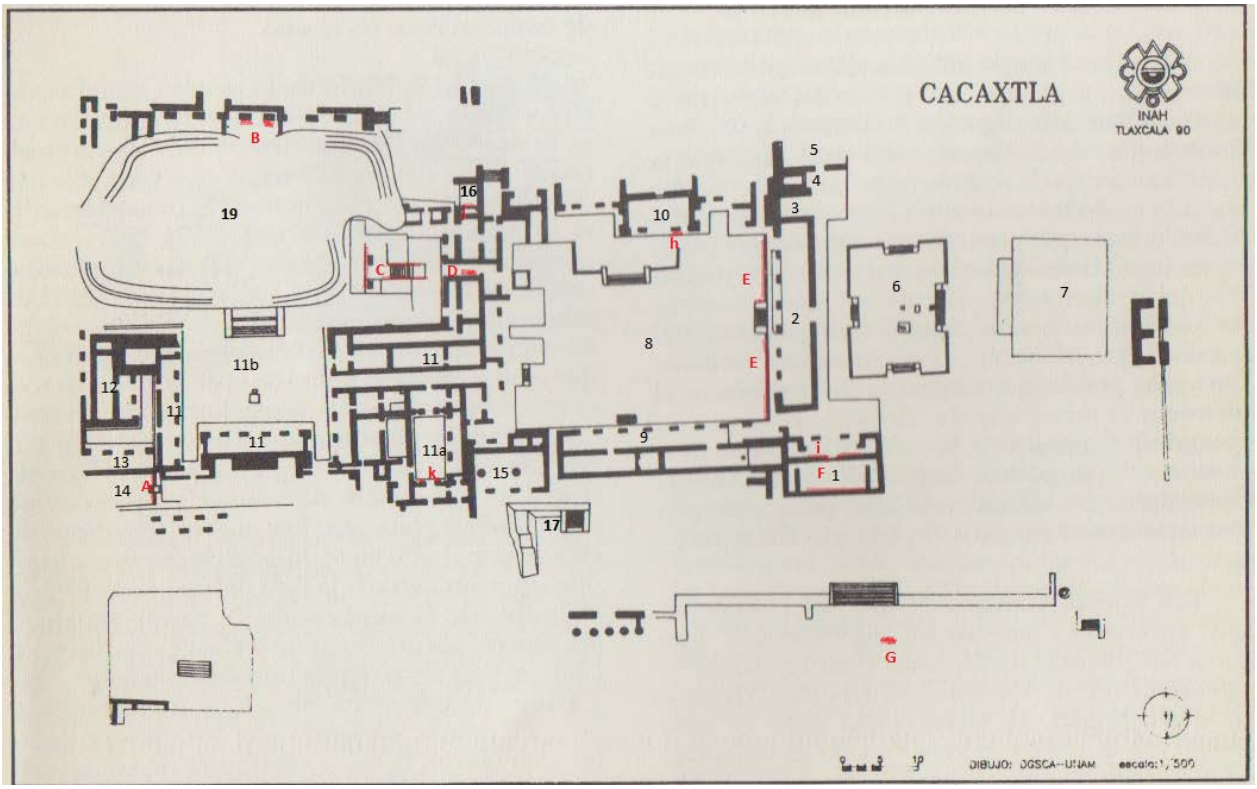


Figure 12. Map of the Gran Basamento of Cacaxtla with location of murals and sculpture (adapted from *Cacaxtla, Proyecto de investigación y conservación* 1990: 11).

1 Building A 2 Building B 3 Pasillo de los Tableros 4 Las Conejeras 5 Building C 6 Sunken Patio 7 Mount Y 8 North Plaza 9 Building D 10 Building E 11 Palace 11a. Patio of the Rhombuses 11b. Patio of the Altars 12 Building F 13 Portico F 14 Room of the Stairway 15 Building of the Columns 16 La Celosía 17 Taludes del Este 18 Taludes del Sur 19 Group 2	<u>Mural paintings</u> A Room of the Stairway murals B Venus Temple murals C Red Temple murals (step rise, floor, corridor) D Mural section under Main Plaza E Building B murals F Building A murals G Pit A-11 mural <u>Bas relief sculpture</u> h Building E standing figure relief i Building A seated figure relief superimposed on mural j Celosía grill k Patio of the Rhombuses geometric relief



Figure 13. Cacaxtla Building A, north and south portico murals (author's photos).



Figure 14. Cacaxtla Building A, north and south jamb murals (author's photos).



Figure 15. Cacaxtla Building A, back wall drawing (López de Molina and Molina Feal 1980: 29)



Figure 16. Cacaxtla Building A, back wall (author's photos).

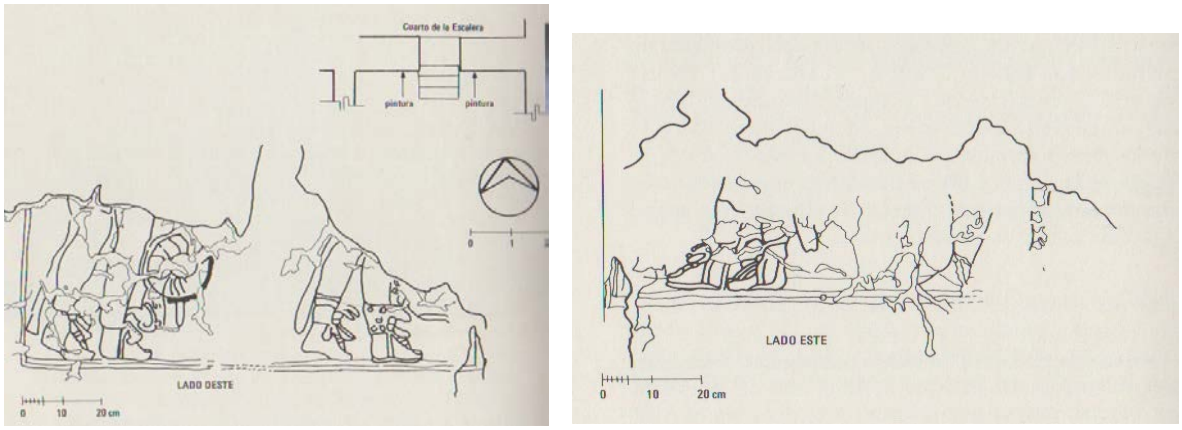


Figure 17. Cacaxtla Room of the Stairway mural drawing (López de Molina and Molina Feal 1980: 48).



Figure 18. Cacaxtla Room of the Stairway mural detail (author's photo).



Figure 19. Section of Cacaxtla Building B east battle mural (Enrico Ferorelli photo in Stuart 1992:125).



Figure 20. Cacaxtla Building B battle mural (Enrico Ferorelli photo in Stuart 1992: 126).



Figure 21. Cacaxtla Venus Temple mural (author's photo).



Figure 22. Cacaxtla monumental warrior clay sculpture (author's photo).

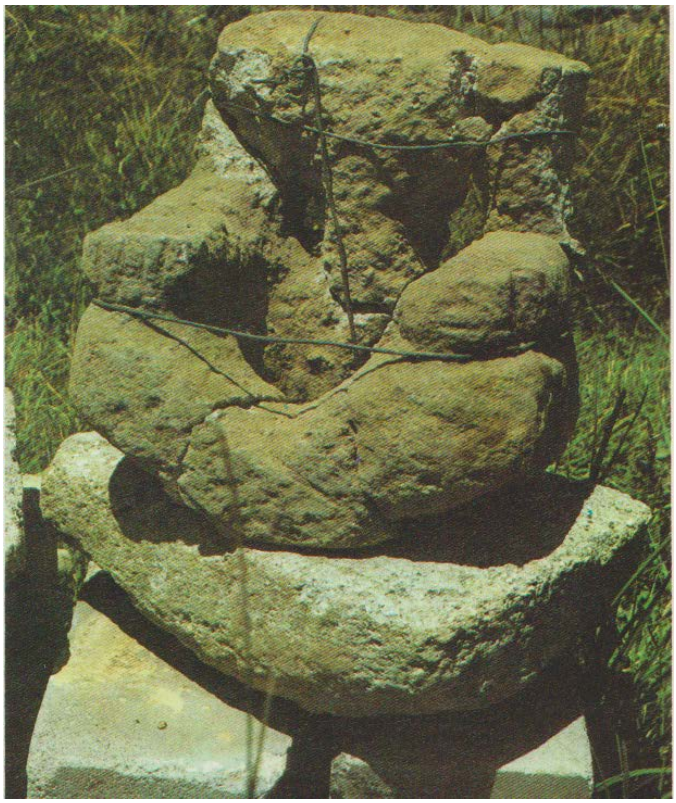


Figure 23. Cacaxtla three dimensional stone sculpture (Sánchez del Real 1987: n.p.).

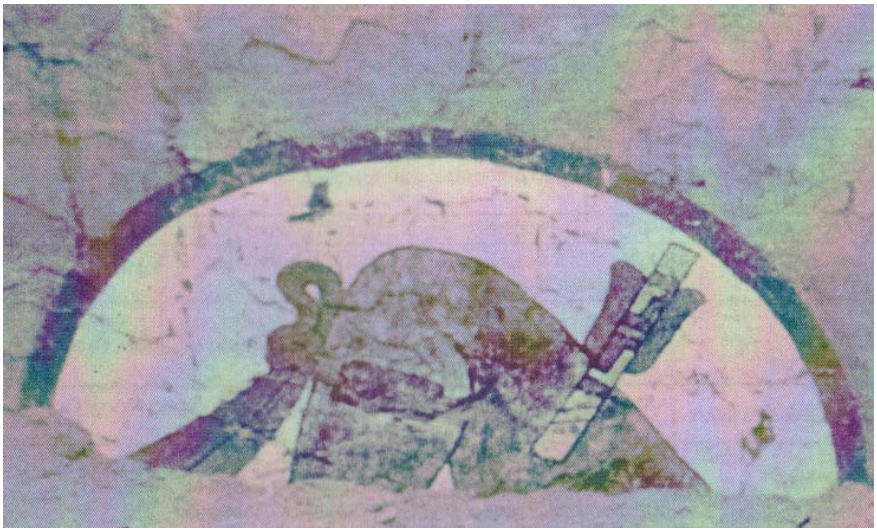


Figure 24. Cacaxtla, Pozo 11-A mural (Moreno Juárez, Espinoza García, and Ortega Ortiz 2005: 55).



Figure 25. Storm God clay *almena* (roof ornament) of human figure with Storm God mask (author's photo).



Figure 26. Cacaxtla Red Temple murals (author's photo).

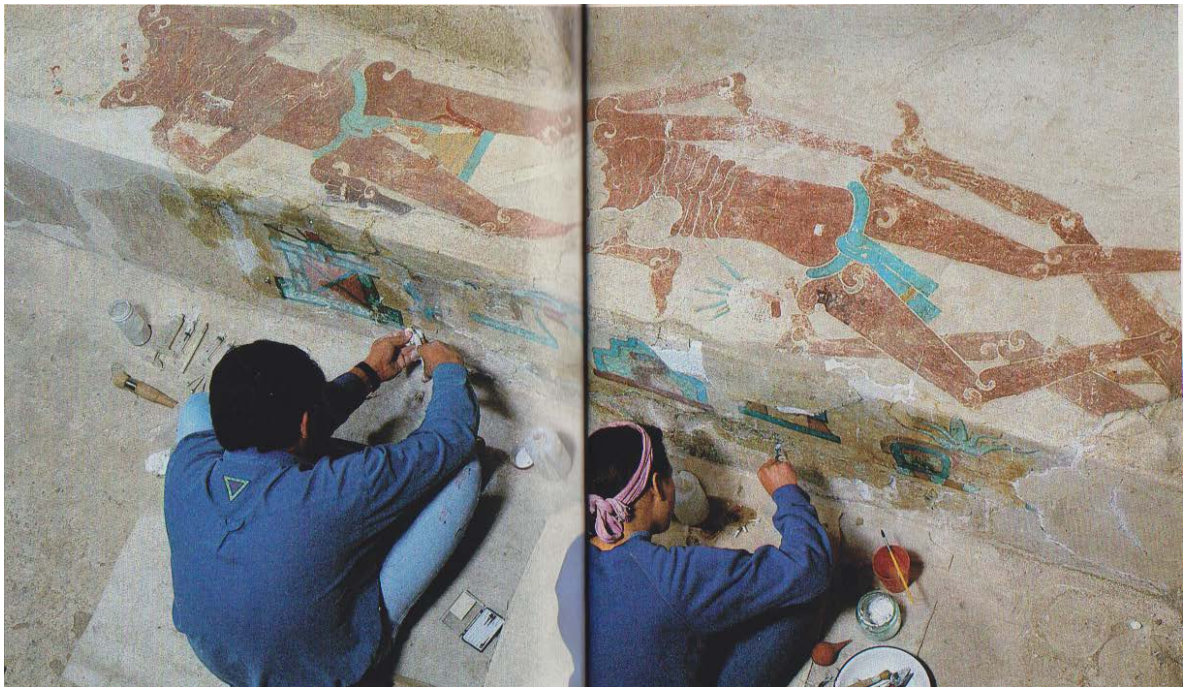


Figure 27. Cacaxtla Red Temple stairway prisoner murals and glyphs on rise (Stuart 1992:130-131).

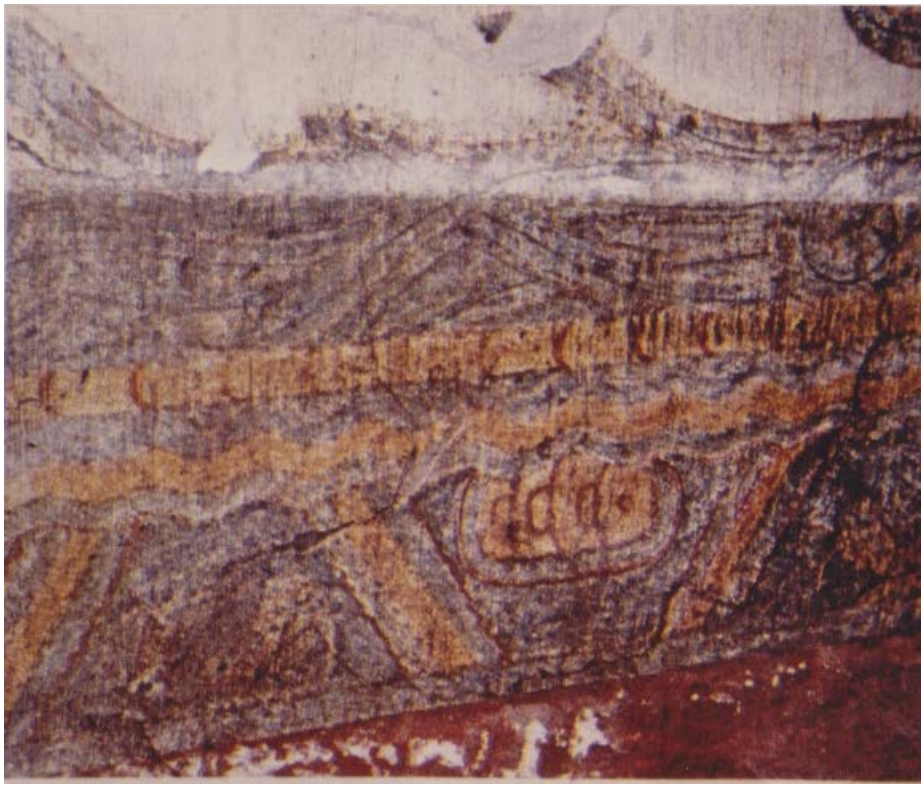


Figure 28. Cacaxtla mural, watery border with chitons and feathered serpent from beneath Main Plaza (*Excelsior*).

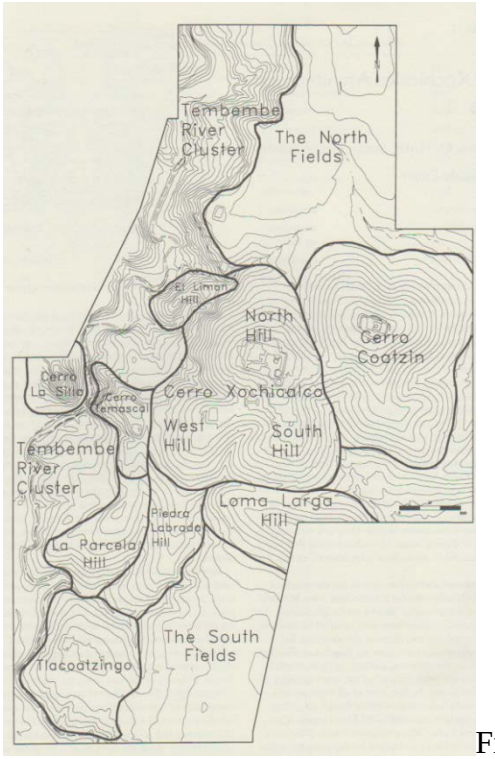


Figure 29. Major topographic divisions at Xochicalco (Hirth, Hirth and Pauer 2000, 2: 198, fig. 12.1).

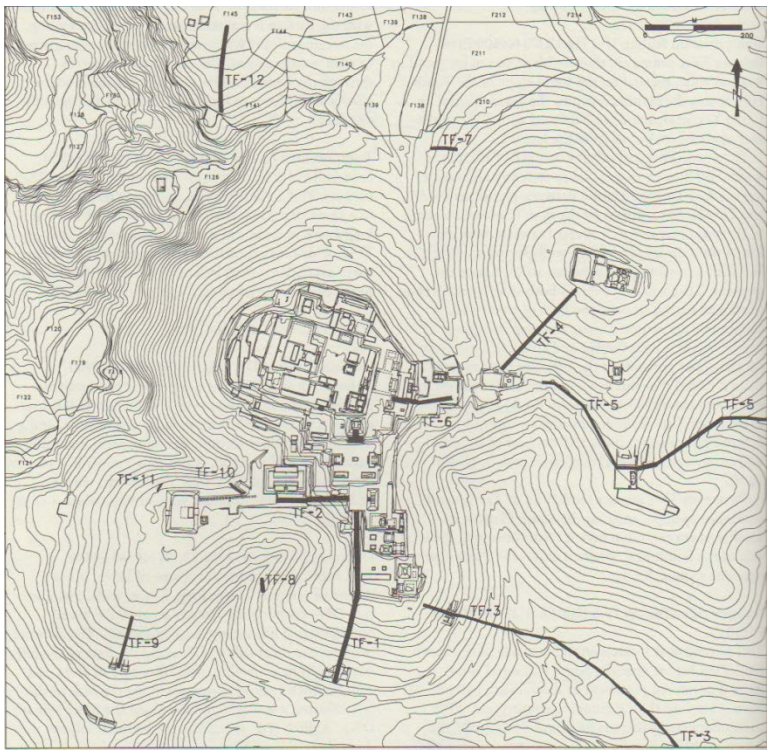


Figure 30. Dark lines mark paved roads linking areas within Xochicalco (Hirth, Hirth and Pauer 2000, 2: 236, fig. 12.17).

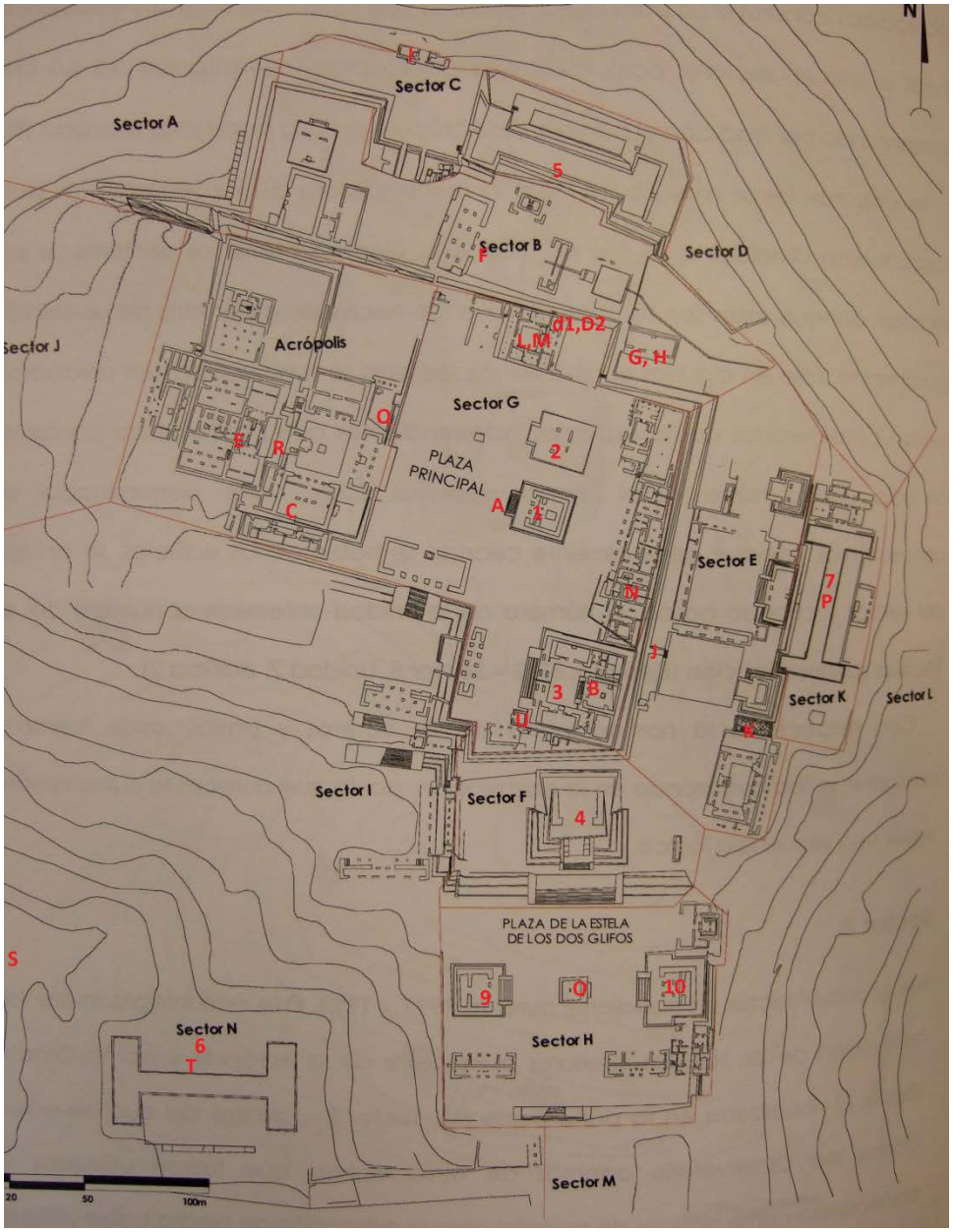


Figure 31. Map of Xochicalco core with major buildings and find spots (adaptation based on González Crespo, Garza Tarazona, Alvarado León et al. 1993-1994: 6, fig. 5).
1: Feathered Serpent Pyramid/2: Twin Pyramid/3: Chamber of the Offerings/4:Building E or Great Pyramid/5: North Ballcourt/6:South Ballcourt/7: East Ballcourt/8. Structure A/9: Structure C/Structure 10: Structure D..
A: Feathered Serpent Pyramid/B: Stelae, Old Fire God/C: Skeletal jaguar/D: Pair of skeletal jaguars/E: El Marcador/F: Half-moon relief/G: Head with hands on face/H: Insect head/I: Standing male with serpent/J: Seated female/K: Ramp of the Animals/L: 4 rattlesnake tail sections/M: Shell/N: Head wearing serpent helmet/O: Two-Glyph Stela/P: Carved ballcourt ring, 3-Rabbit Stone/Q: Macaw roof ornament fragment/R: Starfish/S: Malinche sculpture/T: Macaw Head/U: Four-Glyph Stelae.

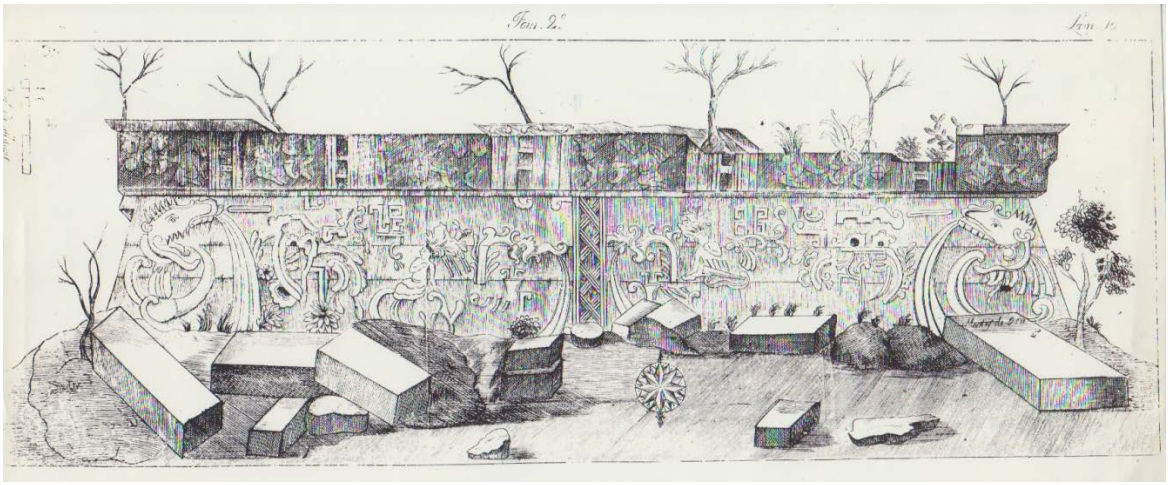


Figure 32. View of the Feathered Serpent Pyramid, Xochicalco (Alzate y Ramírez 1791).

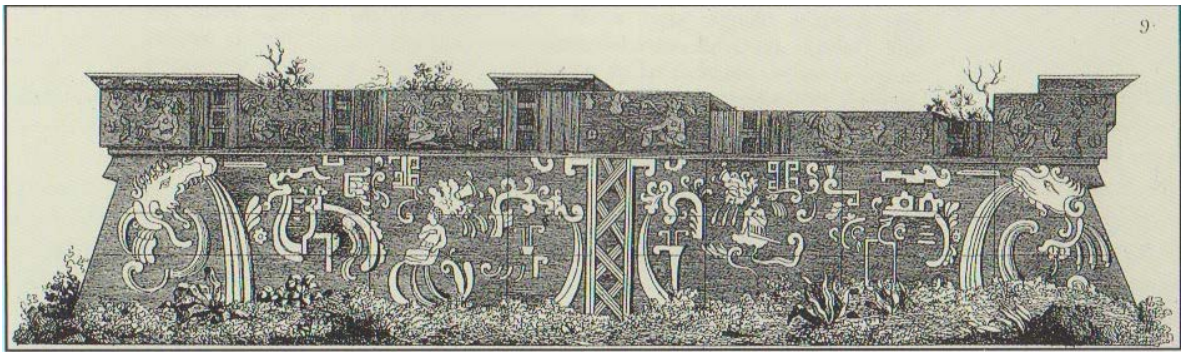


Figure 33. Feathered Serpent Pyramid, Xochicalco, according to Guillaume Dupaix (De la Fuente et al. 1995: 301).

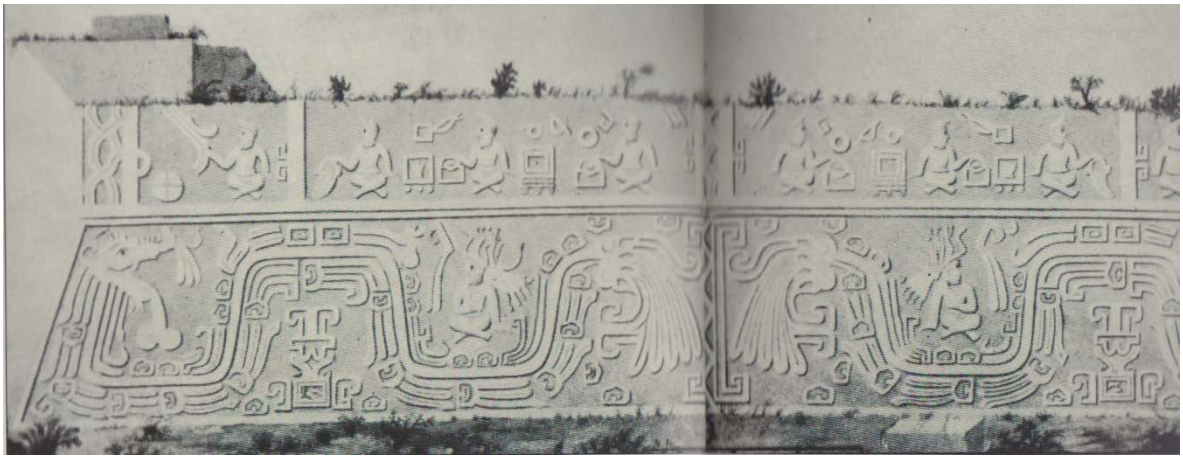


Figure 34. Feathered Serpent Pyramid, Xochicalco, according to Alexander von Humboldt (De la Fuente et al. 1995: 58-59).

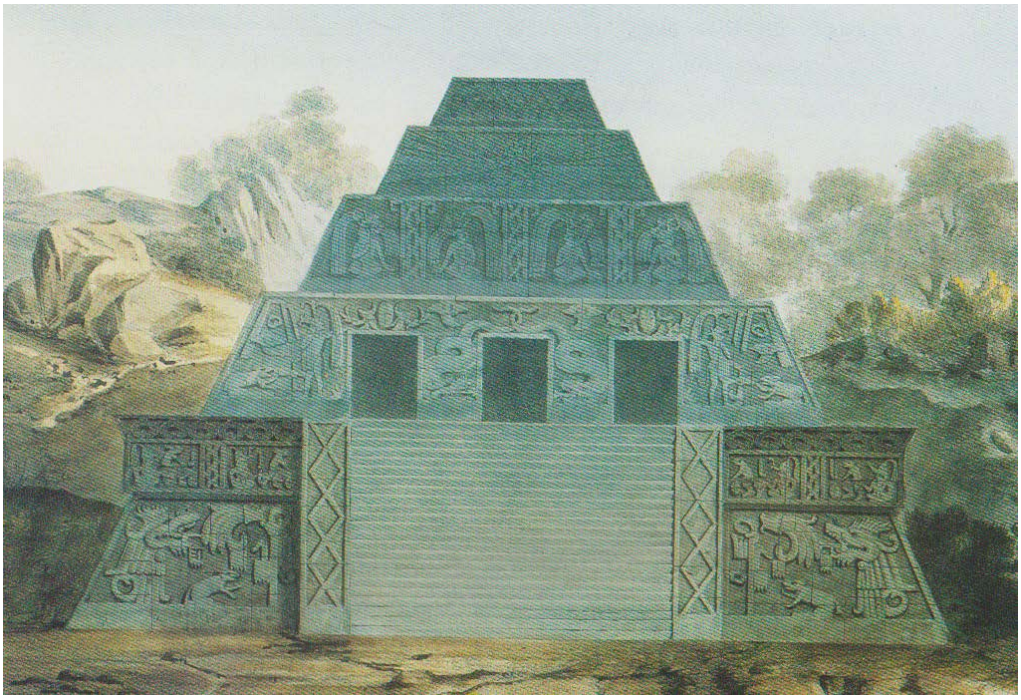


Figure 35. Reconstruction of Feathered Serpent Pypramid, Xochicalco, according to Karl Nebel (De la Fuente et al. 1995: 64).



Figure 36. Feathered Serpent Pyramid, Xochicalco, according to Jean-Fréderic Waldeck (Pasztory 2010: pl. 55).

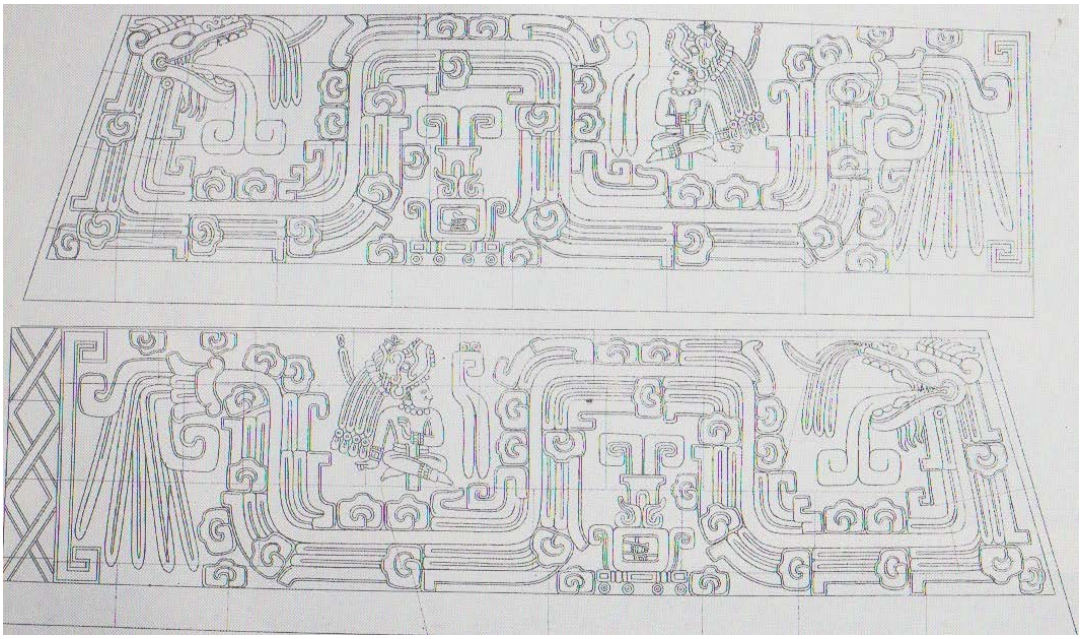


Figure 37. Drawing of Feathered Serpent Pyramid, Xochicalco, published by Antonio Peñafiel 1890 (López Luján 1995: 58, pl. 38).

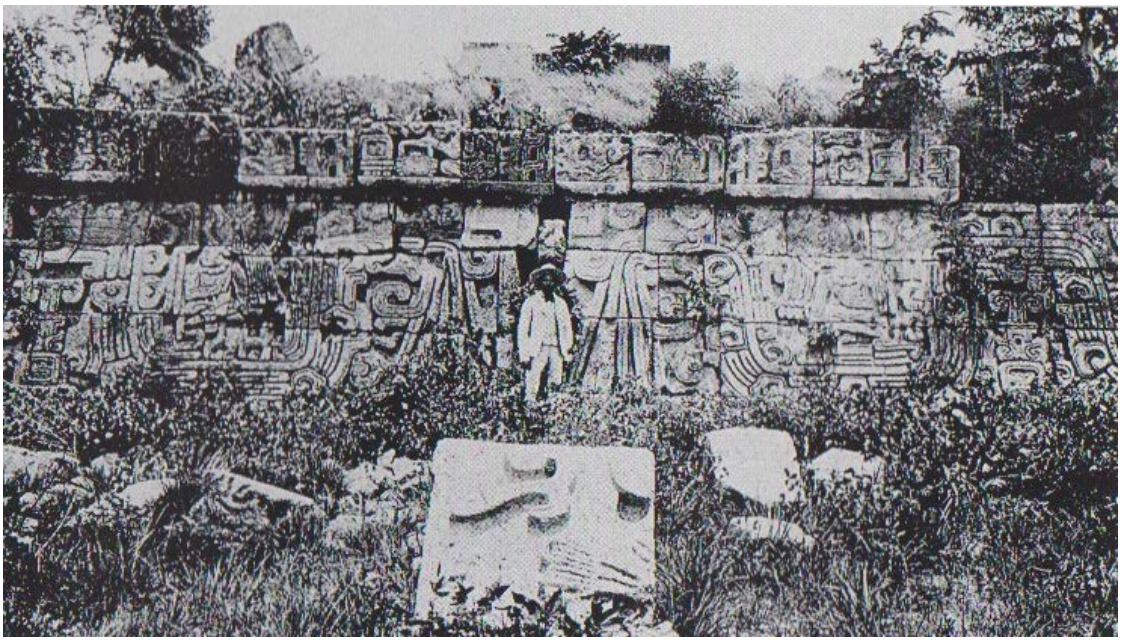


Figure 38. Photo of the Feathered Serpent Pyramid, Xochicalco, published by Antonio Peñafiel 1890 (López Luján 1995: 26, pl. 12).



Figure 39. La Malinche sculpture, Xochicalco (author's photo).

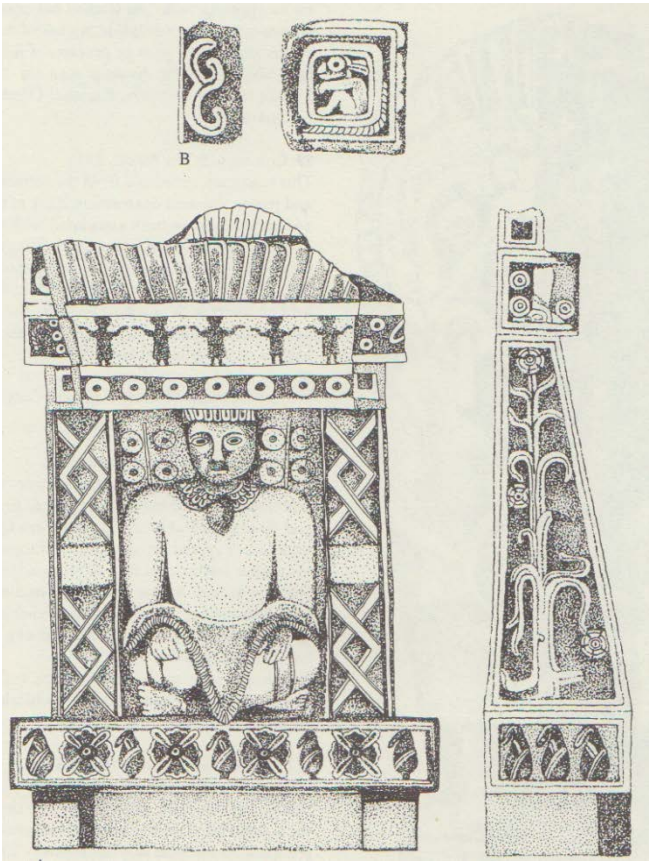


Figure 40. Drawings of La Malinche sculpture (Smith 2000, 2: 35, fig. 3.15).

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Figure 41. Xochicalco Stelae 1, 2 and 3 (author's photos).

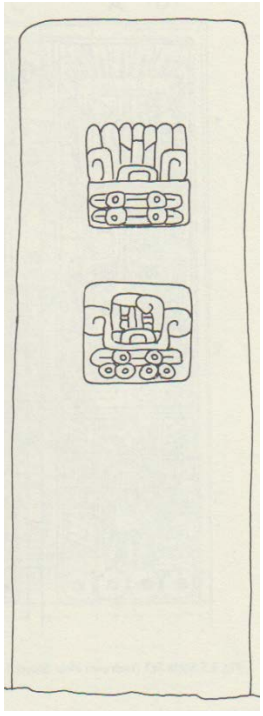


Figure 42. Xochicalco Two-Glyph Stela (Smith 2000, 2: 26, fig. 3.8).



Figure 43. Xochicalco New Fire Stone (author's photo).



Figure 44. Xochicalco, Three-Rabbit Stone (author's photo).

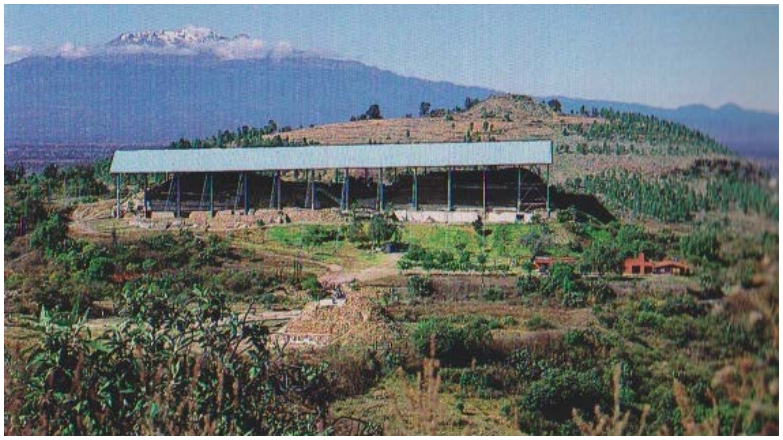


Figure 45. Cacaxtla under mammoth roof with the hill of Xochitécatl beyond it (Enrico Ferorelli in Stuart 1992: 122).



Figure 46. Aerial view of the core of Xochicalco (De la Fuente et al. 1995: 200-201).



Figure 47. View of Great Platform under roof with Building B in background and Red Temple in foreground (Stuart 1995: 122-123).



Figure 48: View of Mound B of Los Cerritos eastward from Cacaxtla Hill (author's photo).



Figure 49. View of summit of Gran Basamento, Cacaxtla (author's photo).

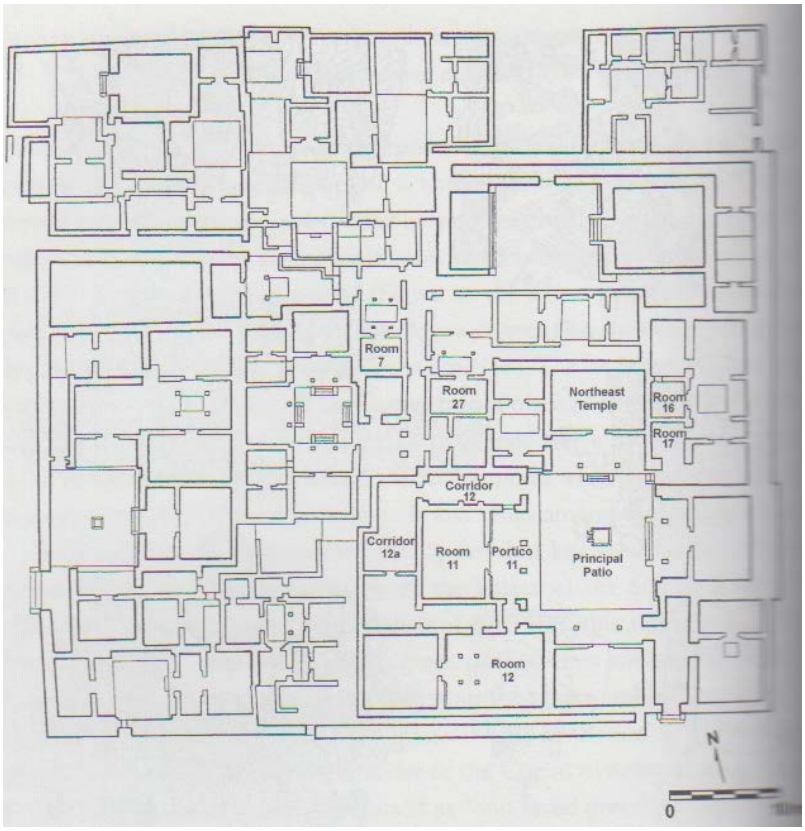


Figure 50. Tetitla apartment compound, Teotihuacan (Taube 2003: 280, fig. 11.4).

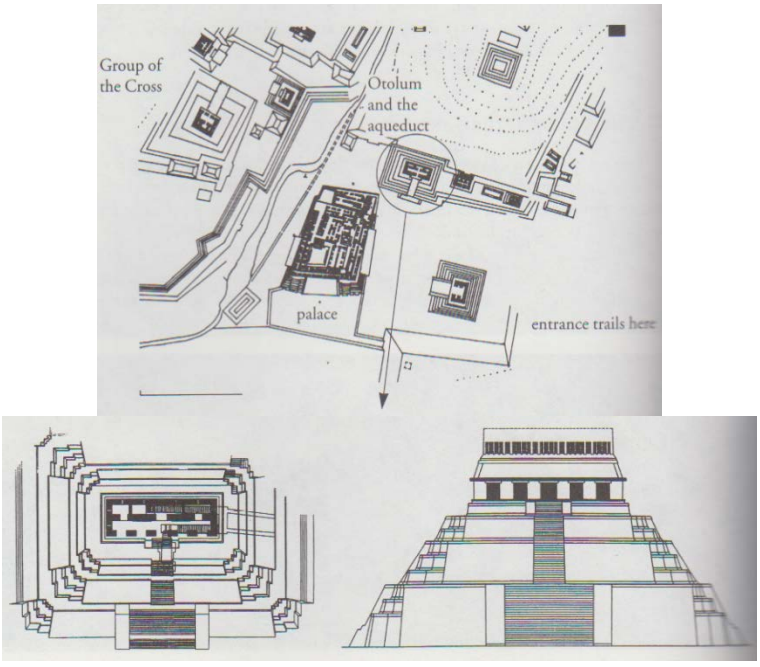


Figure 51. Plan of central area of Palenque with plan and elevation of the Temple of the Inscriptions (Schele and Mathews 1998: 98, fig. 3.4).



Figure 52. Las Conejeras, Cacaxtla (author's photo).

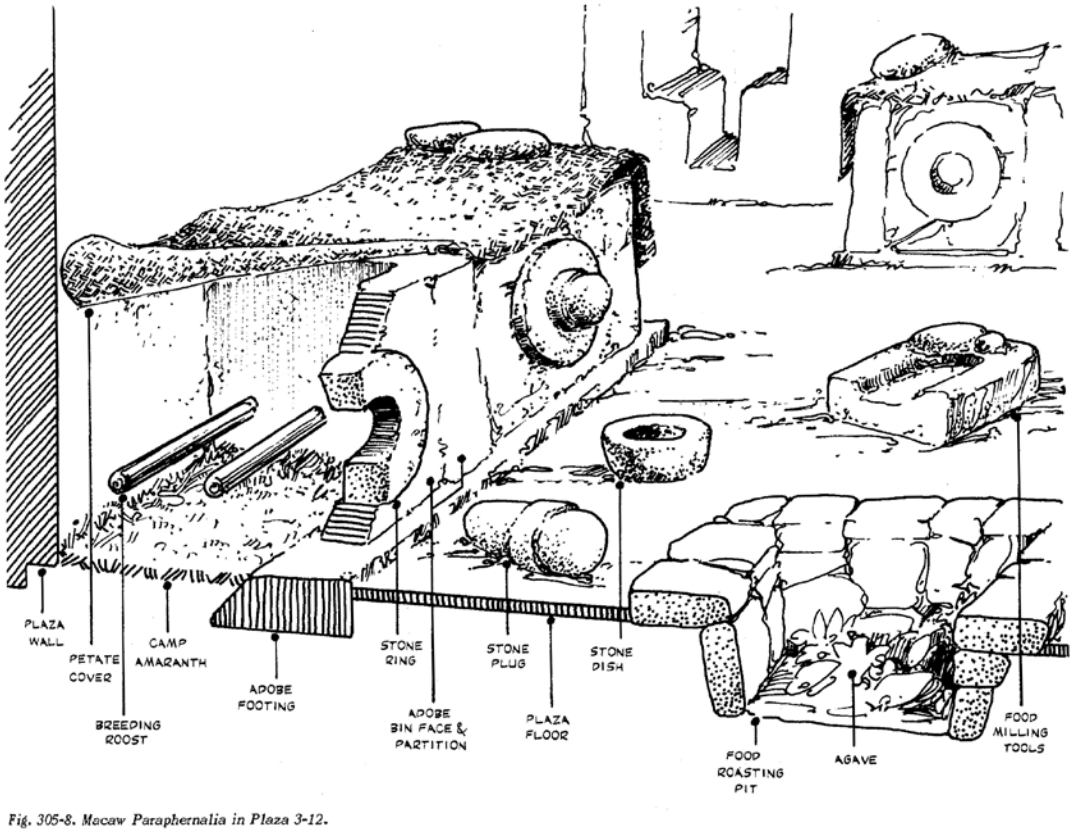


Figure 53. Macaw pens, Paquimé (DiPeso et al. 1974: 269).



Figure 54. Cacaxtla, early version of talud-tablero (Sánchez Real 1987: n.p.).

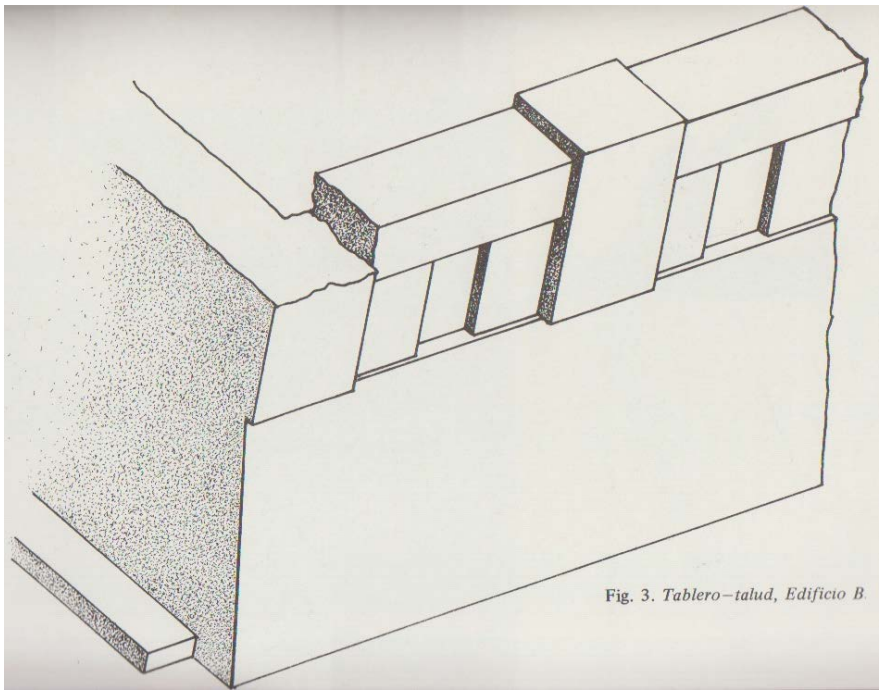
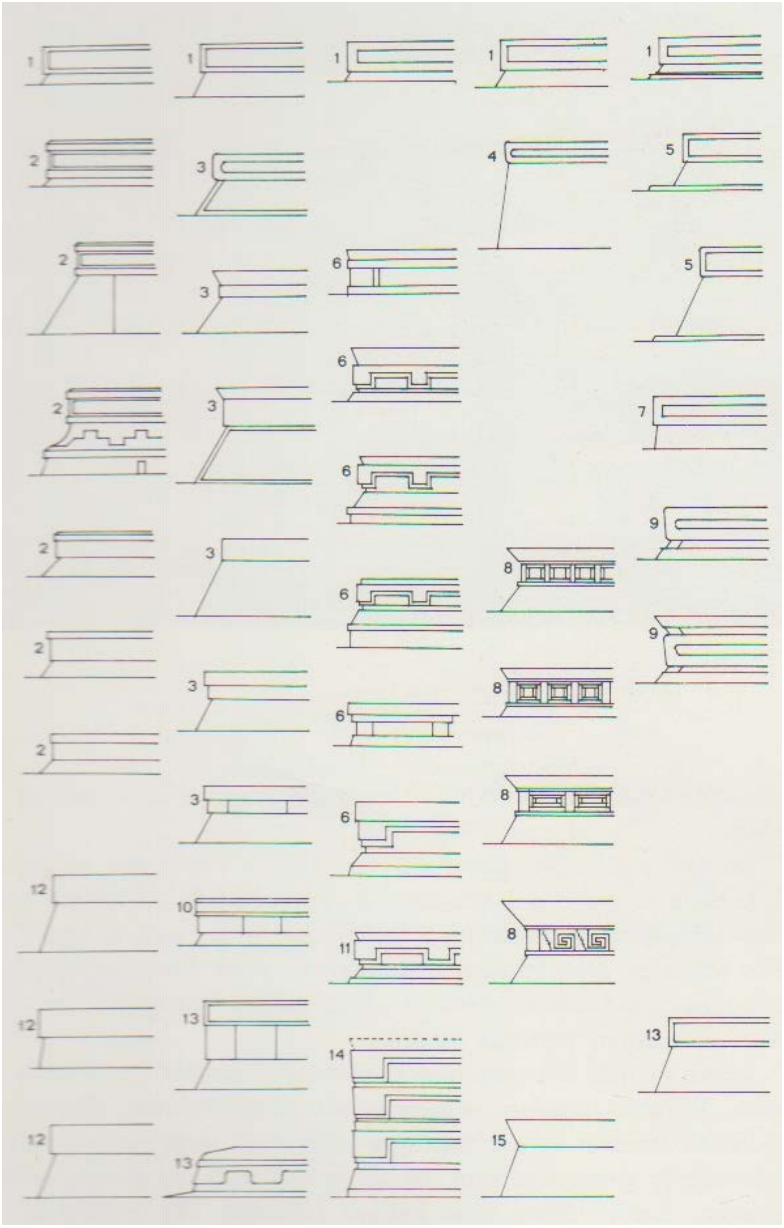


Figure 55. Cacaxtla Building B, later version of *talud-tablero* with taller proportions and overlapping panels in *tablero* (López de Molina and Molina Feal 1980: 11, fg. 3).



61. *Esquema de diversas variantes de «tableros» en Mesoamérica.*
1. *Teotihuacan* / 2. *Cholula* / 3. *Xochicalco* / 4. *El Ixtépete* / 5. *Kaminaljuyú* / 6. *Monte Albán* / 7. *Yaxhá* / 8. *El Tajín* / 9. *Tikal* / 10. *Tula* / 11. *Lambityeco* / 12. *Calixtlahuaca* / 13. *Chichén Itzá* / 14. *Mitla* / 15. *Misantla.*

Figure 56. *Talud-tablero* variants (Gendrop 1975: 60).

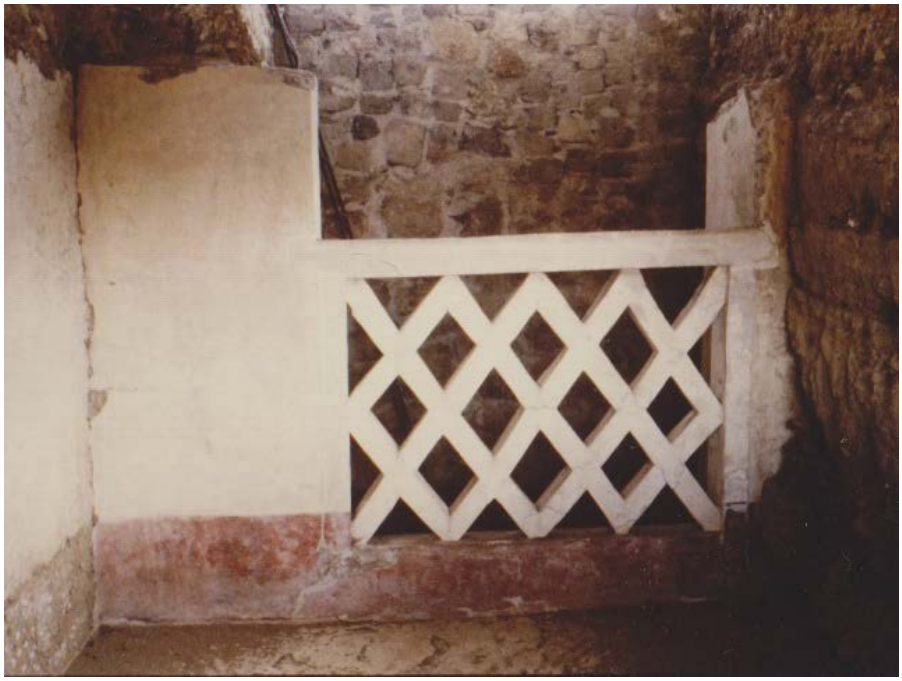


Figure 57 (left). Cacaxtla, Celosía latticework architectural ornament (author's photo).

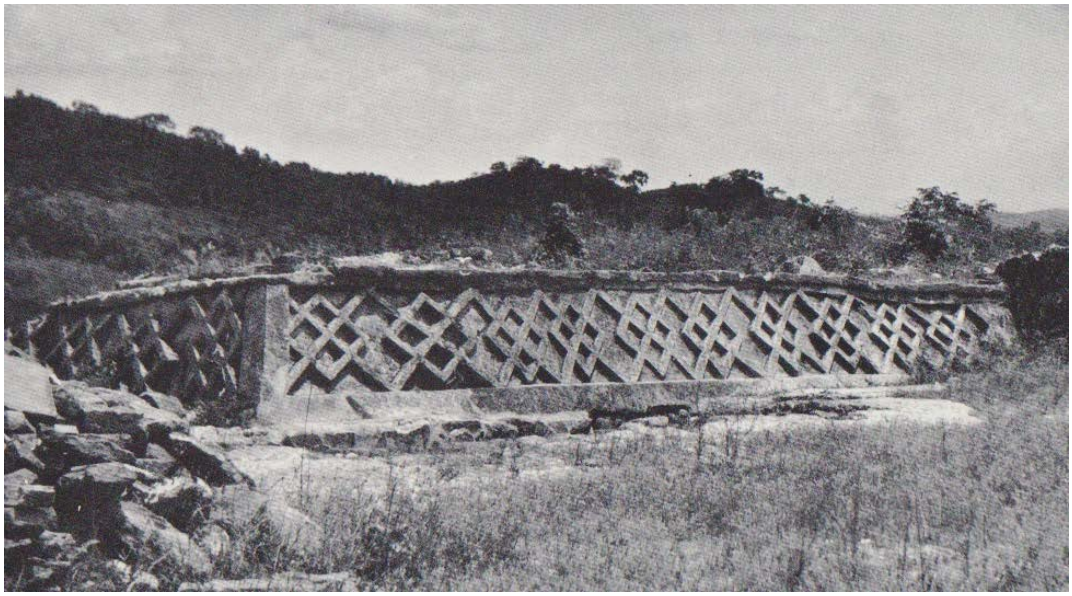


Figure 58 (right). Tajín Chico, platform Building D (Gendrop 1975: 63).



Figure 59a. Cacaxtla Building E architectural ornamentation with frame composed of band of *chalchihuitl* disks (author's photo).



Figure 59b. Cacaxtla architectural *clavo* and terracotta *chalchihuitl* decoration (http://cookjmex.blogspot.mx/search/label/Cacaxtla%20and%20Xochit%C3%A9catl).



Figure 60. One of the “Once Señores” (Claudia Brittenham photo).



Figure 61. Teotihuacan clay bird almena (roof ornament) (Berrin and Pasztory 1993: 208)

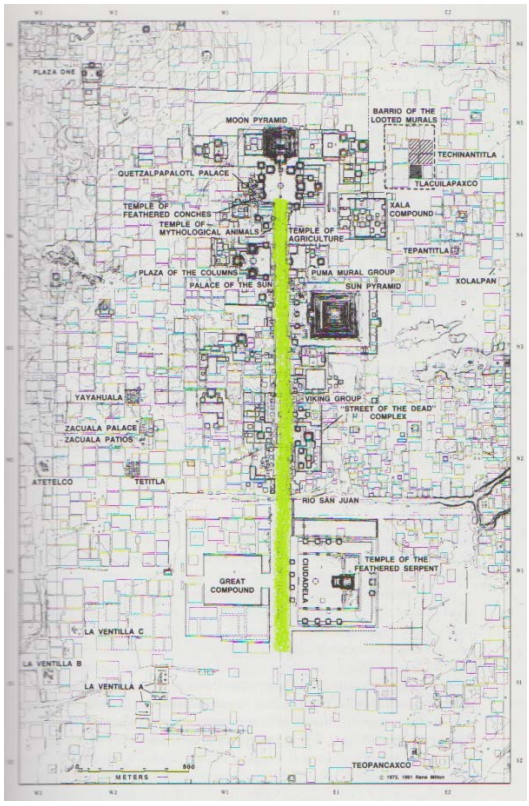


Figure 62. Plan of Teotihuacan with Street of the Dead in green (Berrin and Pasztory 1993: 19.



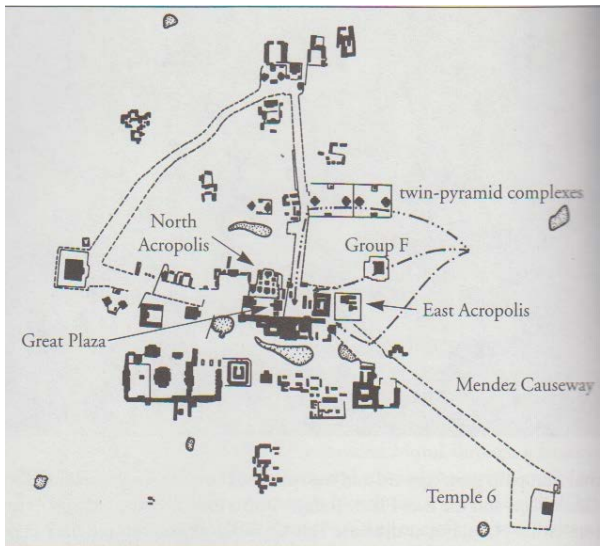


Figure 63 (left). Xochicalco plan with paved roads marked in black (Hirth, Hirth and Pauer 2000, 2: 236, fig. 12.17).

Figure 64 (right). Map of center of Tikal (Schele and Mathews 1998:68, fig. 2.5).

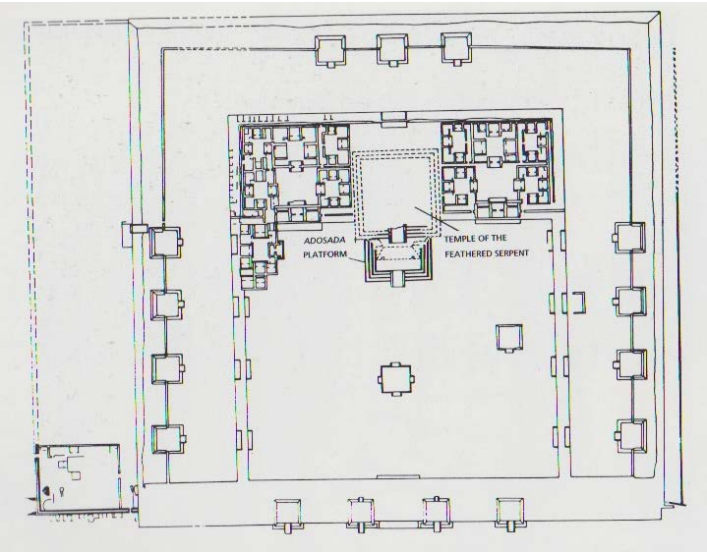


Figure 65. Plan of Ciudadela with Feathered Serpent Temple and elite residential complex in back (Berrin and Pasztory 1993: 102, fig. 1).

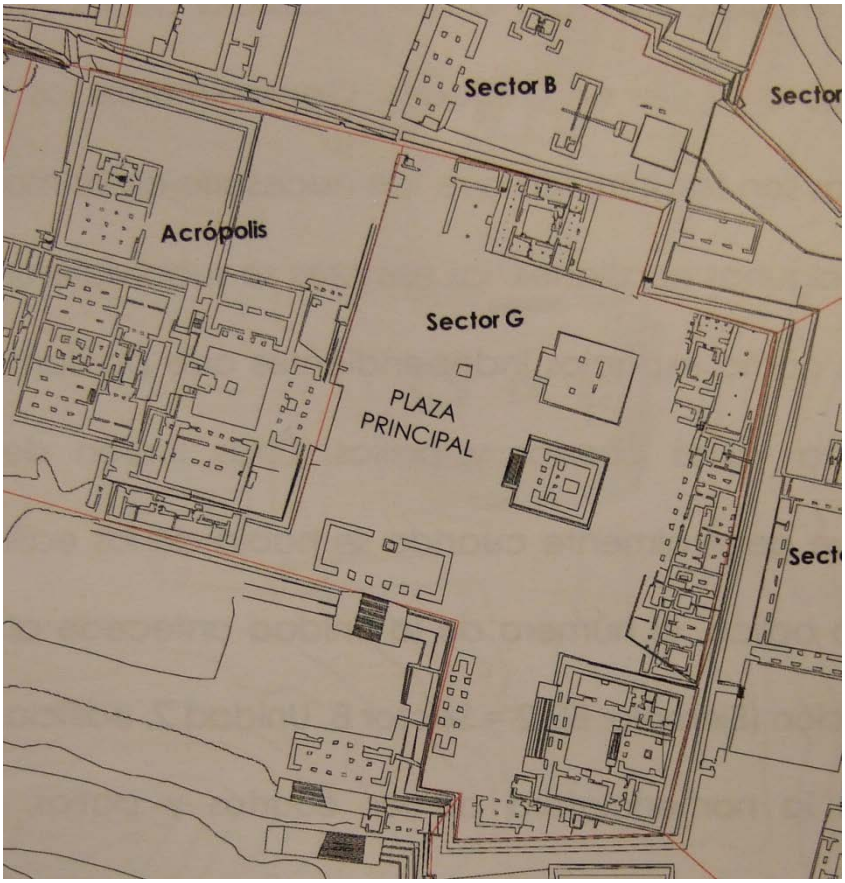


Figure 66. Map of central section of Xochicalco with main plaza and Acropolis (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 6, fig. 5).

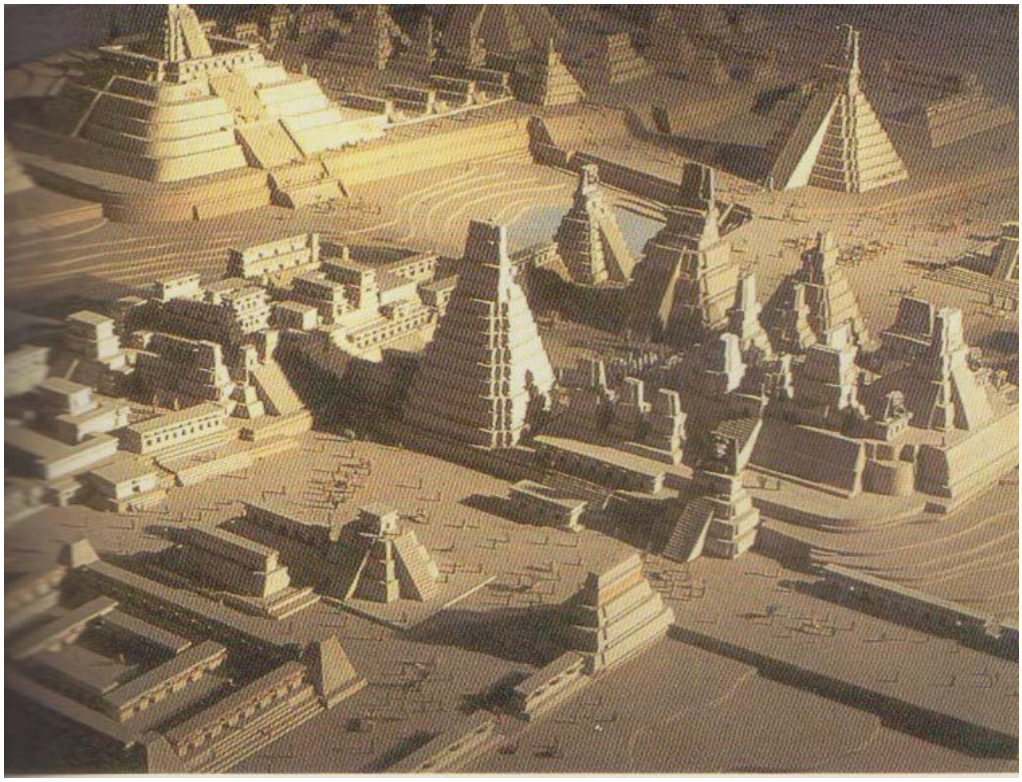


Figure 67. Architectural model of the Central Acropolis, Tikal, Museo Nacional de Arqueología, Guatemala City (Valverde et al. 2010: 207).

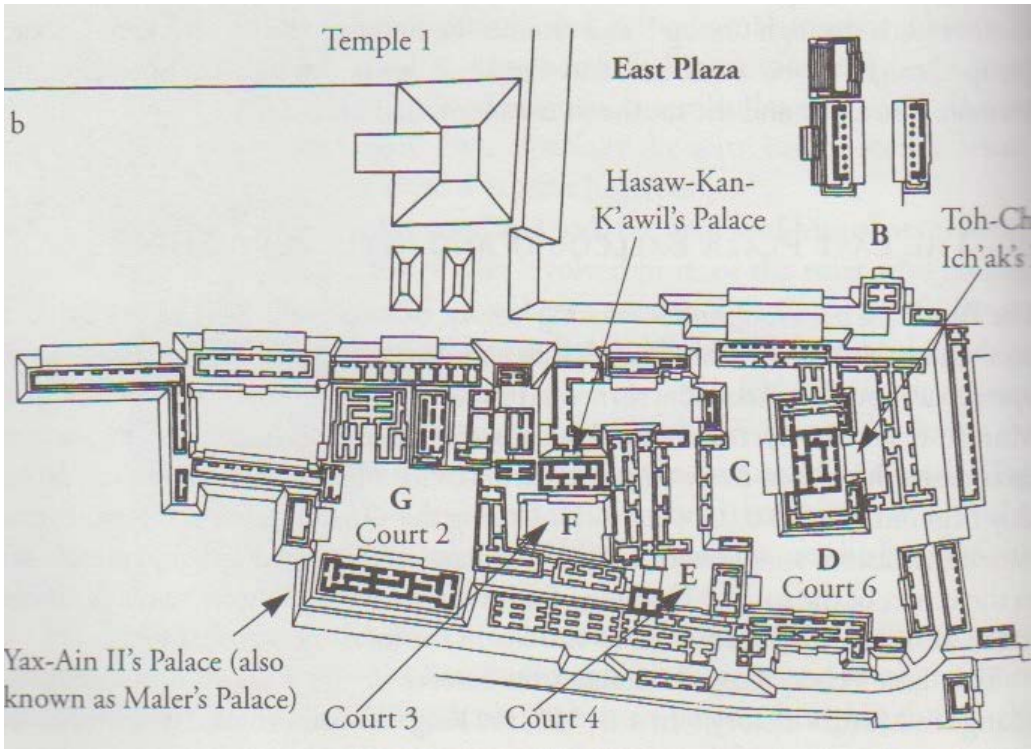


Figure 68. Map of Central Acropolis, Tikal (Schele and Mathews 1998:68, fig. 2.5).



Figure 69. View of Xochicalco South Ballcourt (also called West Ballcourt and X10-I) (De la Fuente et al. 1995: 208).

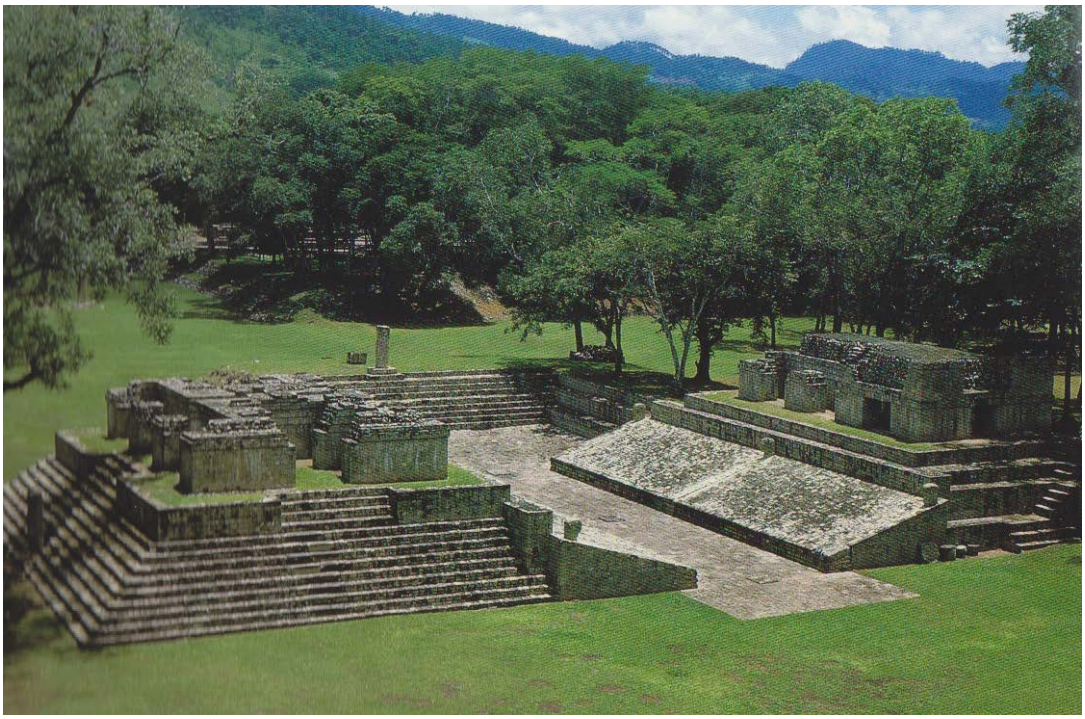


Figure 70. View of Copán Ballcourt A-III (Whittington 2001: 104, fig. 116).

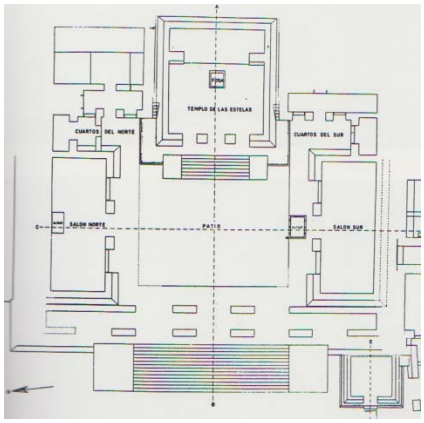
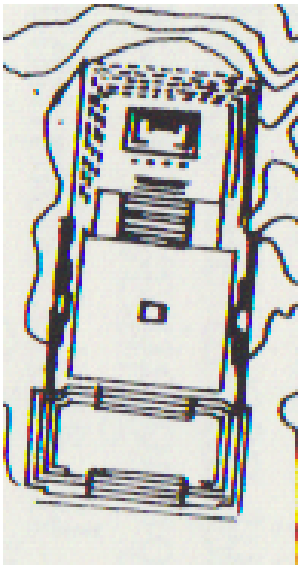




Figure 71a. Plan of Xochicalco Structure A (Temple of the Stelae) (López Luján 1995: 65).
Figure 71b. View of Xochicalco Structure A (Temple of the Stelae) (author's photo).



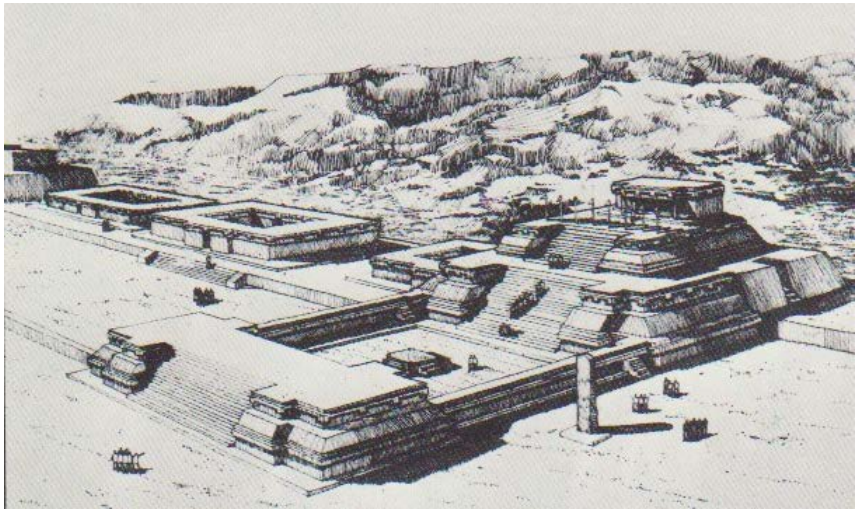


Figure 72. Plan of Monte Albán Group M (Miller 1995: 39).
Figure 73. Reconstruction of Group M (Gendrop and Heyden 1975: 85).



Figure 74. Characteristic *talud-tablero* building profile, Xochicalco (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 38, fig. 34).



Figure 75. Interplay of overlapping panels in *tablero* at Xochicalco (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 38, fig. 37).

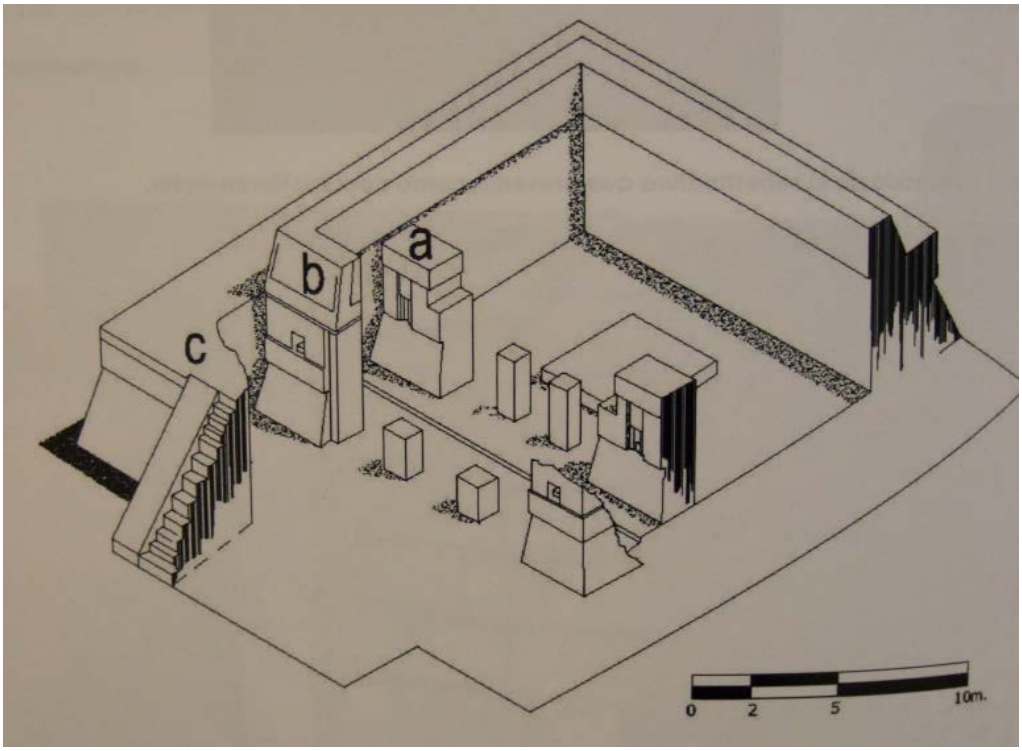


Figure 76. Earlier levels of Feathered Serpent Pyramid (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 166: fig. 219).

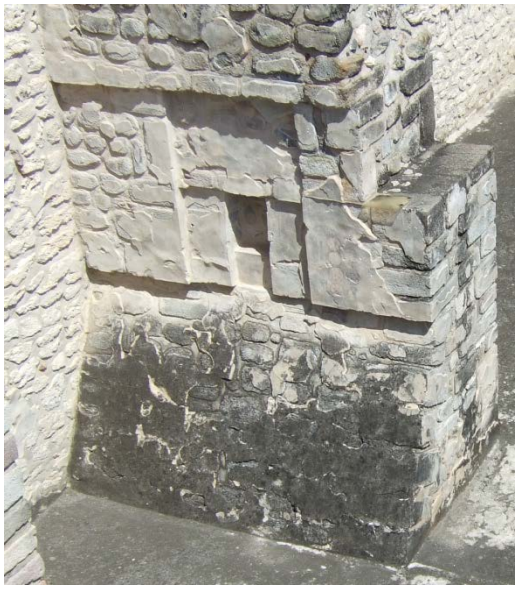




Figure 77 (left). Niche of overlapping panels of *talud-tablero* from earliest stage of Feathered Serpent Pyramid, Xochicalco (author's photo).

Figure 78 (right). Detail of niche above *talud-tablero* from second stage of Feathered Serpent Pyramid, Xochicalco (author's photo).



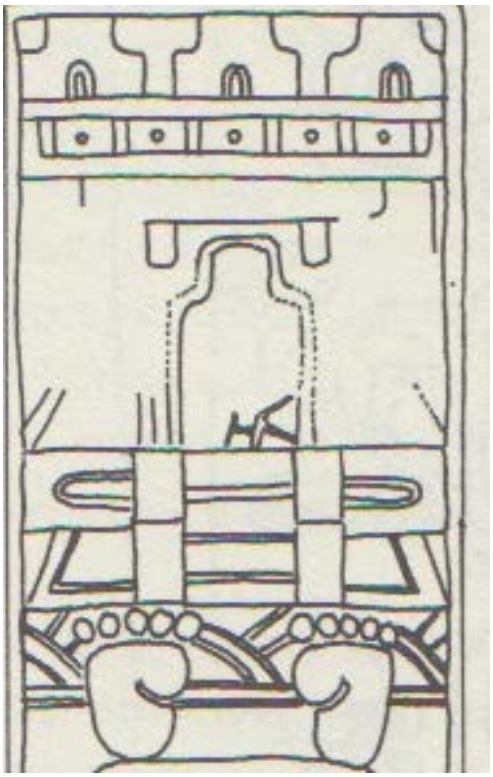


Figure 79 (left). Xochicalco bird *almena* (roof ornament) (author's photo).

Figure 80 (right). Detail, temple with stepped *almenas*, Xochicalco Stela 3 (Smith and Hirth, 2000, 2: 25).

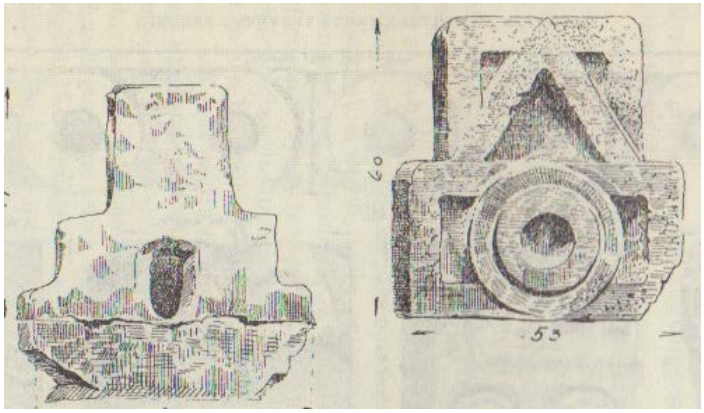




Figure 81. Teotihuacan *almenas* (Gamio 1979, 2: 122ff, lám. 21).

Figure 82. Maya-style *almena* found near Sun Pyramid, Teotihuacan (Taube 2003: 274, fig. 11.1a

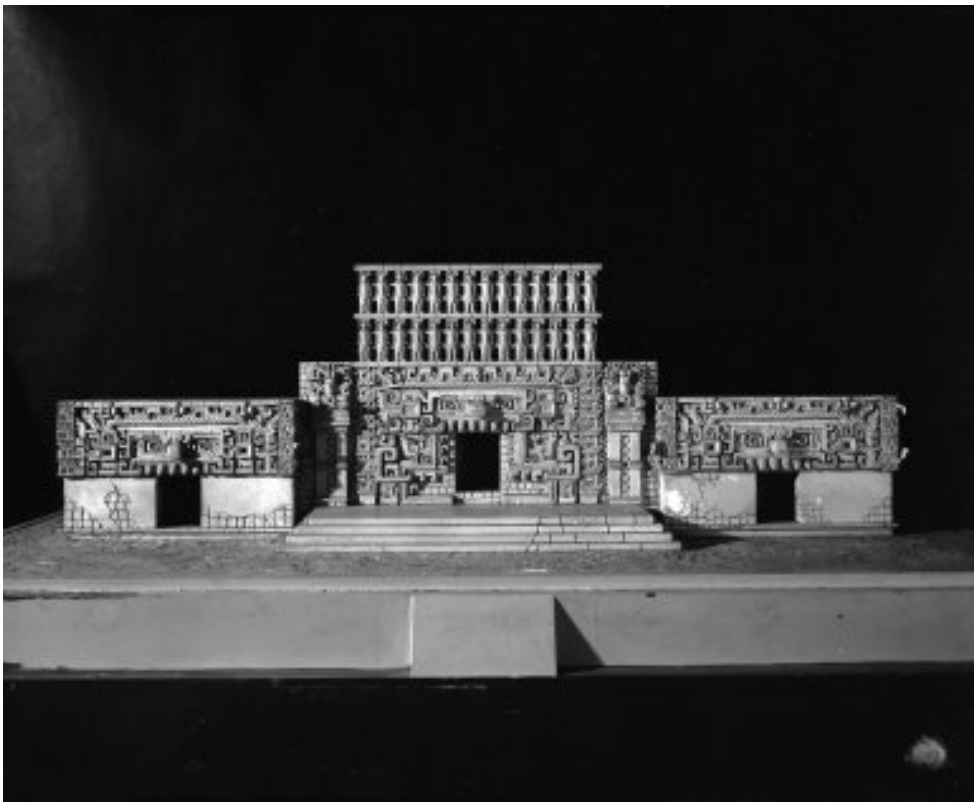


Figure 83. Architectural model of Hochob main building with human figures on the upper frieze, The Brooklyn Museum (website: https://www.brooklynmuseum.org/opencollection/exhibition_printable/2700/image/9106).

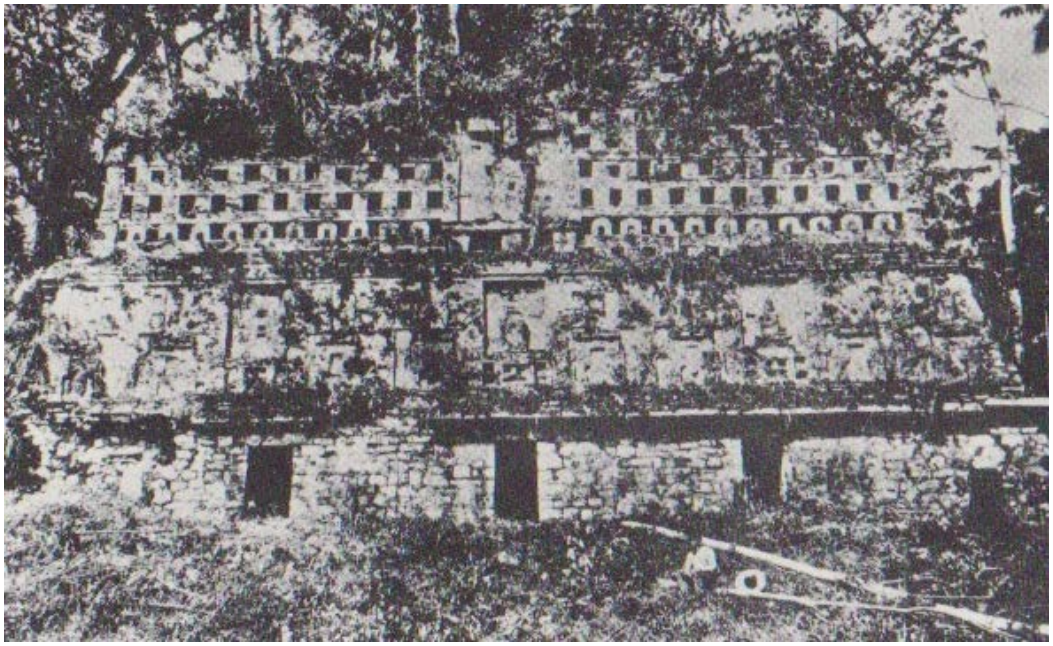


Figure 84. Yaxchilán, Building 33 with traces of human figures on façade (Gendrop and Heyden 1975: 130).

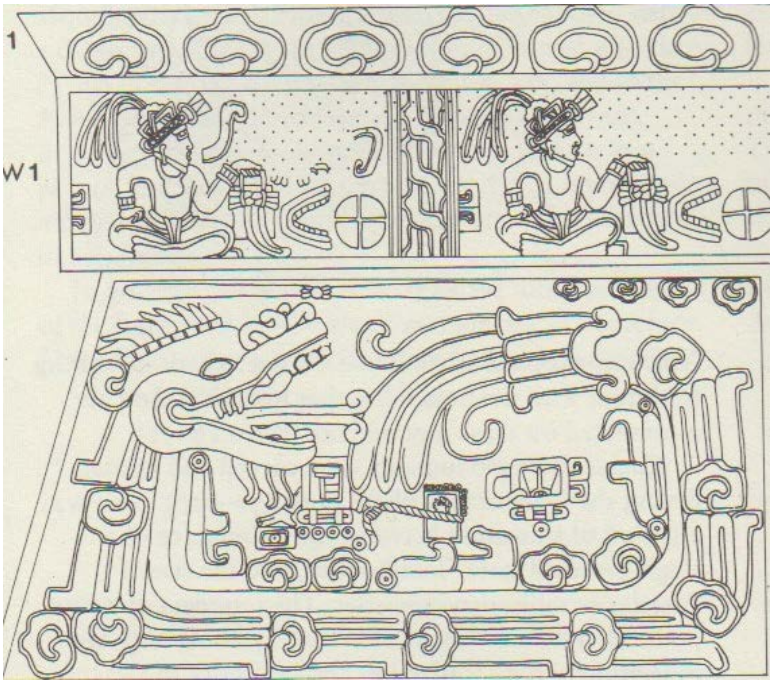


Figure 85. Drawing of the lower platform of the west façade of the Xochicalco Feathered Serpent Pyramid (Smith 2000, 2: 58, fig. 4.1).

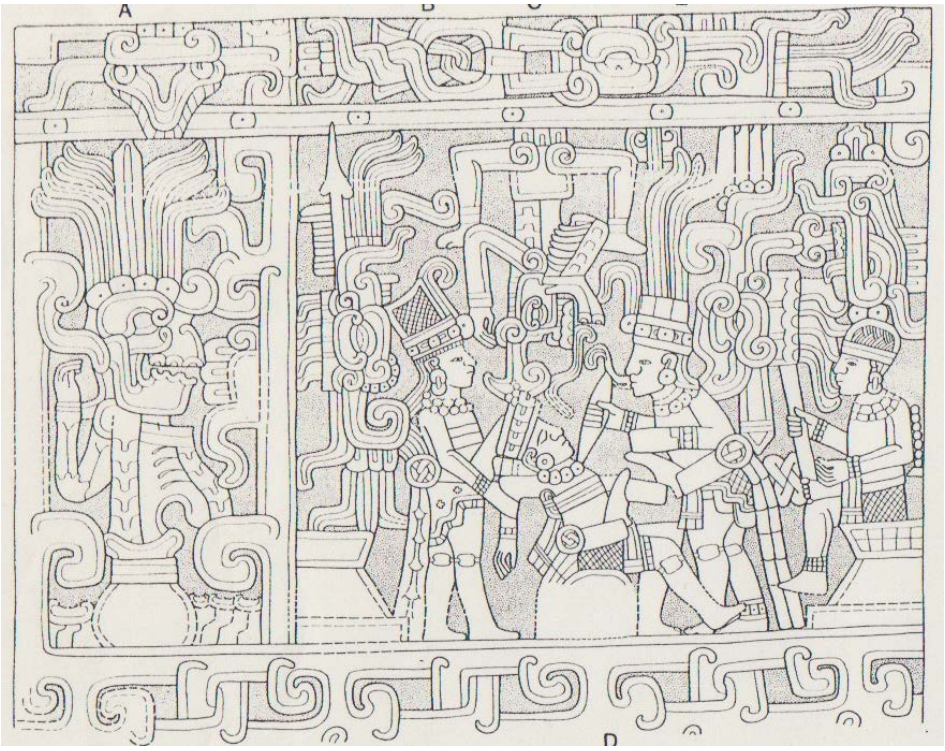


Figure 86. Interlaced volutes with double outline in borders from El Tajín South Ballcourt Panel 4 (Kampen 1972: fig. 23).

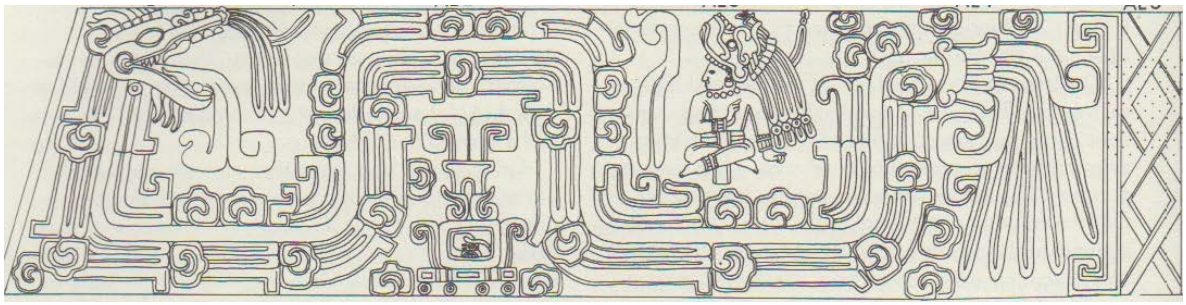


Figure 87. Drawing of southeast lower *talud* of the Xochicalco Feathered Serpent Pyramid (Smith 2000, 2: 62, fig. 4.2).

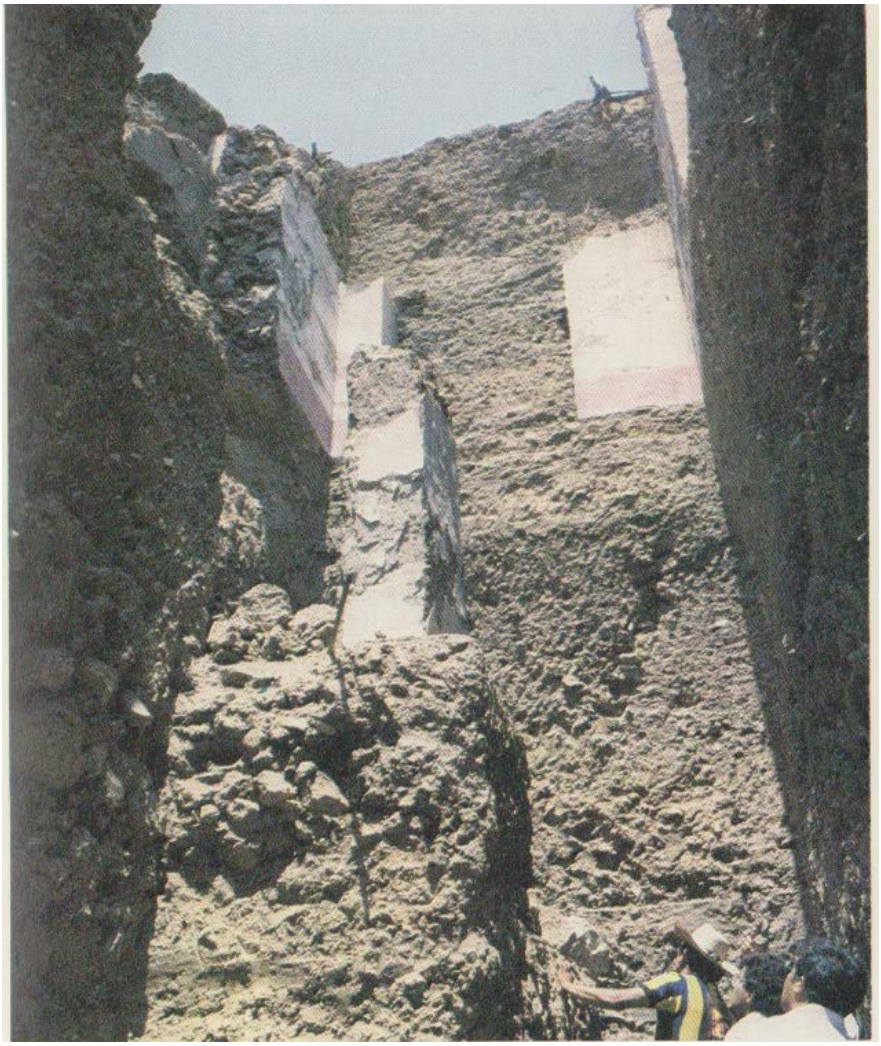


Figure 88. Pit excavated for construction of roof to cover Cacaxtla showing more than four stucco floors marking different construction phases (Sánchez del Real 1987: np).



Figure 89a. Cacaxtla Building E bas-relief on pillar (author's photo).



Figure 89b. El Peru Stela 34 (Bruhns 1988: 125, fig. 5).





Figure 90a. Cacaxtla Building A clay relief superimposed on top of mural painting (Sánchez del Real 1987: np).

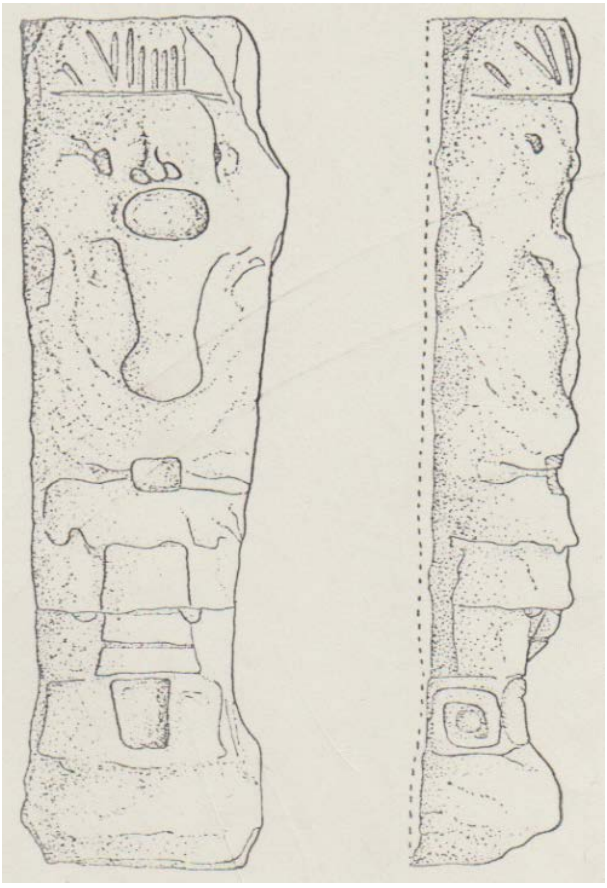
Figure 90b. Drawing of Cacaxtla Building A superimposed relief (López de Molina and Molina Feal 1980: 24, fig. 14).



Figure 91. Cacaxtla polychrome clay relief fragments depicting flowers, corn, shells, serpents (author's photo).



Figure 92. Polychrome unfired clay male figure from Cacaxtla found during Salvamento excavations (author's photo).



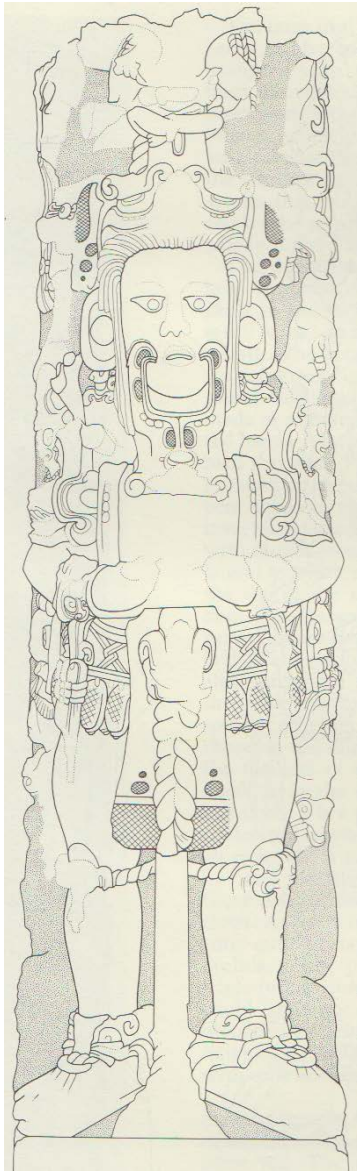


Figure 93 (left). Drawing of Cacaxtla monolith 2.50 m in height (Abascal 1973: fig. 3).

Figure 94 (right). Drawing of Copán Stela F (Baudez 1994: 49, fig. 17).





Figure 95 (left). Bat from Maya cylindrical vase (Robicsek and Hales 1981: 33, Vessel 53).
Figure 96 (right). Killer Bat from Copán Structure 10L-20 (Fash 1991, 131, fig. 82).





Figure 97. Seibal Stela 13 (Greene, Rands, and Graham 1972: 237).
Figure 98. Xochicalco “El Creador” terracotta sculpture (author’s photo).




Figure 99a. Theater-type censer variant (Berrin and Pasztory 1993: 97, cat. no. 71).
Figure 99b. Jaguar-serpent on Teotihuacan cylindrical tripod (Kubler 1972: 20).



Figure 100a-d. Once Señores (Eleven Lords) (Claudia Brittenham photos).



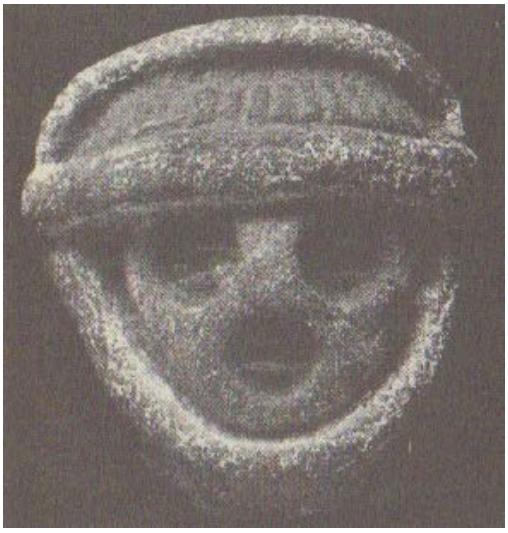


Figure 101. Figure with flayed mask, one of the Once Señores (Claudia Brittenham photo).
Figure 102. Teotihuacan terracotta head with Xipe mask (González González 2011: 35, fig. 14).



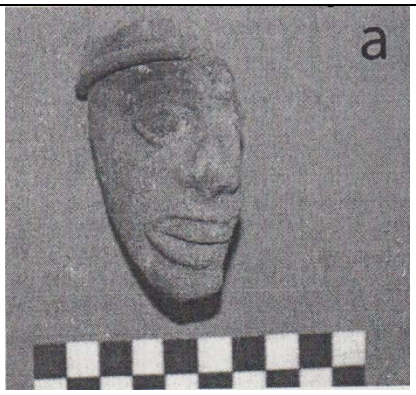




Figure 103a. Terracotta standing female figure, El Zapotal (Gutiérrez Solana and Hamilton 1977: lám. 6).
Figure 103b. Xipe Totec figurine, Xaltocan, Burial 2 (Morehart et al. 2012: 435, fig. 8a).
Figure 103c. Detail, fig. 100a, face of one of the Once Señores (Claudia Brittenham photo).



Figure 104. Cacaxtla glyph-like relief sculpture (author's photo).

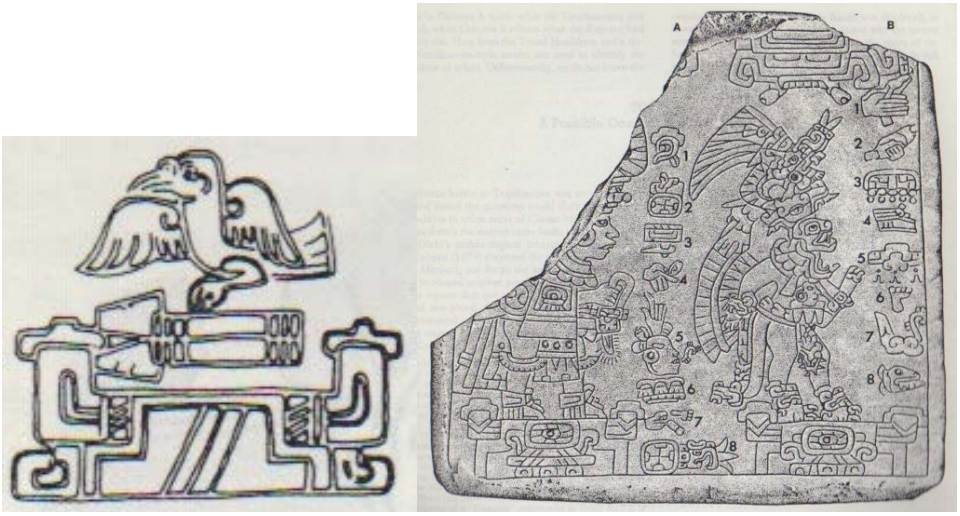


Figure 105. Zapotec place name for Tototepec (Marcus 1983a: 108, fig. 4.15).
Figure 106. Figures standing on mountain with personal names 8 Turquoise and 3 Turquoise, Bazan Slab, Monte Albán (Marcus 1983b: 180, fig. 6.7).



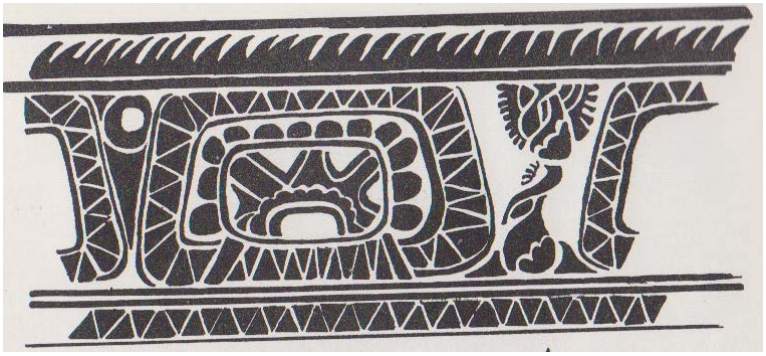


Figure 107. Teotihuacan censer with feathered arc frame (Berrin and Pasztory 1993: 218, fig. 69).

Figure 108. Drawing of half star in feather frame on a Teotihuacan tripod vessel (Von Winning 1987, 2, fig. 9m).

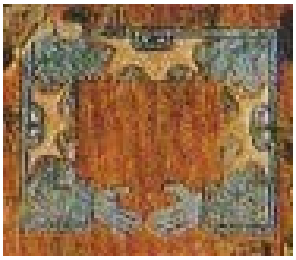




Figure 109. Cacaxtla Building A south portico detail of glyphic enclosure with half stars (postcard, photo by Jürgen Bavoni)

Figure 110. Detail of Xochicalco Stela 2 with half star sign (Smith 2000, 2: 24, fig. 3.4).

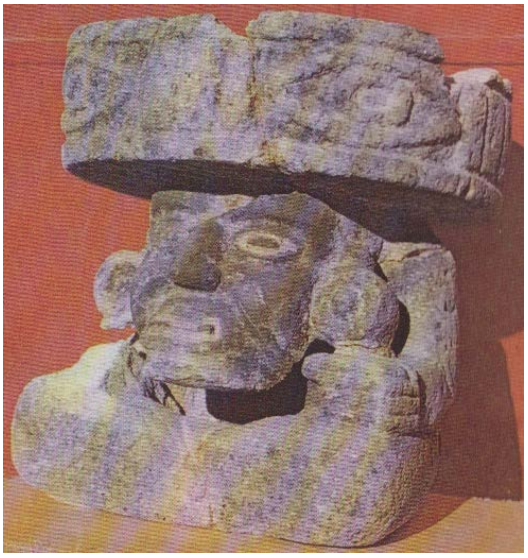




Figure 111. Teotihuacan-style Old Fire God brazier from Xochicalco (Sáenz 1986: 473).
Figure 112. Xochicalco Old Fire God sculpture (author's photo).

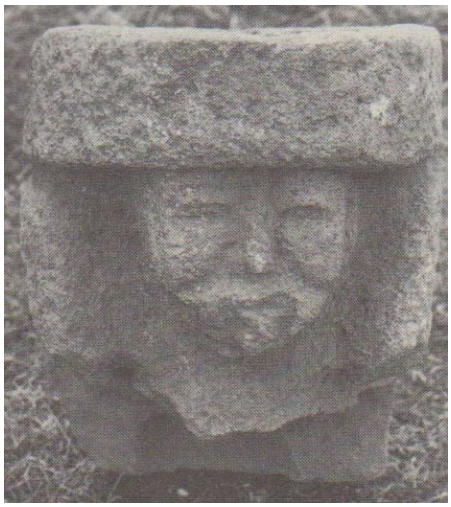




Figure 113. Xochicalco Old Fire God brazier (Smith and Hirth 2000, 2: 40, photo 3.12).
Figure 114. Teotihuacan Old Fire God brazier (Berrin and Pasztory 1993: 175, fig. 10).





Figure 115. Xochicalco, macaw head sculpture from ballcourt (author's photo).
Figure 116. Xochicalco, small macaw head sculptures (author's photo).







Figure 117. Military macaw (*Ara militaris*) with head markings near beak (Peterson and Chalif 1989: lám. 32).
Fig. 118. Drawing of macaw sculpture from Copán ballcourt (Marquina 1981, 2: 587, fig. 24).
Fig. 119. Drawing of Earely Classic Copán ballcourt marker with macaw (Taube 2003: 279, fig. 11.3f).





Figure 120. Standing figure wearing yugo (yoke) and hacha (axe-shaped piece) in El Tajín Sculpture 2 (Kampen 1972: fig. 39c).
Figure 121. Veracruz macaw *hacha* (Whittington 2001: 192, fig. 64).





Figure 122. Xochicalco bird *almena* (De la Fuente et al. 1995: 109).
Figure 123. Detail of descending bird and glyph on tecali vessel from an offering in the Xochicalco Feathered Serpent Pyramid (Sáenz 1986: 459).



Figure 124. Diving quetzal-macaw from Teotihuacan Palace of the Sun, Zone 5-A (Taube 2000: 279, fig. 11.3d).



Figure 125. Bird with glyphic medallion on body from Teotihuacan (Miller 1973: 365, fig. 361).




Figure 126. Terracotta seated puma sculpture from Xochicalco (author's photos).

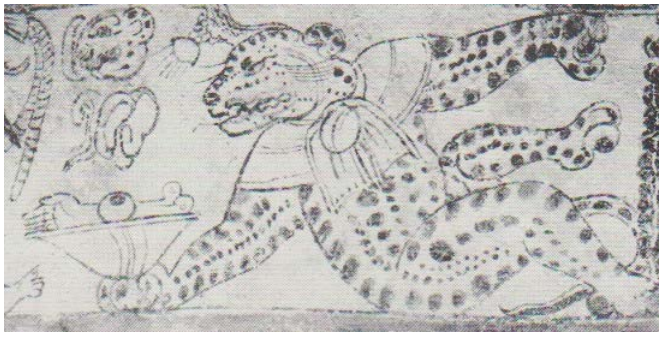



Figure 127a. Large polychrome jaguar urn from the West Platform at Monte Albán (Jorge Pérez de Lara photo, http://www.mesoweb.com/es/recursos/MNA/59.html).
Fig. 127b. Jaguar with scarf on Maya Codex Style vessel (Robicsek and Hales 1981: 24).

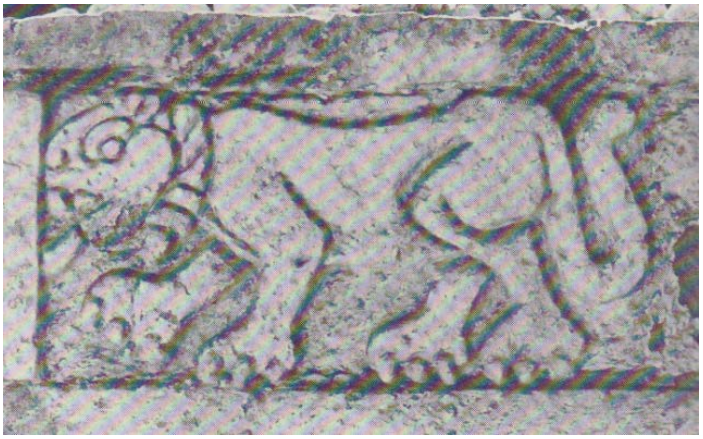


Figure 128a. Jaguar relief from Tula, Building B (De la Fuente, Trejo, and Gutiérrez Solana 1988: lám. 97).

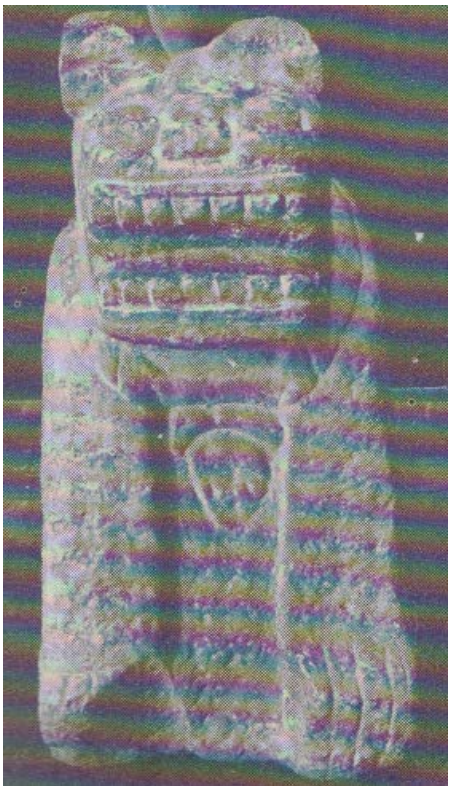


Fig. 128b. Jaguar standard bearer from Tula (De la Fuente, Trejo, and Gutiérrez Solana 1988: lám 56).









Figure 129a. Stone emaciated jaguar sculpture from Xochicalco (author's photo).
Figure 1290b. Emaciated jaguar sculpture from Xochicalco excavations (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 319, fig. 434).
Figures 129c-d. Emaciated jaguar sculpture from Xochicalco (De la Fuente et al. 1995: 104-105).



Figure 130a. Salivating netted jaguar with heart in mouth in mural from Atetelco, Teotihuacan (Kubler 1972: 33, fig. 19).



Figure 130b. Jaguar with heart in claw, Platform of the Eagles, Chichén Itzá (Coe 1993: 150, fig. 116).



Figure 131a-c. “Señor Yelmo de Serpiente” (Lord Serpent Helmet), Xochicalco (authir’s photo).





Figure 132. Feathered Serpent Pyramid view (Berrin and Pasztory 1993: 52, fig. 3).
Figure 133. Feathered serpent headdress (Sugiyama 2005: 63, fig. 21).



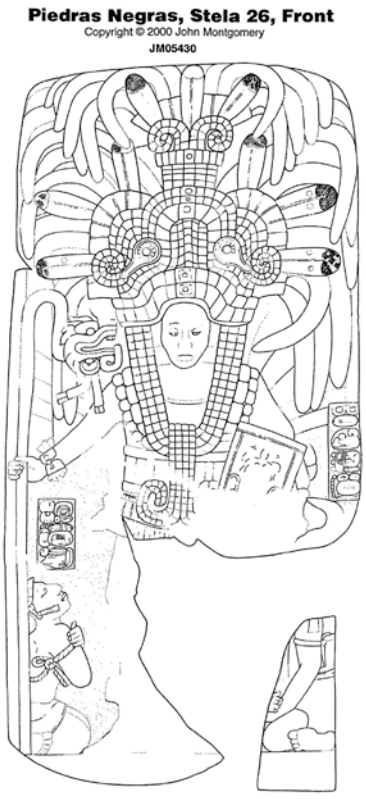


Figure 134. Ruler with feathered serpent headdress on Bonampak Stela 3 (Mathews 1980: 65, fig. 4).
Figure 135. Ruler with feathered serpent headdress on Piedras Negras Stela 26 (John Montgomery drawing, Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org).



Figure 136a. Detail of feathered serpent from Cacaxtla Building A mural (Doris Heyden photo).
Figure 136b. Feathered Serpent from Cacaxtla Building A mural (author's photo).



Figure 137. Classic Maya Bearded Dragon from Late Classic bowl (Taube 2003: 297, fig. 11.13b).
Figure 138. Head emerging from feathered serpent maw, Uxmal (photo by Jorge Pérez de Lara, http://www.mesoweb.com/es/recursos/MNA/51.html).
Figure 139. Tikal Temple 1 Lintel 2 showing feathered serpent above seated ruler (Coggins 2002: 68, fig. 12b).





Figure 140a. Xochicalco Lord Serpent Helmet (author's photo).
Figure 140b. Maya jade with figure wearing feathered serpent headdress from Chichén Itzá Cenote of Sacrifice (Proskouriakoff 1974: 165, pl. 67).





Figure 141. Sculpture of female figure with feathered serpent headdress probably originally from Xochicalco (Smith and Hirth 2000, 2: 37, photo 3.9).
Figure 142. Teotihuacan feathered feline-serpent headdress on figurine (Séjourné 1959: fig. 69c).





Figure 143. Zapotec deity with feathered serpent headdress (Caso and Bernal 1952: 169, fig. 296).
Figure 144. Zapotec whistle with feathered serpent headdress from Monte Albán (Caso and Bernal 1952: 169, fig. 296).

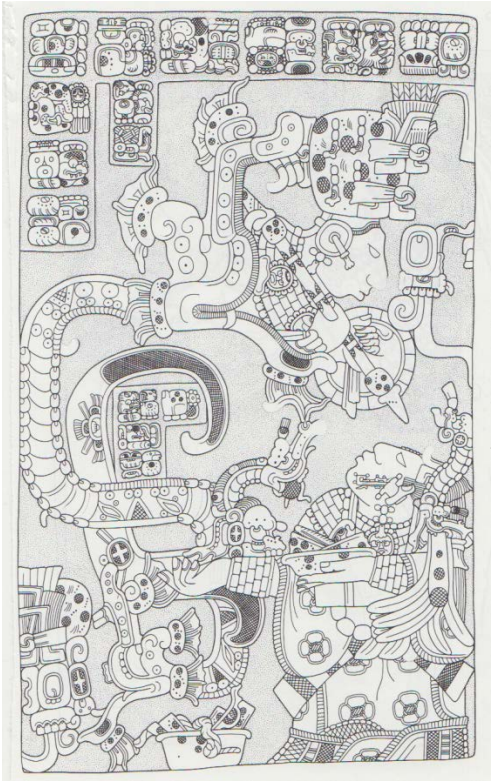




Figure 145. Yaxchilán Lintel 25 with dynasty founder Yat Balam emerging from vision serpent (Sharer 1994: 241, fig. 5.13b).
Figure 146. God K emerging from bearded dragon (Robicsek and Hales 1981: 16, vessel 4).



Figure 147. Teotihuacan enthroned figurine (Berrin and Pasztory 1993: 231, fig. 98).



Figure 148. Piedras Negras Stela 25 (John Montgomery drawing, Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org).


Figure 149. Seated female deity from Xochicalco (front and back) (author's photo).


Figure 150. "El Creador" terracotta sculpture from Xochicalco (author's photos).



Figure 151a-b. Detail of the face and back view of “El Creador” (author’s photo).



Figure 152. Palenque Censer stand with Sun God (Miller and Martin 2004: 227, pl. 124).





Figure 153. Detail of cacao associated with ancestors on Pakal's sarcophagus lid, Palenque (Schele and Freidel 1990: 220, fig. 6:3).

Figure 154. Rio Bec area censer base (author's photo).





Figure 155. Cacaxtla Red Temple detail of cacao "plant" (author's photo).

Figure 156. Cacaxtla urn with cacao "plant" (author's photo).



Figure 157. Sculpture known as the “Adolescent from Cumpich,” Campeche (Arqueología Mexicana website, available at: http://www.arqueomex.com/S5N6MNASalArqMaya3.html).
Figure 158. Standing female terracotta sculpture with knotted serpent belt from El Zapotal (Gutiérrez Solana and Hamilton 1977: fig. 9).



Figure 159. Sacrificial Stone from Xochicalco (author’s photo).

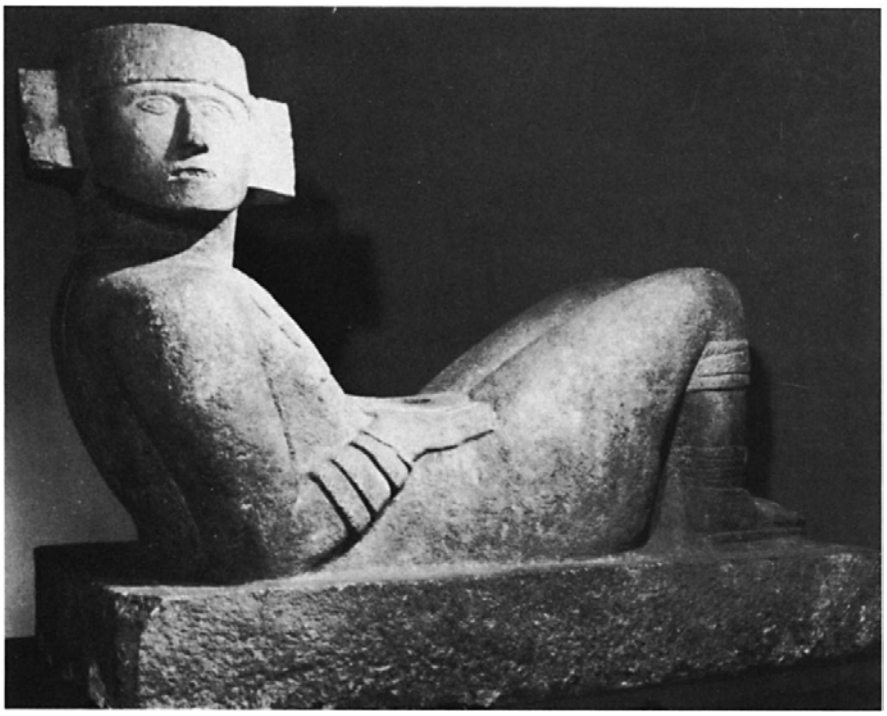


Figure 160. Chacmool from Chichén Itzá (Miller 1985:8, fig. 1).



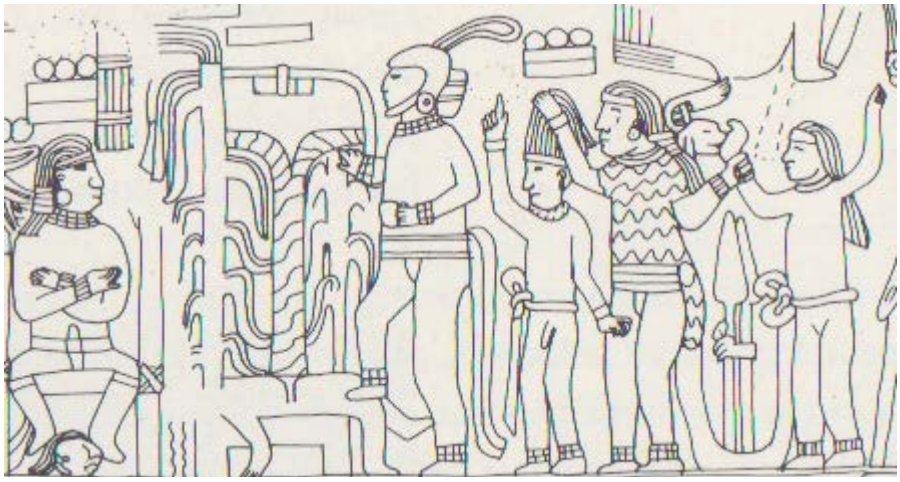


Figure 161. Detail of Xochicalco Stela 1 showing recumbant figure in front of temple (Smith and Hirth 2000, 2: 23, fig. 3.3).

Figure 162. Detail of column from the Building of the Columns, Tajín Chico, El Tajín showing 13 Rabbit beside the sacrifice of prisoners (author's drawing).



Figure 163. El Marcador or El Señor Rojo (The Marker or the Red Lord) from Xochicalco (author's photos).



Figure 164a-b. Detail of aureole of Xochicalco Marcador and Tikal Marcador (a: author's photo; b: Martin 2000: 108, fig. 166).

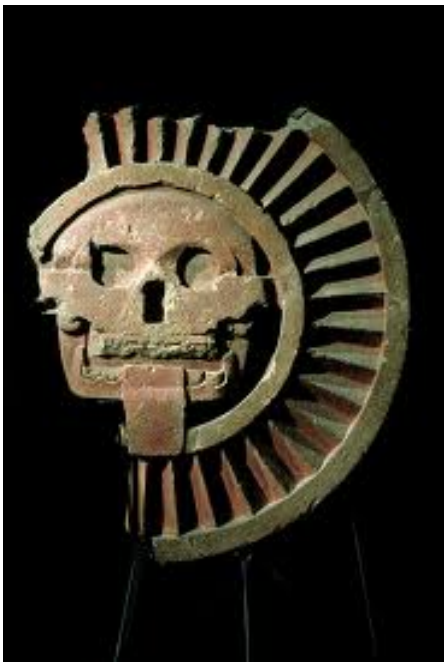


Figure 165. Details of lower part of the Xochicalco Marcador (author's photos).



Figure 166. Xochicalco Feathered Serpent Pyramid, west side, relief on south side of stairway (author's photo).

Figure 167. Stream of precious water flowing from hands of the Great Goddess, Tetitla, Teotihuacan (Miller 1973: 146, fig. 302 detail).



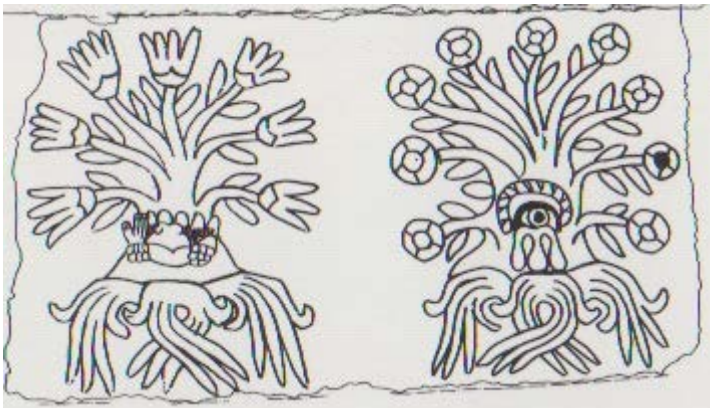


Figure 168. Round stone relief of a skull found near the Sun Pyramid at Teotihuacan (Jorge Pérez de Lara photo, consulted at: http://www.mesoweb.com/es/recursos/MNA/19.html).
Figure 169. Drawing of detail of flowering tree murals, Techinantitla, Teotihuacan (Berrin 1988: 150, fig. VI.3b).

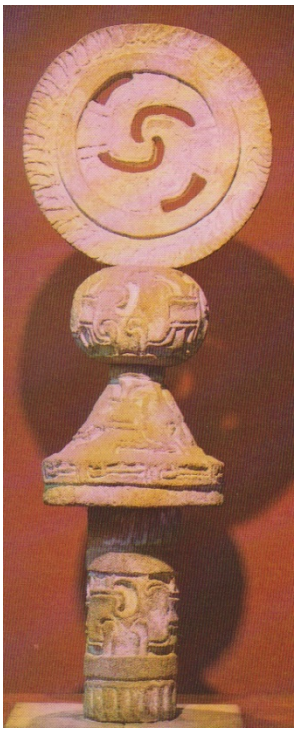




Figure 170. La Ventilla ballcourt marker from Teotihuacan (Solís 1991: 54, no. 66).
Figure 171. Tikal Marcador (Martin 2000: 108, fig. 166).



Figure 172. View of Xochicalco Feathered Serpent Pyramid (author's photo).



Figure 173. Detail of juncture of different slabs to form the relief, Xochicalco Feathered Serpent Pyramid (author's photo).

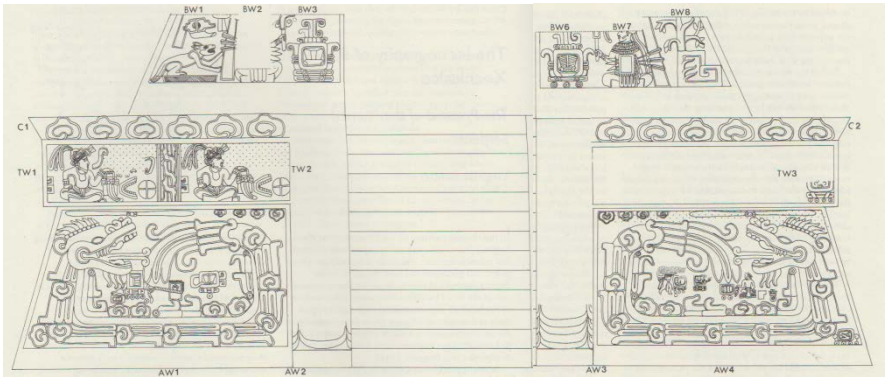
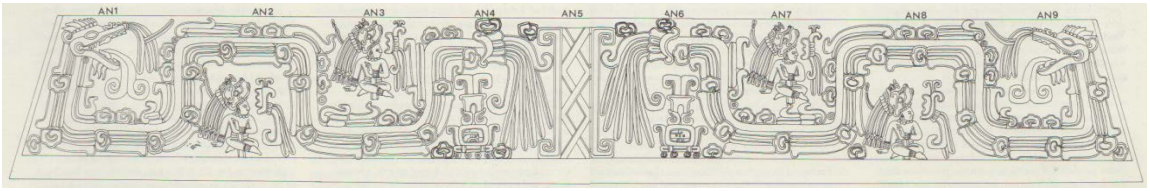
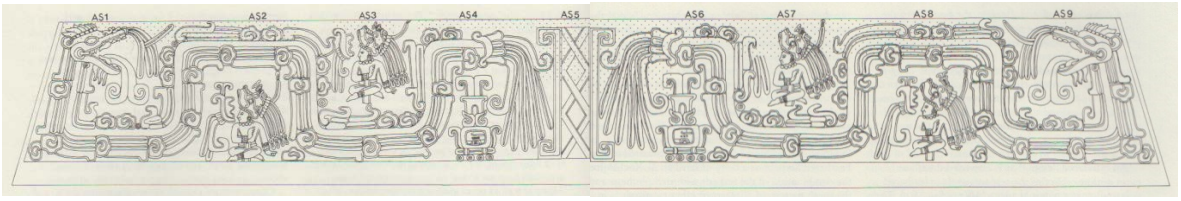


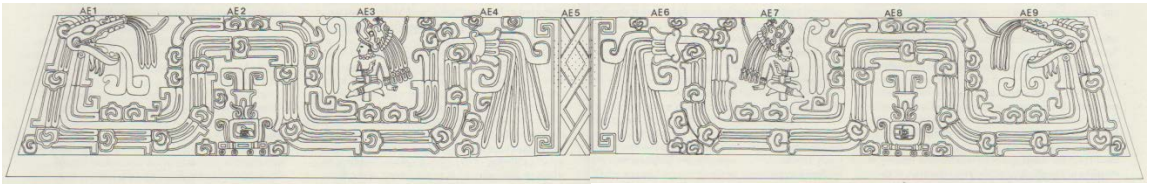
Figure 174. West side of the Xochicalco Feathered Serpent Pyramid showing sloped lower *talud*, rectangular *tablero* and sloped upper *talud* (Smith 2000ª, 2: 58-59).



NORTH SIDE



SOUTH SIDE



EAST SIDE

Figure 175. Drawing of the lower talud on the Xochicalco Feathered Serpent Pyramid (Smith 2000a, 2: 62-63, fig. 4.2).

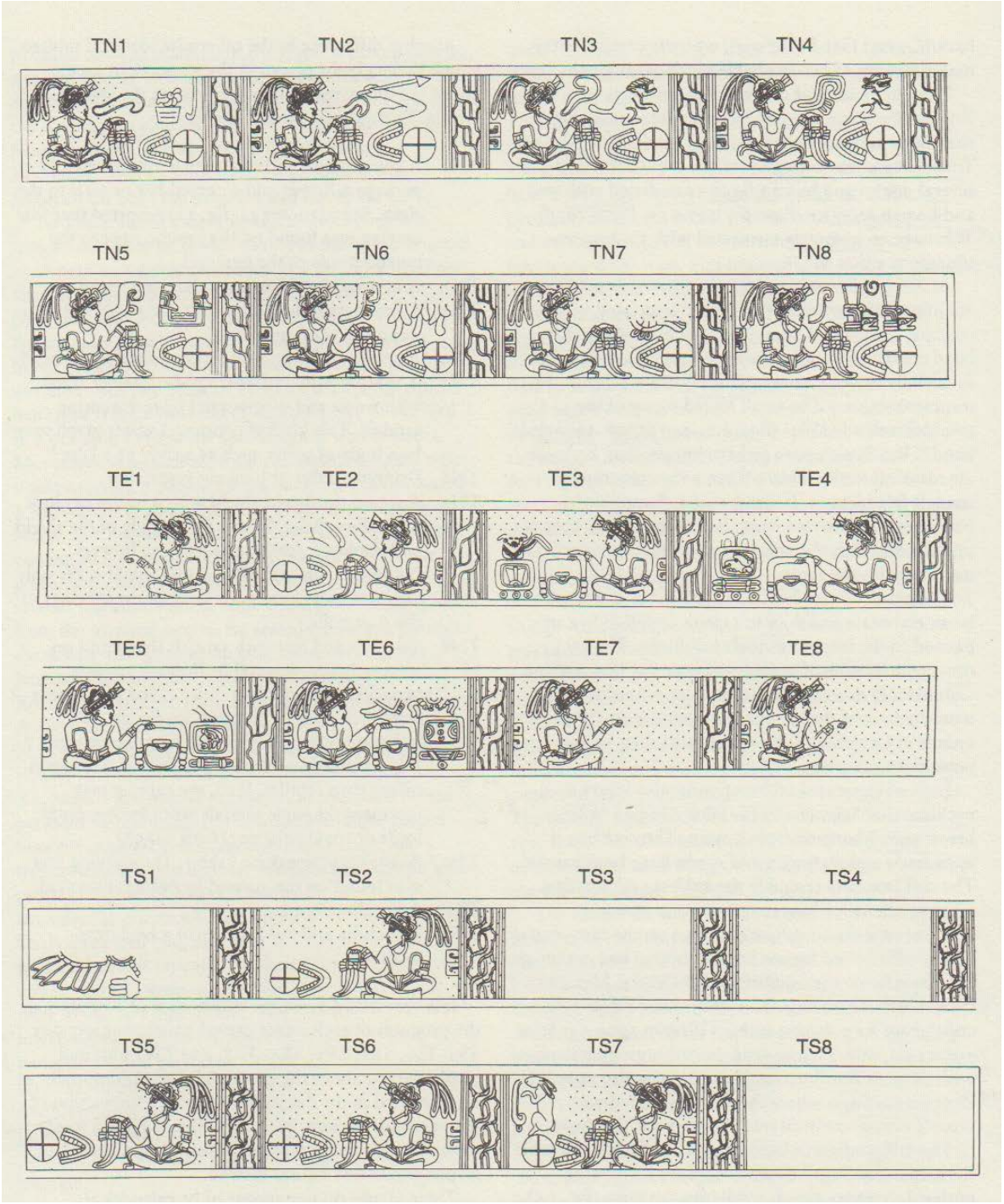


Figure 176. Rectangular tablero panels on north, east, and south sides of the Xochicalco Feathered Serpent Pyramid (Smith 2000a, 2: 70, fig. 4.5).

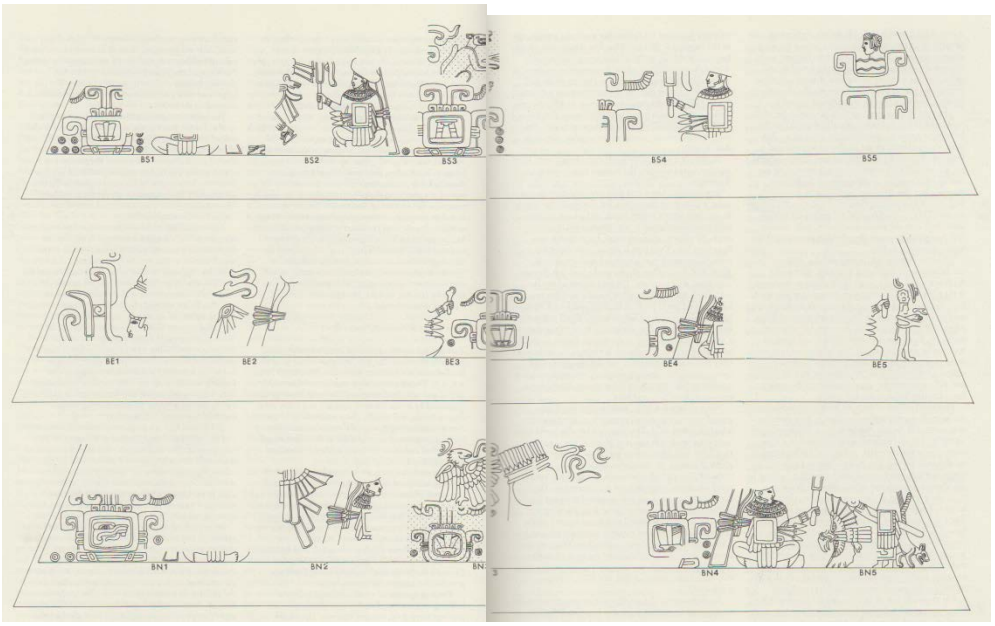


Figure 177. South, east, and north sloping talud walls on upper story of the Xochicalco Feathered Serpent Pyramid (Smith 2000a, 2: 74-75, fig. 4.7).

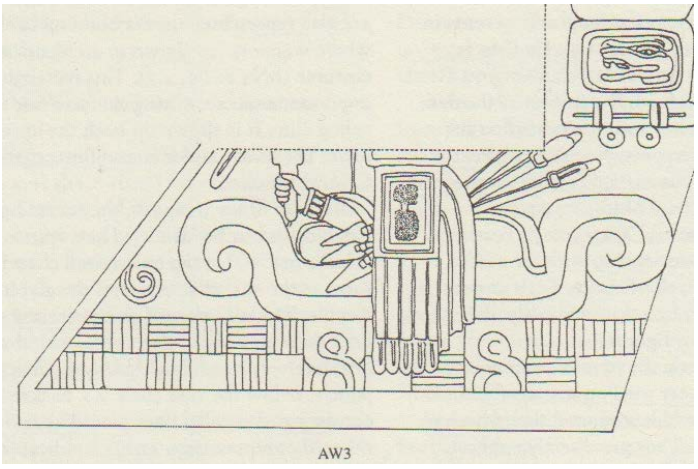


Figure 178. Relief on the south side of the outer wall of the stairway of the Xochicalco Feathered Serpent Pyramid (Smith 2000a, 2: 66, fig. 4.3).

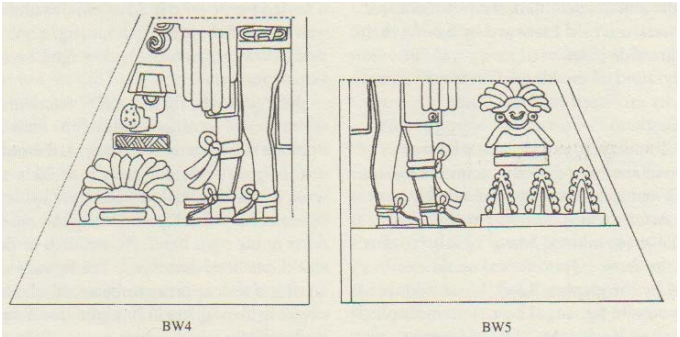


Figure 179. North and south jamb, upper story, Xochicalco Feathered Serpent Pyramid (Smith 2000a, 2: 66, fig. 4.3).



Figure 180a. Jade plaque from Cenote of Sacrifice, Chichén Itzá (Proskouriakoff 1974: 179, pl. 72).
Figure 180b. Seated figures on Copán Altar Q (accessed at *La Jornada en la Ciencia* online: http://ciencias.jornada.com.mx/investigacion/ciencias-sociales-y-humanas/investigacion/conciencia-del-pasado)



Figure 181. View of AN2 amd AN3 on the north lower *talud* of the Xochicalco Feathered Serpent Pyramid (author's photos).



Figure 182. View of AN7 and AN8 on the north lower *talud* of the Xochicalco Feathered Serpent Pyramid (author's photos).



Figure 183. View of AE3 and AE7 on the east lower *talud* of the Xochicalco Feathered Serpent Pyramid (author's photos).



Figure 184. View of AS2 and AS3 on the south lower *talud* of the Xochicalco Feathered Serpent Pyramid (author's photos).



Figure 185. View of AS7 and AS8 on the south lower *talud* of the Xochicalco Feathered Serpent Pyramid (author's photos).

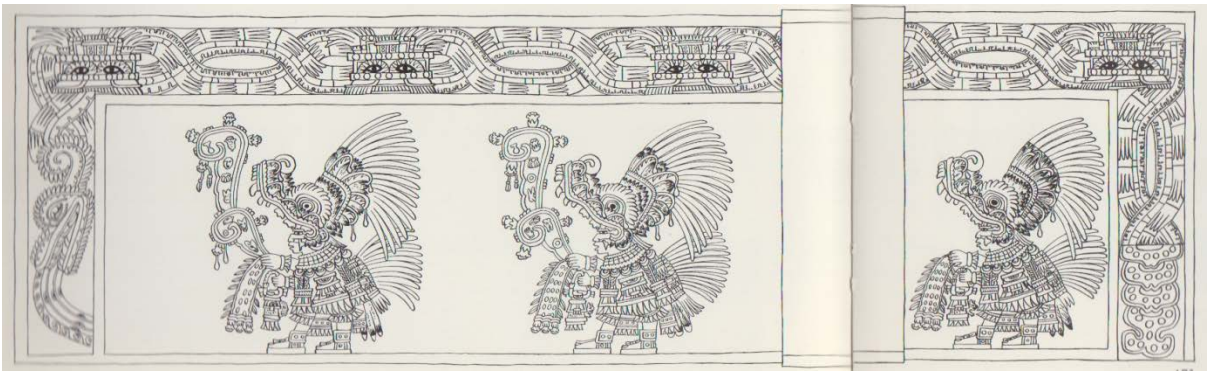


Figure 186. Drawing of mural from Tepantitla, Teotihuacan (Miller 1973: 100-101, fig. 173).

AN2 	AN7 	AN8 	AE3 
AE7 	AS2 	AS7 	AS8 

Figure 187. Table of profiles of figures from the lower talud of the Xochicalco Feathered Serpent Pyramid (author's photos).

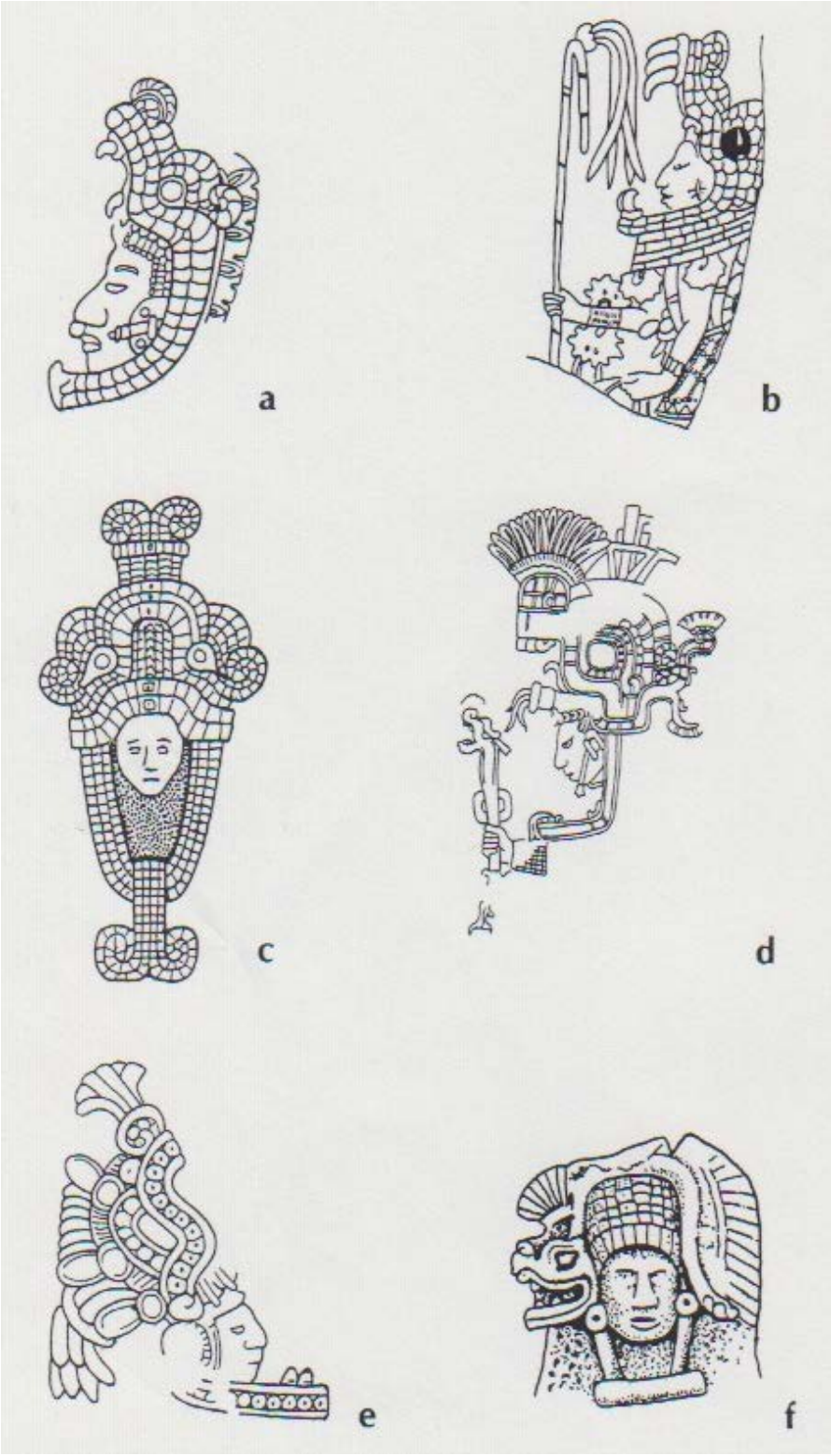


Figure 188. Feathered serpent headdresses in Classic Maya images: a) Lamanai Stela 9; b) Nohmul sherd; c) Piedras Negras Stela 26; d) Bonampak Stela 3; e) doorjamb Northern Maya Lowlands; f) Jonuta style figurine (Taube 1992: 61, fig. 6).



Figure 189. Figures BS2 and BN2 from the upper talud of the Xochicalco Feathered Serpent Pyramid (author's photos).



Figure 190. Piedras Negras Stela 9 showing balloon headdress and trapeze-and-ray sign (Stone 1989: 163, fig. 14).



Figure 191. Headdress details from lower talud, Xochicalco Feathered Serpent Pyramid (author's photos).



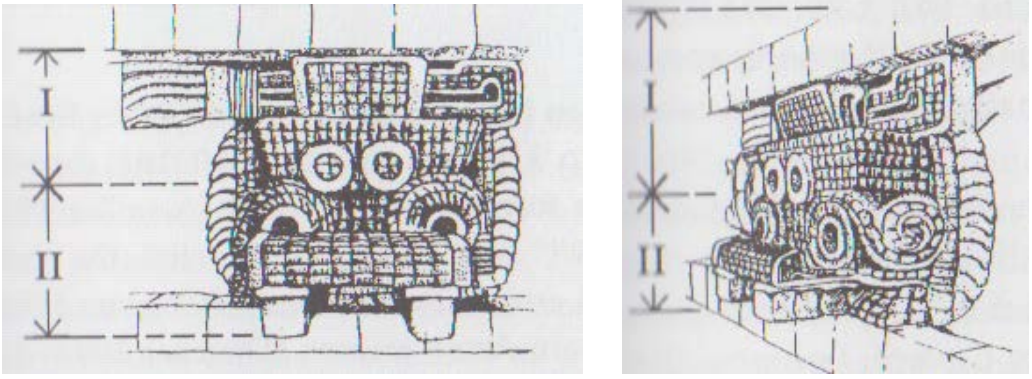


Figure 192a-b. View of Teotihuacan Feathered Serpent Temple and drawing of Primordial Crocodile headdress (Berrin and Pasztory 1993: 52, fig. 3; Sugiyama 2005: 69, fig. 25a).





Figure 193a-b. a) Detail of headdress creature's headdress; b) smoke issuing from the 7-Reptile's Eye Glyph on Xochicalco Feathered Serpent Pyramid (author's photos).

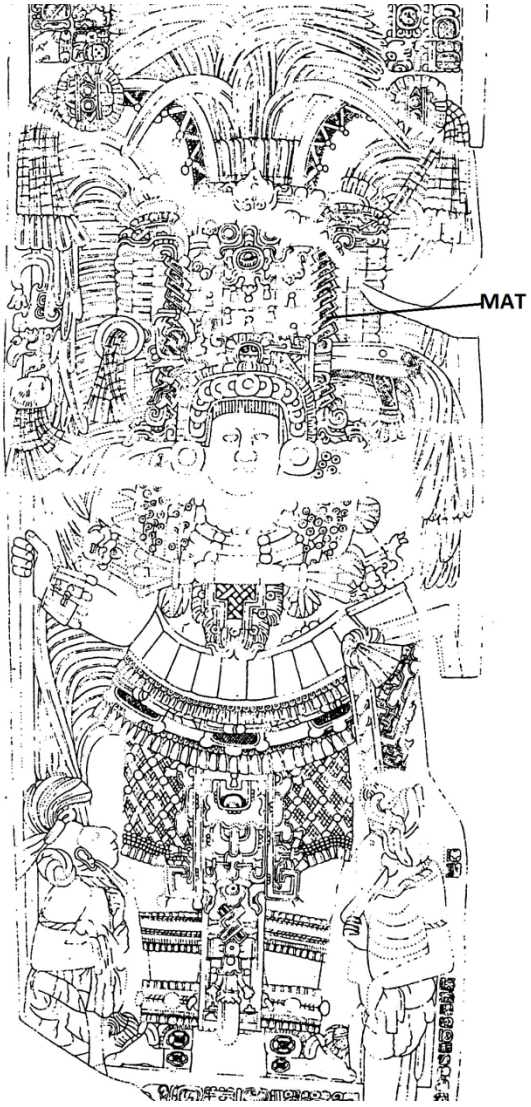


Figure 194. Piedras Negras Stela 8 with mat signs in headdress (John Montgomery drawing, Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org).



Figure 195a. Detail of Xochicalco Stelae 1 and 3 (author's photos).
Figure 195b. Detail of Xochicalco Stelae 1 and 3 (Smith and Hirth 2000, 2: 23, 25).



Figure 196. Maya jade with feathered serpent helmet from Cenote of Sacrifice, Chichén Itzá (Proskouriakoff 1974: 165, pl. 67).



Figure 197. Reptile's Eye glyph from the Xochicalco Feathered Serpent Pyramid (De la Fuente et al. 1995: 27).



Figure 198. Reptile'e Eye glyph on Teotihuacan plano-relief vessel (Von Winning 1987: 78ff, fig. 1d).

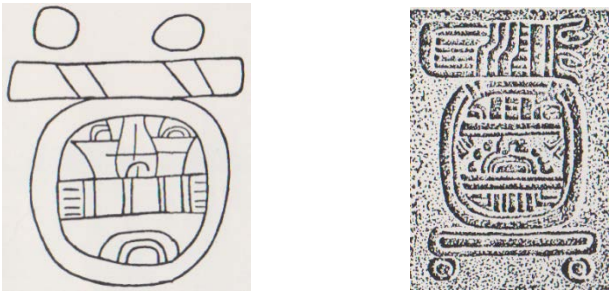


Figure 199. 3 Reptile's Eye with double comb sign and with fire bundle (Von Winning 1987: 78ff, fig. 4a, b).

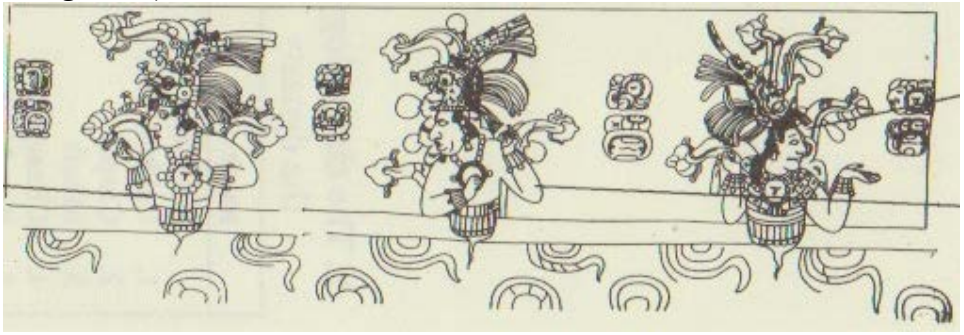


Figure 200. Pakal's sarcophagus side showing ancestors rising from earth band with Reptile's Eye, Palenque (Schele and Freidel 1990: 220, fig. 6.3).



Figure 201. Seated figure with trapeze-and-ray headdress on tablero of the Xochicalco Feathered Serpent Pyramid (author's photo).
Figure 202. Storm God with trapeze-and-ray headdress on Xochicalco Stela 2 (author's photo and drawing from Smith and Hirth 2000, 2: 24, fig. 3.4).

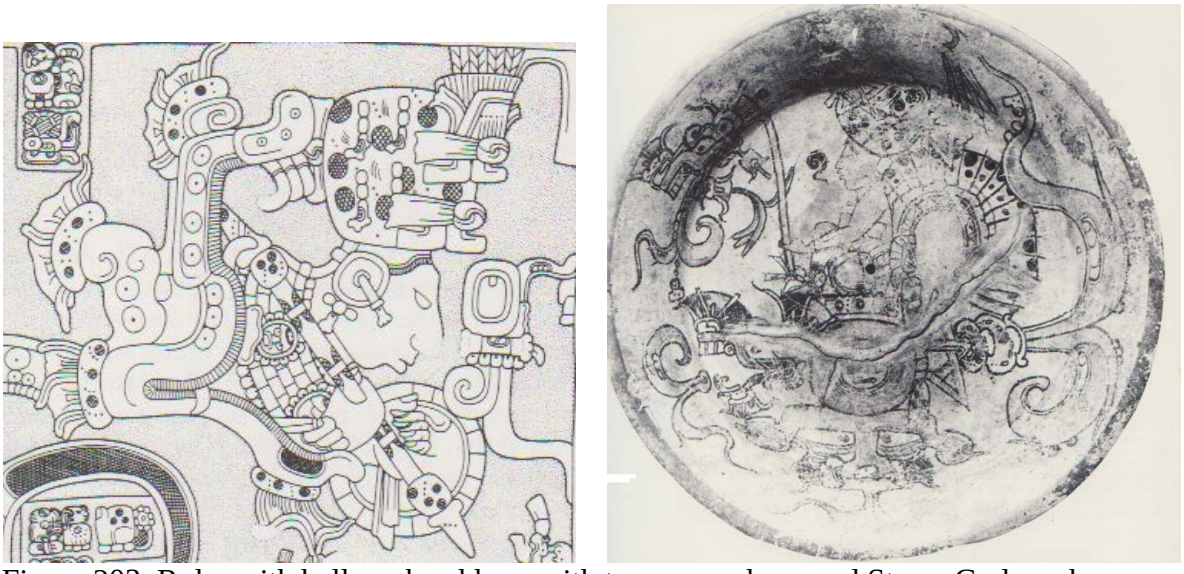


Figure 203. Ruler with balloon headdress with trapeze-and-ray and Storm God mask emerging from jaws of vision serpent, Yaxchilán Lintel 25 from Structure 23, Yaxchilán (Schele and Miller 1986: 188, pl. 63a).
Figure 204. Codex style Maya plate with ruler as warrior wearing balloon headdress with Trapeze-and-Ray signs (Robicsek and Hales 1981: 75, vessel 107).

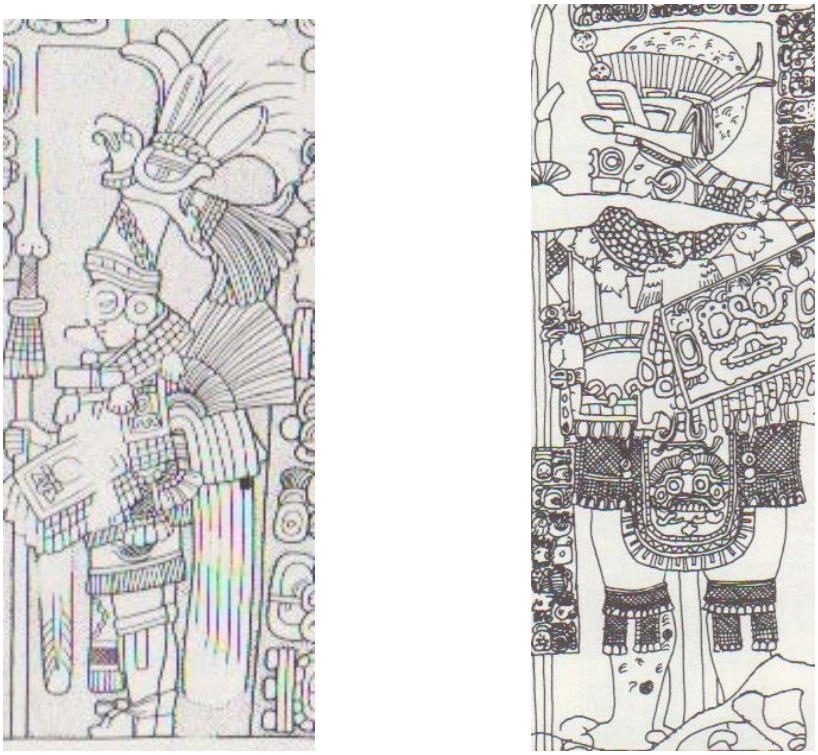


Figure 205. Subsidiary figure wearing goggle on eye, holding shield with trapeze-and-ray and with Storm God panel between shells on necklace from Piedras Negras Lintel 2, Structure 0-13 (Schele and Miller 1986: 149, pl. 40a).

Figure 206. Ruler with balloon headdress with trapeze-and-ray and Storm God mask, Aguateca Stela 2 (author's drawing after Miller 1986: fig. 26).



Figure 207. Teotihuacan enthroned figurines with balloon headdress (Berrin and Pasztory 1993: 231, nos. 98-99).

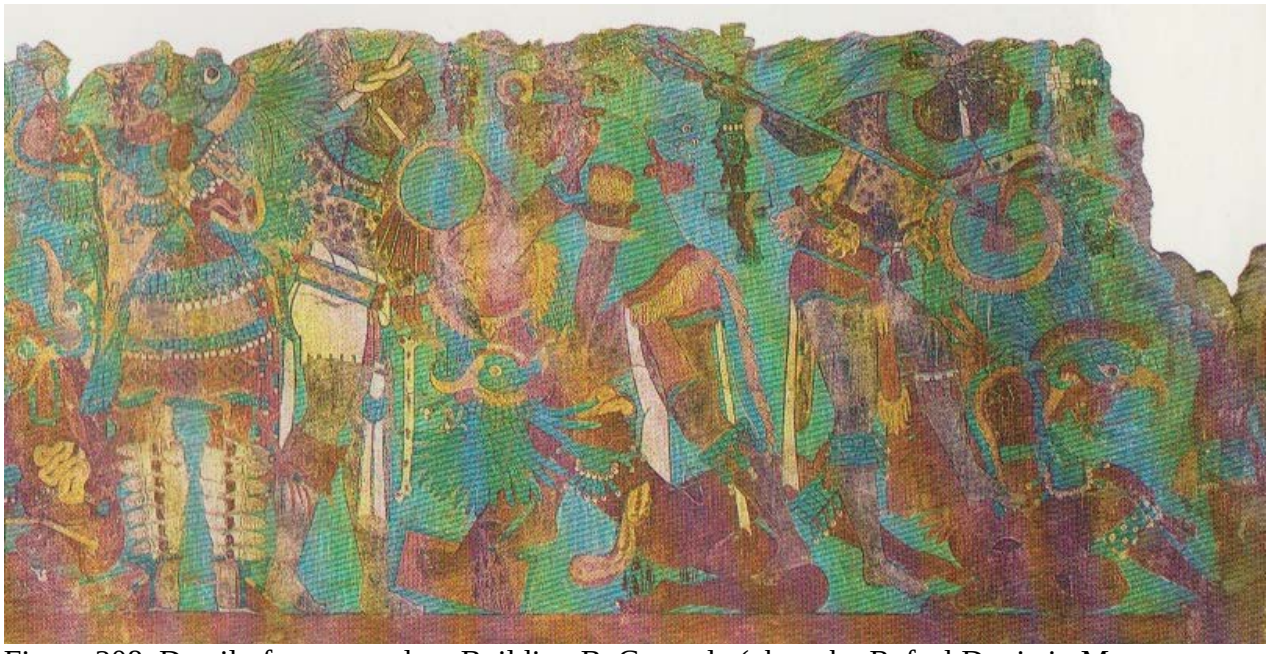


Figure 208. Detail of east mural on Building B, Cacaxtla (photo by Rafael Doniz in Matos Moctezuma 1987: 77).



Figure 209. Maya profile on south jamb, Building A, Cacaxtla (author's photo).



Figure 210. Detail of treatment of line in east mural, Building B, Cacaxtla, to illustrate departures from Maya style discussed by Brittenham (2008) (author's photos).



Figure 211. Hybrid Maya god on east wall, Red Temple, Cacaxtla (author's photo).

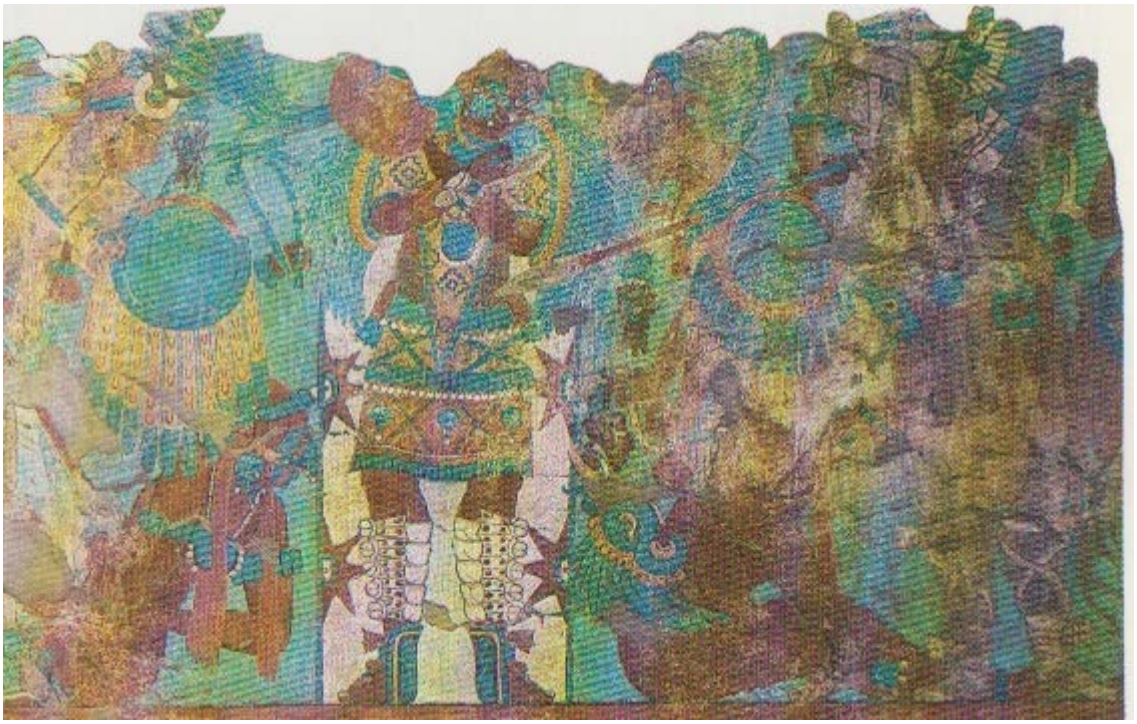


Figure 212. Cacaxtla, Building B, “battle” mural (photo by Rafael Doniz in Matos Moctezuma 1987: 61).



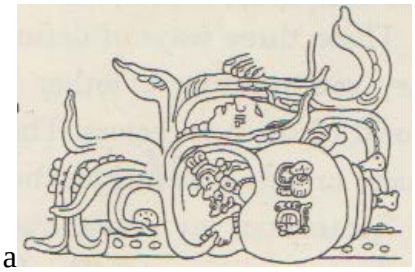
Figure 213. Reconstruction of battle mural in Room 2, Structure 1, Bonampak (Miller 1995: 66).

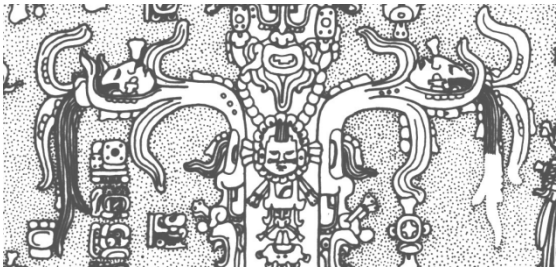




Figure 214a. Figure on south portico of Building A, Cacaxtla (postcard, photo by Jürgen Bavoni).
Figure 214b. Seibal Stela 6 (John Montgomery drawing, Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org).



a 

b 



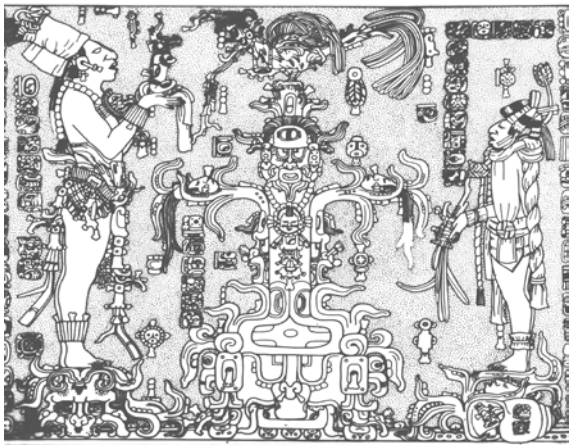
c 

Figure 215. Detail of corn as human heads, east wall of Red Temple (author's photo).
Figure 216a-b. Details of corn as human head from panel in the Temple of the Foliated Cross, Palenque; c. View of central panel (a: Freidel, Schele, and Parker 1993: 183, fig. 4.2h; b-c: Linda Schele drawing, Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org).
Figure 217. Red tassels on *Zea mays* (World Land Trust website: http://www.worldlandtrust.org/images/plants/atlantic-forest/zea-mays-vl%20.jpg)

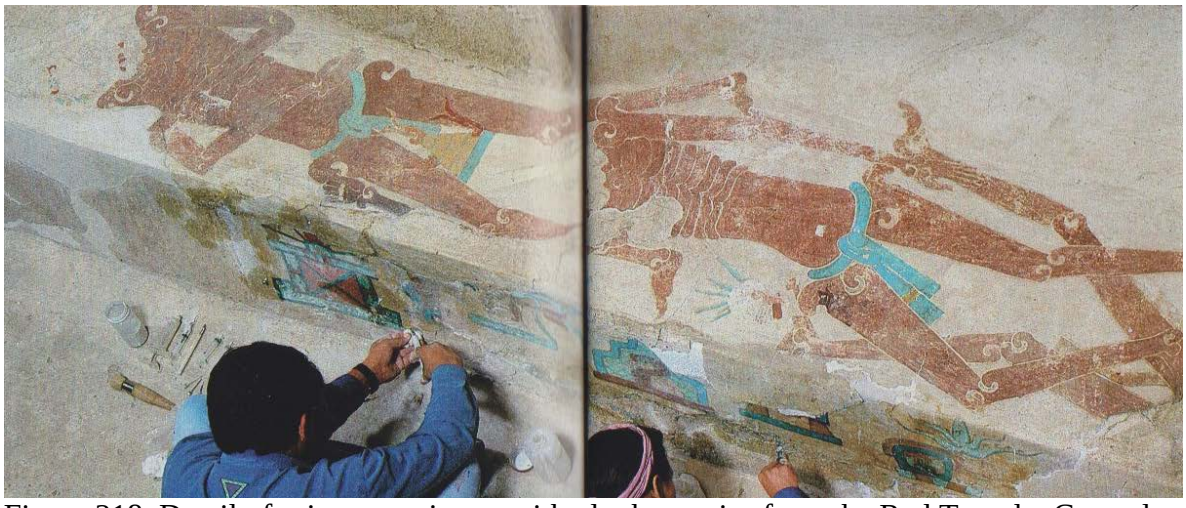


Figure 218. Detail of prisoner stairway with glyphs on rise from the Red Temple, Cacaxtla (Stuart 1992: 130-131).



Figure 219. Examples of Maya prisoner stairs from Dos Pilas (above) and Tamarindito (below) (Greene, Rands, and Graham1972: 203, pl. 94).

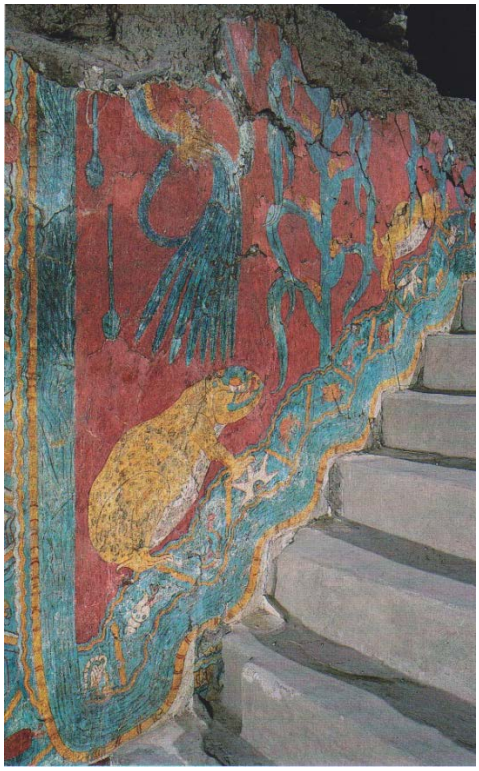


Figure 220. Watery underworld on the west wall, Red Temple, Cacaxtla (Stuart 1992: 136).



Figure 221. Watery underworld on the east wall, Red Temple, Cacaxtla (Stuart 1992: 134-135).

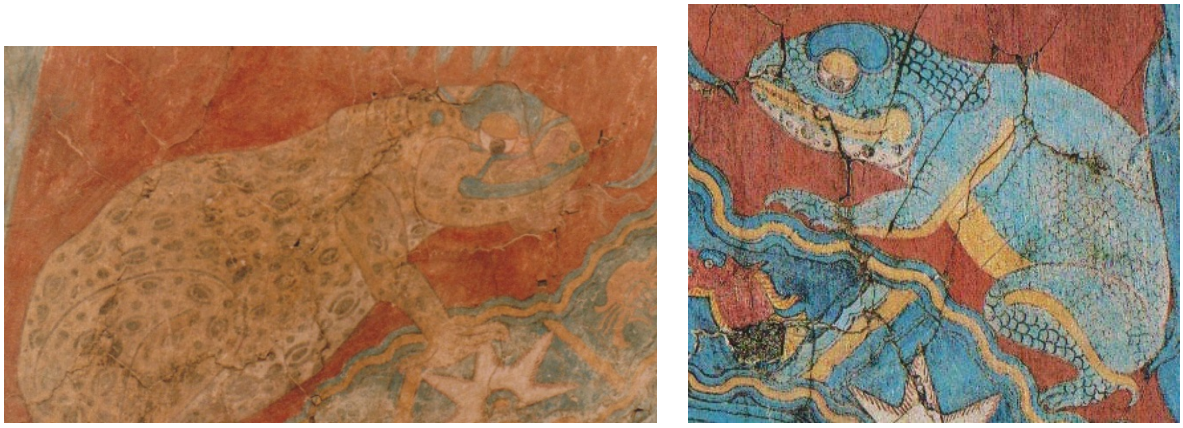




Figure 222a-c: Creatures from the watery underworld of the Red Temple, Cacaxtla (a,c author's photo; b from Stuart 1992: 135).

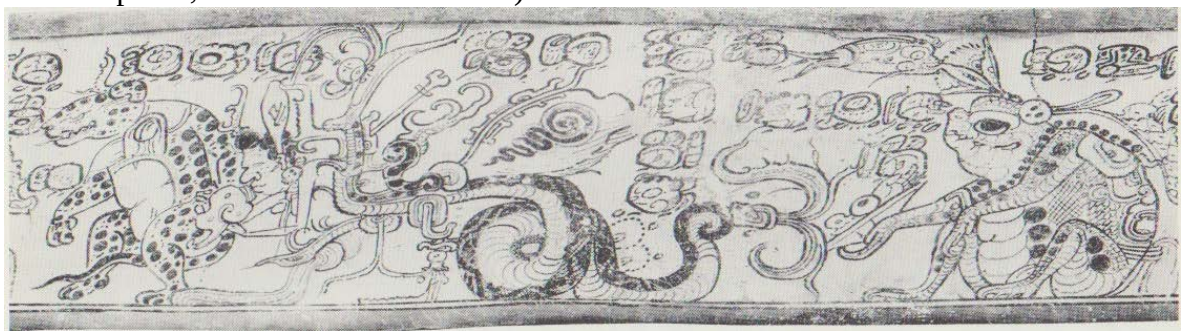


Figure 223. Creatures in the Maya underworld (Robicsek and Hales 1981: 26, vessel 33).



Figure 224. Detail of borders on the north and south porticoes (Stuart 1992: 124, 129).

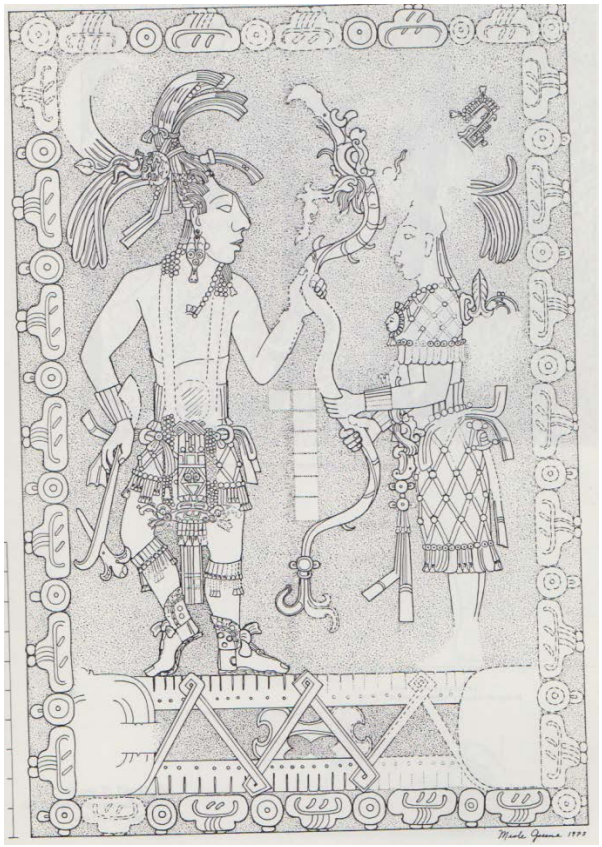




Figure 225a. Drawing of stucco relief from Pier D, House D, Palace, Palenque (Robertson 1985: fig. 182).
Figure 225b.Codex style Maya vessel with lord emerging from turtle shell representing earth with water band below (Robicsek and Hales 1981: 155, fig. 58A).



Figure 226. Detail of balloon headdress worn by figure 32, west mural, Building B, Cacaxtla (Matos 1987: 71).

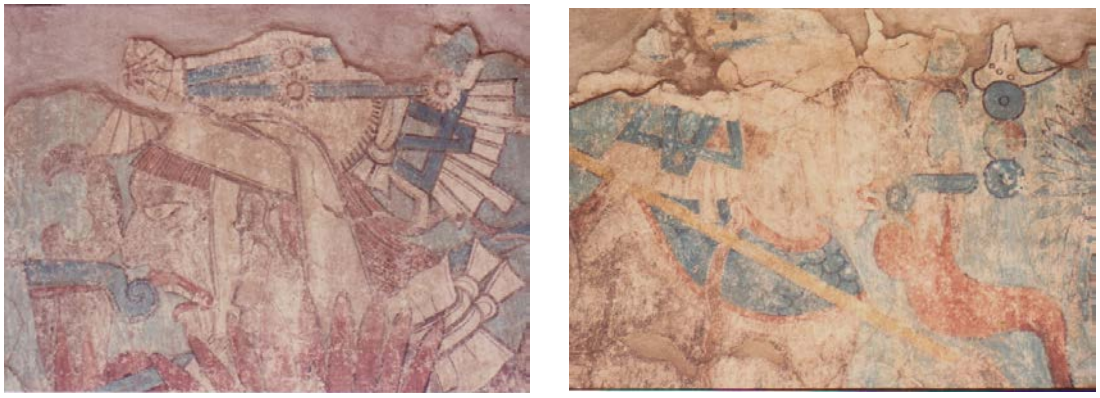


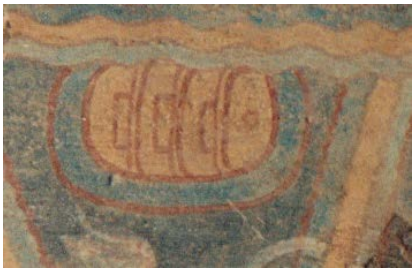
Figure 227. Details of Trapeze-and-Ray in headdresses of figures 3 and 29, Building B, Cacaxtla (author's photos).



Figure 228. Figure (corn deity?) emerging from shell, south jamb, Building B, Cacaxtla (author's photo).

Figure 229. Lord of Xibalba (underworld) emerging from shell (Justin Kerr Maya Vase Database K578, Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org).

a) 

b)  

c)   

Fig. 230a-c. Depiction of chitons from watery borders in murals at Cacaxtla; a) mural layer under the Red Temple (pit under Main Plaza); b) examples from Red Temple; c) Building A (a: *Excelsior*; b: author's photos; c: Stuart 1992: 123).



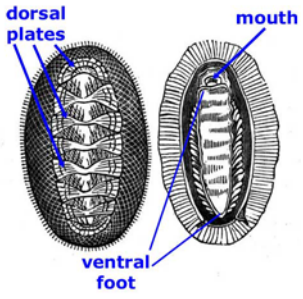


Figure 231a. *Chiton stokesii* (accessed: http://es.treknature.com/gallery/Central_America/Costa_Rica/photo200627.htm).
Figure 231b. Chiton diagram (accessed: http://www.esu.edu/~milewski/intro_biol_two/lab__11_mollusca/chiton.html).

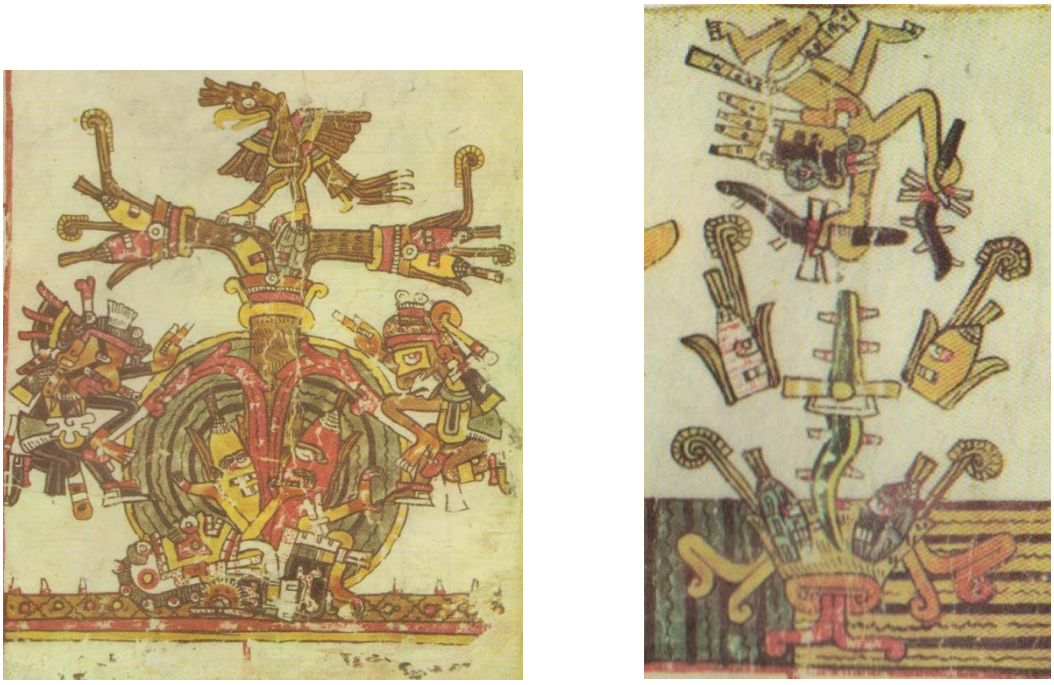
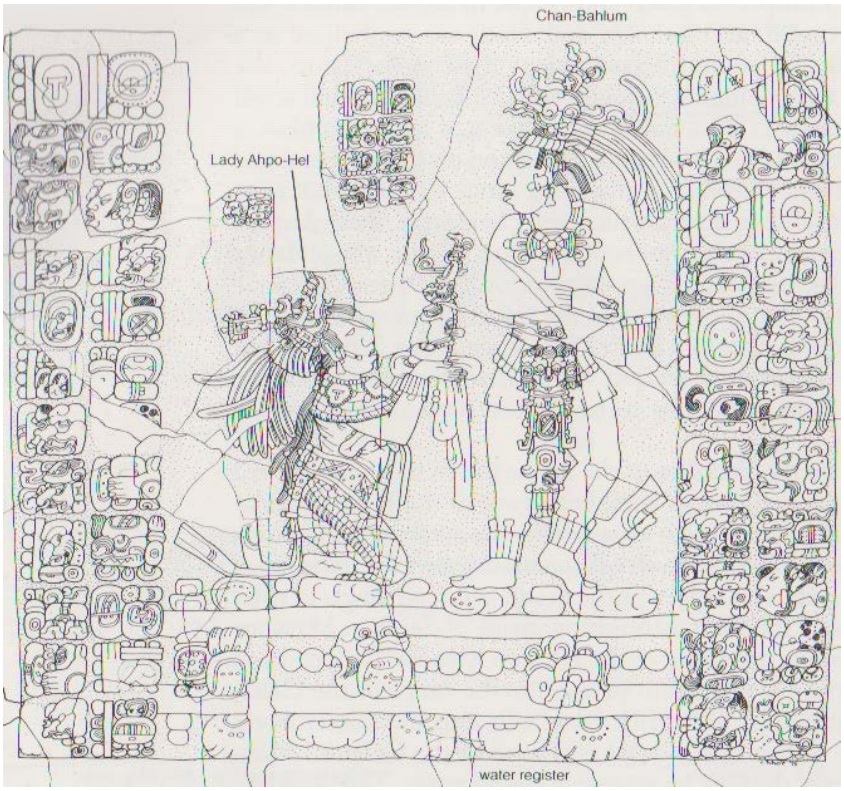


Figure 232a-b. Personification of corn in the *Codex Borgia* (Seler 1980, 3: lám. 53, 20).



Figure 233a. Teotihuacan aquatic bands, drawing of Zone 5-A mural (Miller 1973: 86, fig. 128).

Figure 233b. Teotihuacan aquatic bands, Zone 3, Platform 16, Teotihuacan (Miller 1973: 69, fig. 86).



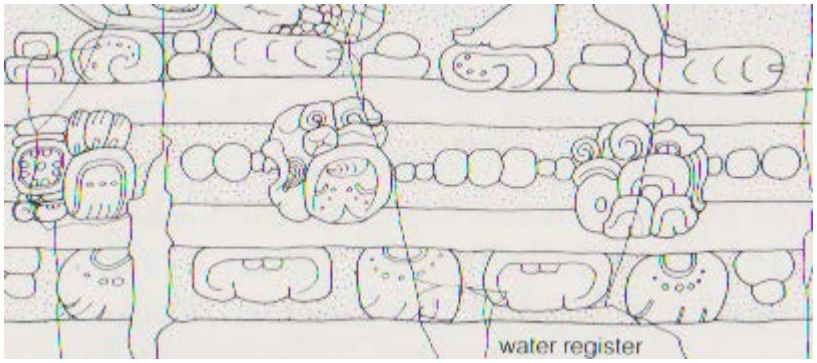


Figure 234a. View of Palenque Temple 14, Sanctuary Tabler view (Schele and Miller 1986: 272, fig. VII.2)
Figure 234b. Detail of *le* sign in water band below figures (Schele and Miller 1986: 272, fig. VII.2).



Figure 235. Balamkú frieze with *le* signs in watery border. (Internet accessed: http://www.google.com.mx/imgres?biw=1440&bih=695&tbm=isch&tbnid=COAELzFmAjM-mM%3A&imgrefurl=http%3A%2F%2Fwww.trotamexico.com%2Fes%2Farticulo%2Fcampeche%2Fbalamku%2Fzonas-arqueologicas%2Flu%2Fbalamku%2F&docid=jW0qdrlZlxeIVM&imgurl=http%3A%2F%2Fwww.trotamexico.com%2Fmultimedia%2Fcampeche%2Fbalamku%2Fzonas-arqueologicas%2Flu%2Fbalamku%2F4.jpg&w=500&h=363&ei=jbIKU4SqIaSCyAGTu4D4Bg&zoom=1&ved=0CH4QhBwwDw&iact=rc&dur=2659&page=1&start=0&ndsp=16).

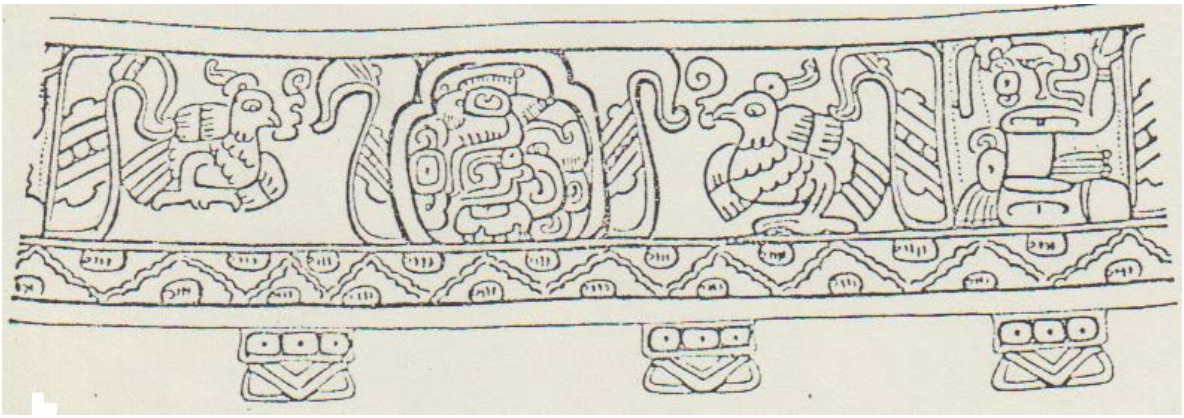


Figure 236. Drawing of decoration on tripod vessel from Tikal Burial 48 with *le* signs in aquatic border (Berlo 1976: fig. 22).



Figure 237. Uaxactún Stela 5m ca. 378, earliest recorded appearance of the balloon headdress (Greene, Rands, and Graham 1972: 309, pl. 146).

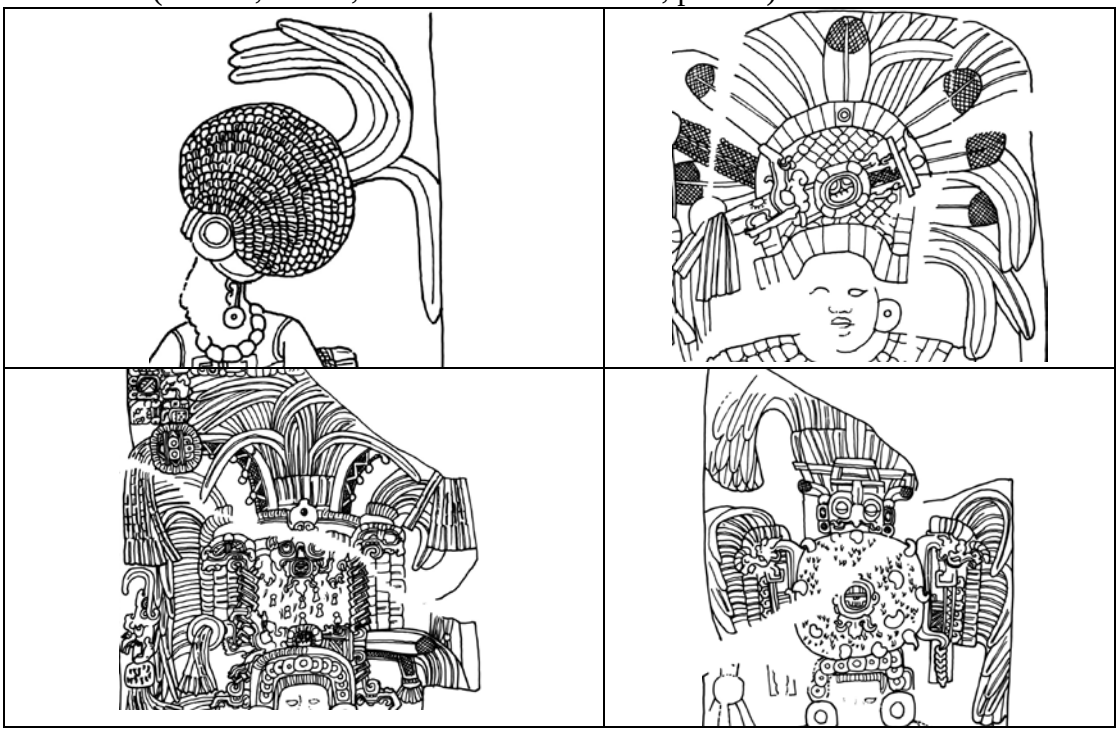


Figure 238. Details of balloon headdress at Piedras Negras: a) Lintel 4 (659); b) Stela 35 (662); c) Stela 8 (726); d) Stela 9 (736) (Linda Schele drawings, Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org).



Figure 239. Blocks with mural remains from the Pirámide Gemela (Twin Pyramid), Xochicalco (author's photos).

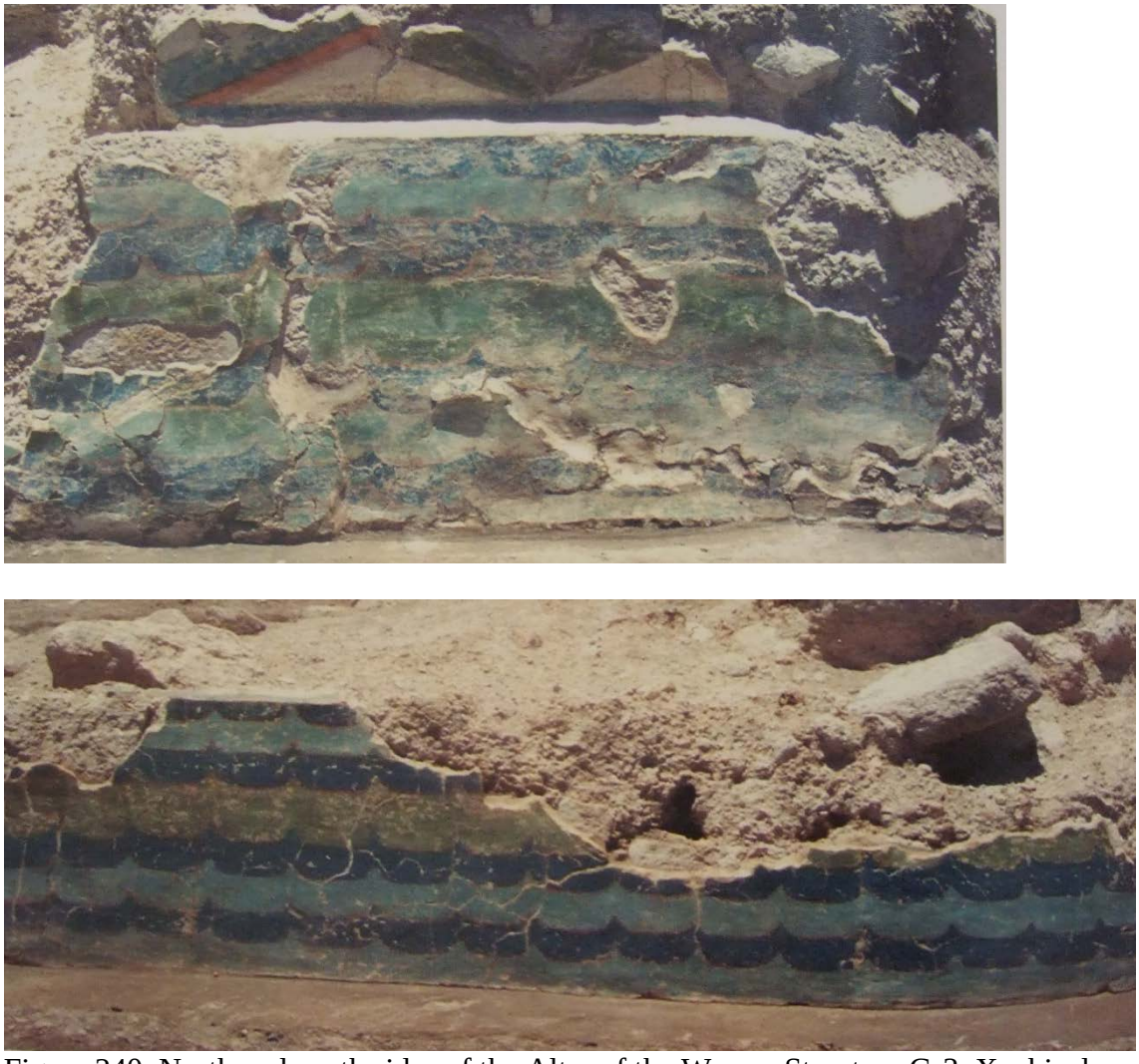


Figure 240. North and south sides of the Altar of the Waves, Structure G-3, Xochicalco (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 180, fig. 236).



Figure 241. Painted circles painted in cinnabar on Xochicalco Feathered Serpent Pyramid substructure (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: fig. 217).



Figure 242. Sector B-Structure 1, temascal painted mat designs (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: fig. 5.14).



Figure 243. Sector B-Structure 2, altar in two shades of Maya blue (author's photo).



Figure 244. Sector K-Structure 2-Room 5, copy of mural on altar with fourteen seated figures (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: fig. 5.17).



Figure 245a-c. Xochicalco *tecali* and other lapidary stone Teotihuacan-style masks from Xochicalco Site Museum (author's photos).



Figure 246a-b. Excavated Teotihuacan masks from the Conjunto Noroeste del Río San Juan and Conjunto 1D, the north residential area behind the Feathered Serpent Temple (Berrin and Pasztory 1993: nos. 25, 31; Jarquín Pacheco and Martínez Vargas 1982: 110).



Figure 247. Xochicalco-style masks referring to the Teotihuacan style, Site Museum (author's photos).

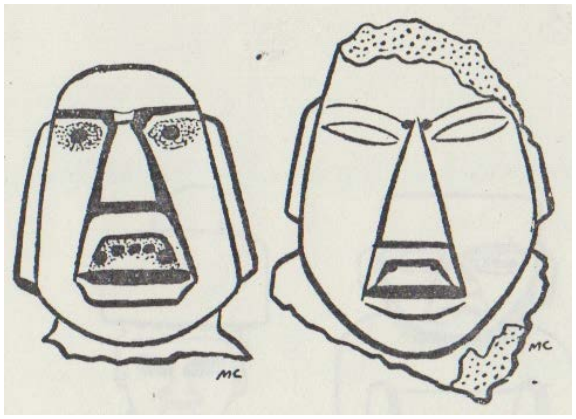



Figure 248a. Covarrubias's Type 2 with Olmecoid traits (Covarrubias 1948: fig. 1).
Figure 248b. Xochicalco mask with Olmecoid traits, Site Museum (author's photo).

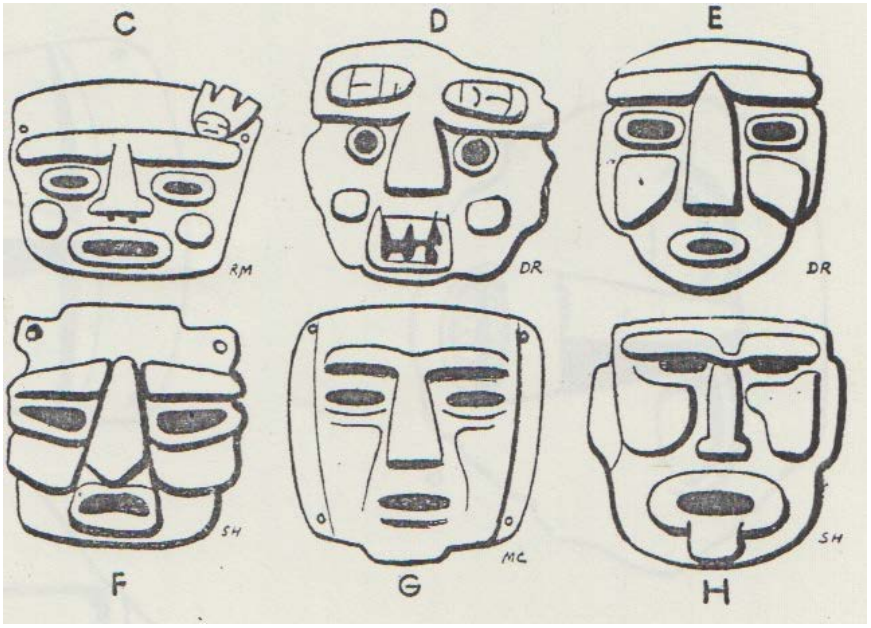




Figure 249a. Covarrubias Type 5 in Mezcala style masks (Covarrubias 1948: fig. 4).
Figure 249b. Xochicalco Mezcala-style masks, Site Museum (author's photos).





Figure 250a. Teotihuacan bust with mask found in tomb north of the Ciudadela (Berrin and Pasztory 1993: no. 60).
Figure 250b. Large Teotihuacan female lapidary sculpture, West Plaza Compound, Street of the Dead Complex (Berrin and Pasztory 1993: 179, no. 16).



Figure 251. Maya jade funerary mask from Tomb 1, Structure 7, Calakmul (Martínez del Campo Lanz 2011: 45).





Figure 252. Stone boxes in floors at Xochicalco covered by stone slabs (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: fig. 34).

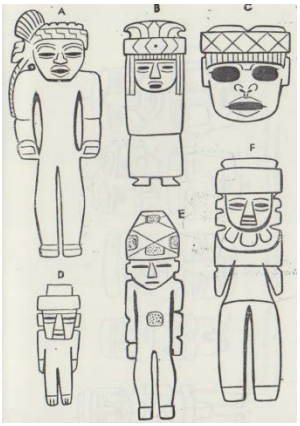


Figure 253. Covarrubias's Type 3: Teotihuacanoid figurines (Covarrubias 1948: fig. 2).

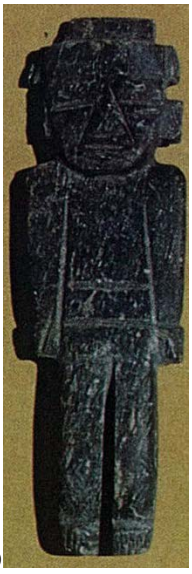
a  b  c  d 

Figure 254. a-b. Two male and c-d. two female Xochicalco (Teotihuacan-Mezcala) style figurines from Xochicalco (a. author's photo; b. Sáenz 1986: 469; c. author's photo; d. Sáenz 1986: 469).

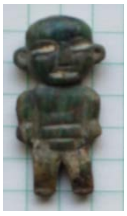
a  b  c  d   e 

Figure 255a, b, c and d. Greenstone figurines from Feathered Serpent Temple offerings; b. from the Moon Pyramid offerings (a. Berrin and Pasztory 1993: 182, no. 21; b-d. author's photos; e. Sugiyama and López Luján 2006: 31, fg. 5).

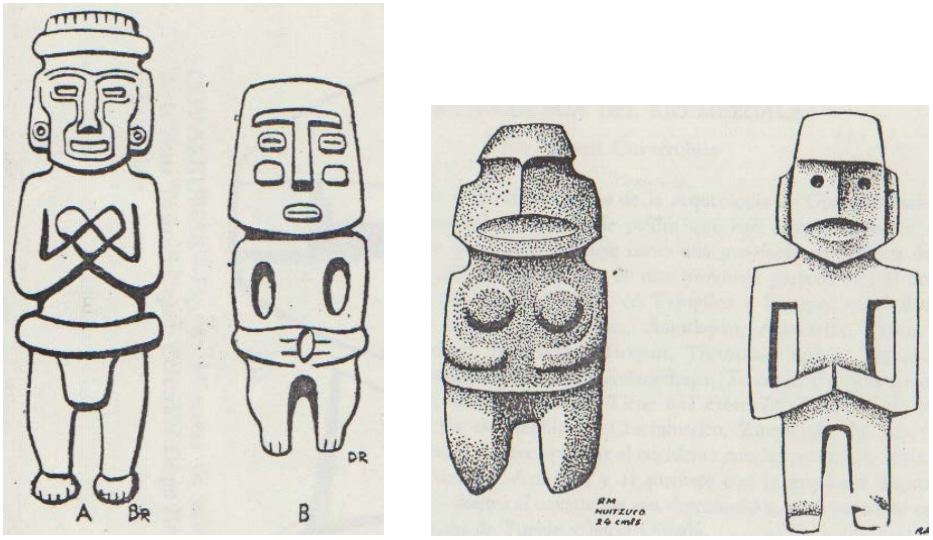


Figure 256. Covarrubias Type 5: Mezcala style figurines (Covarrubias 1948: figs. 4, 5).


a b c d
Figure 257. Mezcala style figurines from Xochicalco (a, c, d. author's photo; b. Sáenz 1986: 469).

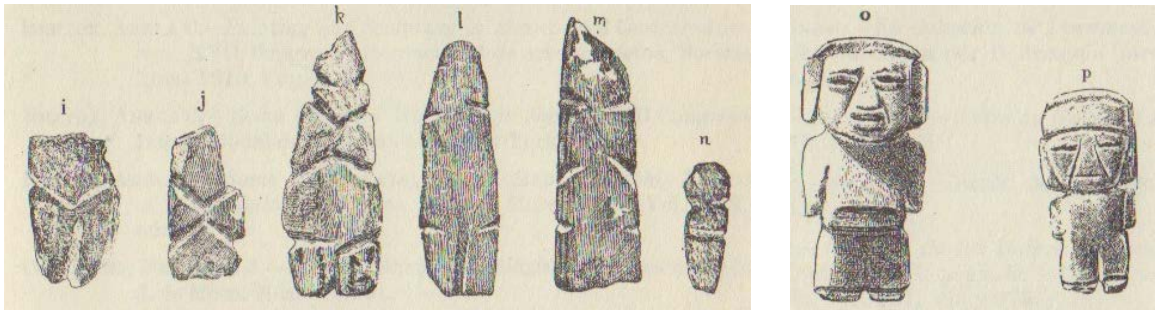


Figure 258. Slate figurines from Sun Pyramid tunnel, Teotihuacan (Gamio 1979, 2: lám. 100i-n).
Figure 259. Figurines from other probably related excavations at Teotihuacan (Gamio 1979, 2: lám 100o-p).



Figure 260. Maya style figure from Burial 5, Teotihuacan Moon Pyramid (author's photo).



Figure 261a-b. Monte Alban IIIA male and female figurines: a. from Monte Albán Mound P, Offering 1; b. Mound I (Caso 1965: 901, fig. 9, 8).

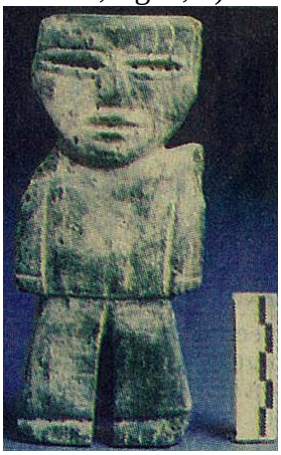


Figure 262. Schematic greenstone figurine from Palenque Site Museum (*Reforma* July 17, 1996).




Figure 263. Cacaxtla Building B figure 6 and detail of Olmec jade pendant (photo by Rafael Doniz in Matos Moctezuma 1987: 77 and author's photo).



Figure 264. Dark greenstone head pendant from Cacaxtla (author's photo).

a 
b 
c 

Figure 265a-c. a. Jade plaque with frontal torso from Cacaxtla; b) jade plaque with frontal figure; c) large jade plaque with standing figure (a. Palavicini Beltrán and Reyes Zepeda 2005:72; b. author's photo; c. http://cookjmex.blogspot.mx/search/label/Cacaxtla%20and%20Xochit%C3%A9catl).

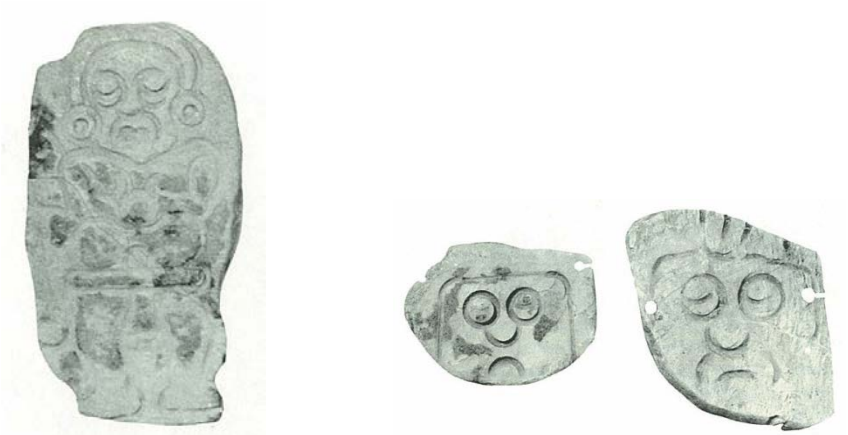


Figure 266. Epiclassic Monte Albán, Mound B, greenstone figure and head plaques form third offering (Caso 1965: 911, fig. 30).



Figure 267. Maya jade plaque from Cenote of Sacrifice, Chichén Itzá (Proskouriakoff 1974: 163, pl. 66).

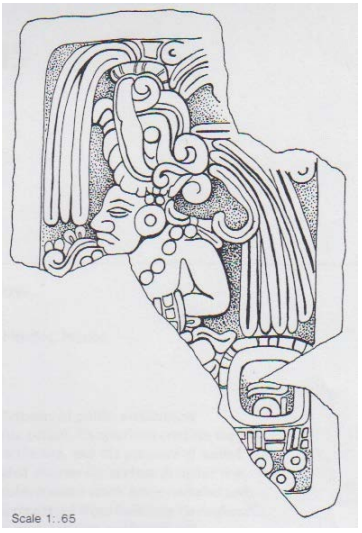


Figure 268. Ceramic plaque depicting an individual in Maya style (González Crespo, Garza Tarazona et al. 1995: 236, fig. 23).

a  b  c 

Figure 269. Maya Jade pieces from Xochicalco: a. Structure C Burial: b. Feathered Serpent Pyramid Burial 2; c. Structure C offering (author's photos).

a  b  c 

Figure 270. Plaques from a. Feathered Serpent Pyramid Burial 1; b. Structure C Burial;.c. Structure C offering (author's photos).

a  b 

Figure 271a-b. a. Tecali vessel with polychrome from Xochicalco Feathered Serpent Pyramid Offering 1; b. plain tecali vessel from Xochicalco (a. Sáenz 1986: 459; b: author's photo).



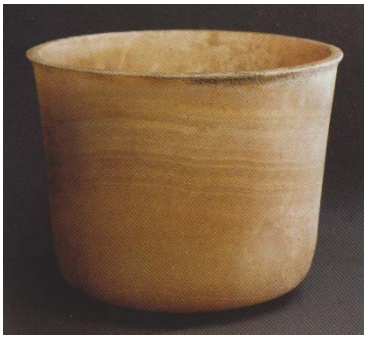


Figure 272. Tecali vessel fragment from Cacaxtla (author's photo).
Figure 273. *Tecali* vessel from Tomb 2, Yaxchilán (Miller and Martin 2004: 113, pl. 56).

a 

b 

Figure 274a-b. Large obsidian eccentrics forming Storm God face: a. from Cacaxtla; b. Xochicalco Structure E, the Great Pyramid (a. Brittenham 2008: 369, fig. 66; b. author's photo).

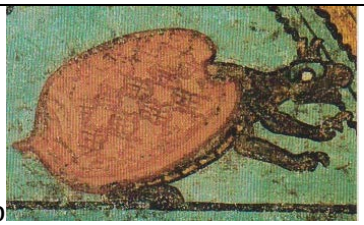




Figure 275. Miniature obsidian eccentrics from Xochicalco (author's photo).
Figure 276. Maya eccentric flint (Miller and Martin 2004: no. 82).



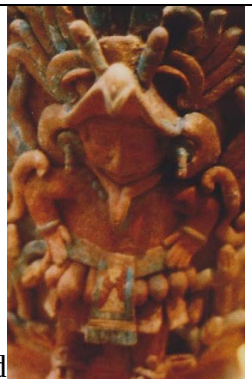
a



b



c



d



e



f

Figure 277. *Oliva porphyria:* a. perforated shell from Cacaxtla; b. Building A south portico water band detail detail; c. Building B mural, drawing of figure 37 with shell pendants tied to torso; d-f. details of shell belt pendants on Cacaxtla Urn 1,Urn 2 and Urn 3 (a, d, e: author's photos; b Stuart 1992: 129; c: author's drawing; f: accessed on internet at:
http://cookjmex.blogspot.mx/search/label/Cacaxtla%20and%20Xochit%C3%A9catl

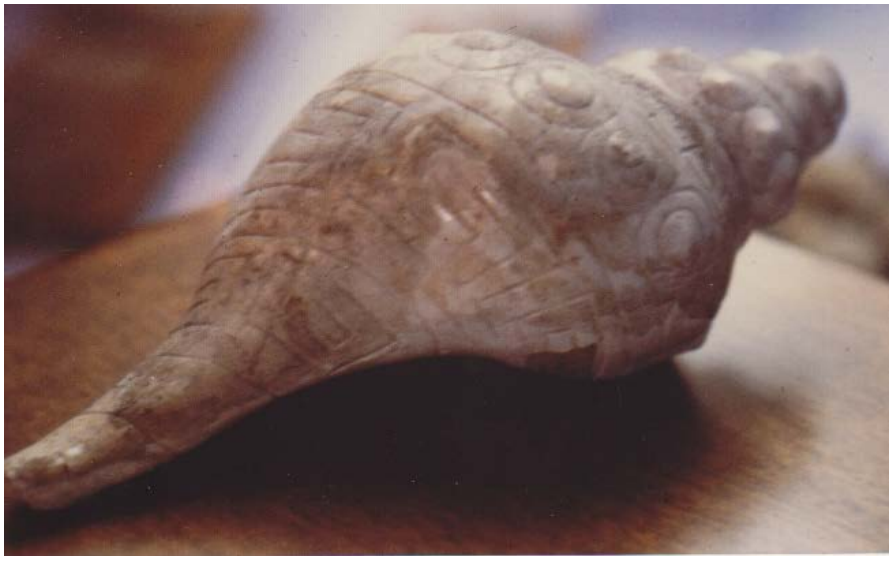


Figure 278. Carved shell trumpet from Xochicalco Site Museum (author's photo).



Figure 279. Offering in situ from the Xochicalco Feathered Serpent Pyramid (Sáenz 1986: 460).


a


b


c


d

Figure 280 a-d. a. Urn I; b. Urn II; c: Urn III; d. Urn IV (a-b: author's photos; c: accessed: http://cookjmex.blogspot.mx/search/label/Cacaxtla%20and%20Xochit%C3%A9catl). D: Claudia Brittenham photo).





Figure 281a-b. Detail of bird warriors with long red hair (Matos 1987: 77, 71).



Figure 282. Teotihuacan deformed figurines with patchy and mohawk hairdos (Berrin and Pasztory 1993: 232).



Figure 283. Tapijulapa censer base (accessed at: http://www.latinamericanstudies.org/pellicer-museum-12.htm)

a 

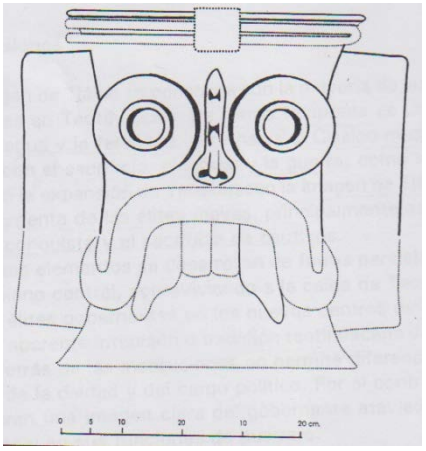
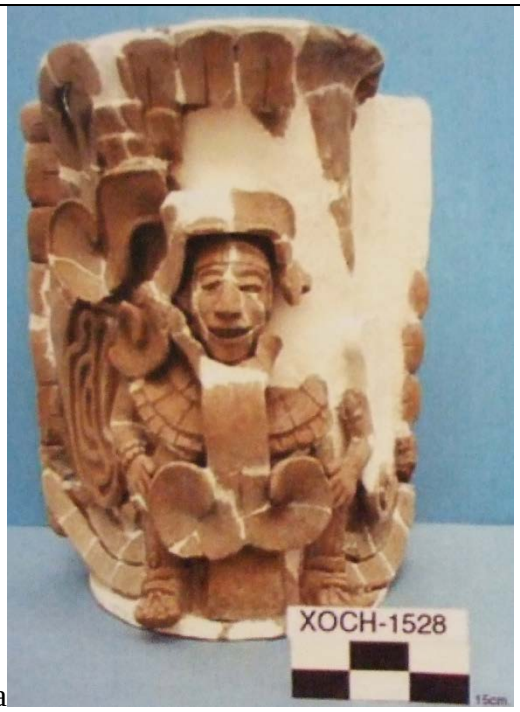
b 

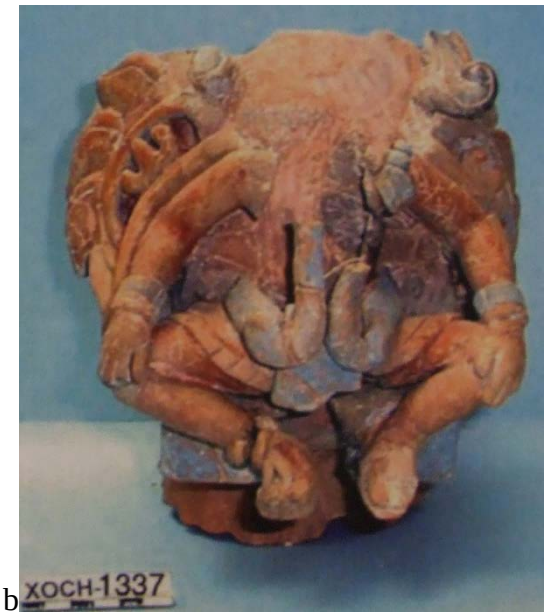
Figure 284a-b. Xochicalco censers with deities: a. Old God emerging from bird-serpent maw; b. ceramic brazier decorated with Storm God face from Xochicalco (Palavicini Beltrán 2004: 213, ilus. 8).






Figure 285a-d. Xochicalco censers with male and female figures and two head fragments (a. De la Fuente et al. 1995: 178; b-d. author's photos).

a 

b 

c 

d 

Figure 286a-d. Xochicalco effigy censers (Garza Tarazona and Alvarado León 1993-1994, 16-175: 20, fig. 1.13; 23, fig. 1.16).


a


b


c

Figure 287a-c. Cylindrical censer stands from a. Palenque; b-c. Zopo Cave, Chiapas (a. Miller and Martin 2005: pl. 125; Hernández Pons 1984: figs. 62c, a).





Figure 288. Butterfly creature effigy vessel (Garza Tarazona and Alvarado León 1993-1994, 16-175: 23, fig. 1.16).
Figure 289. Puma censer with knotted emblem (De la Fuente et al. 1995: 131).



Figure 290. Plano-relief fragment with Reptile's Eye glyph from Cacaxtla (Santana 1990: lám. 53).

Appendix A: Ethnohistorical References to the Olmeca-Xicalanca

Sources that mention the Olmeca-Xicalanca are quite varied, including native style pictorial manuscripts on European paper with prose narrative (*Historia Tolteca Chichimeca, Codex Vaticanus A*), the writings of Franciscan friars (e.g. Sahagún, Torquemada, Motolinía, Mendieta), sixteenth- or early seventeenth-century secular accounts authored by writers of indigenous ancestry (Muñoz Camargo, Alva Ixtlilxochitl, Chimalpahin) as well as later eighteenth-century historical compilations (Veytia).[1] Some of these accounts are almost identical. For example, Tlaxcalan mestizo Muñoz Camargo's work was probably copied by Franciscan Friar Torquemada, or perhaps both drew on an earlier common source (Alcina Franch 1973: 265). Mendieta and part of Torquemada are also based on Motolinía. Other sources are only vaguely related, sharing only minor details, such as the *Historia Tolteca Chichimeca* and Franciscan friar Sahagún's and Texcocan mestizo Alva Ixtlilxochitl's accounts. Although containing overt references to Sahagún, Chimalpahin's history (Lehmann and Kutscher 1958: f. 40r) differs in several respects and were probably based on local Chalco sources not used by other writers (Gibson and Glass 1975: 332; Schroeder 1991). Veytia probably had access to most of these sources, either in the form of originals or in early publications (Glass 1975); however, he apparently drew on

[1] The Olmeca or the Xicalanca are mentioned in the following sources:
Codex Vaticanus A (see Corona Nuñez 1964 III: p. 196, lám. LXXXVIII of f. 66v)
Historia Tolteca Chichimeca (see Kirchhoff et al. 1976: f. 5v, 6v, 94, 10v, 11v, 14v)
Muñoz Camargo (1966 Book 1 Chapter 3: 19-26, Chapter 6: 49-54; Book 2 Chapter 5: 208)
Muñoz Camargo (*Relaciones Geográficas de Tlaxcala*, Acuña [1984])
Torquemada (1975 Book 1 Chapter 12: 49, Chapter 13: 54; Book 3 Chapter 8: 353-354, Chapter 9: 355, Chapter 11: 361-363, Chapter 40: 452-453)
Alva Ixtlilxochitl (1952: 19-21, 469-475)
Sahagún (1961 Book 10 Chapter 29: 187-188, 192-193, 197)
Motolinía (1971 Epístola proemial: 10)
Mendieta (1945 Book 2 Chapter 33: 159-160)
Chimalpahin (see Lehmann and Kutscher 1958: f. 53r, 54r, 54v, 40v-42r, 43v-45v)
Veytia (1944 Chapter 13: 107-110)
For further general information on these sources, see Glass and Robertson (1975: 186, 220), Gibson and Glass (1975: 332, 333, 337, 338, 341, 348, 350-351, 366, 375-376, 717), Alcina Franch (1973), and Glass (1975).

all of these sources, perhaps as well as others, except for Chimalpahin. Most of these texts only peripherally mention the Olmeca-Xicalanca, usually in relation to another group of primary interest, such as the Toltecas or the Chichimecas.

Muñoz Camargo refers to the travels of the Olmecas and Xicalancas and describes an unnamed site that he identifies as their capital in Tlaxcala (Muñoz Camargo 1966: 20-21). They passed through towns located to the southwest of Cacaxtla, such as Tochimilco, Atlixco, Calpan and Huexotzinco, before they reached the province of Tlaxcala. From here, they decided to settle in the town of Santa María de la Natividad and in Huapalcalco, next to a hermitage called Santa Cruz, known by the local inhabitants as Texoloc, Mixco and Xiloxochitla, where the hermitage of San Vicente was located in sixteenth-century Muñoz Camargo's time. This is also where the hills of Xochitecatl and Tenanyacac, and the hermitages of San Miguel and San Francisco, are located. Between the last two hermitages runs the river that comes from the "sierra Nevada" of Huexotzinco. Armillas (1946) was the first to identify the site of Cacaxtla as the capital described by Muñoz Camargo as a steep, rugged hill, measuring about two leagues in circumference,[2] with five defensive terraces and surrounded by deep ravines and earthen walls. These pits served as moats or defensive trenches, and were already in an eroded state by the sixteenth century due to earlier flooding. These deep gorges must have been of colossal size for Muñoz Camargo measured these and said they were more than 20 "pasos" (steps) wide and deeper than the height of a man on a horse with a lance (Muñoz Camargo 1966: 21-22). He marveled not only at the size and strength of the ruins, but also imagined the manpower of "innumerable hands" that must have been involved in the creation of such enormous earthworks (ibid.).

[2] A league was the equivalent of 5,572.5 meters (Torquemada 1983 VII: 530).

Muñoz Camargo's geographical and physical descriptions appear to correspond with the locale and site of Cacaxtla. The town of Santa María de la Natividad is probably the present-day town of Nativitas, and Xochitecatl is certainly the hill west of Cacaxtla. Archaeologists have identified other locales mentioned by Muñoz Camargo.

Town in Muñoz Camargo	Modern town
Texoloc	Texoloc (S. Damian)
Mixco	Mixco (Armillas 1946: 138)
Xiloxochitla	S. Vicente Xiloxochitla (Armillas 1946: 138)
Tenanyacac	Tenanyecca Viejo (Armillas 1946: 138)
? (name not identified)	El Mono/T-273 (Abascal et al. 1976: 45)
? (" " ")	Atlachino/T-248 (Abascal et al. 1976: 45)

It is unclear if each town, hermitage and hill mentioned by Muñoz Camargo has been located, but there does appear to be sufficient evidence to support the site's identification with the Cacaxtla described by the chronicles. Although there are other fortified sites in Tlaxcala, such as Tetepetla and Tepeticpac (García Cook and Mora López 1974), Muñoz Camargo's account seems to correspond more closely with the ruins at Cacaxtla.

Because of the paucity of references to the Olmecas and Xicalancas in the chronicles, there is considerable disagreement over their identity, origins, history, cultural characteristics and ethnic or linguistic affiliations. The Olmeca-Xicalanca are often mentioned in connection with other groups; however, the nature of their relationship with these other peoples is unclear. Some groups apparently accompanied the Olmeca-Xicalanca on some phase of their migrations, and branched off. The Olmecas (or Ulmecas) appear in all sources discussed in this section, while the Xicalancas (or Xicallancas) are mentioned by

all, except for Sahagún. There is no overlap in the other groups associated with the Olmeca-Xicalanca. Muñoz Camargo and Torquemada often refer to the Chalmecas, Zacatecas and Chozamecas (or Chocamecas), while Sahagún places the Olmecas with the Uixtoti and Mixteca. Chimalpahin mentions the Xochteca, Quiyahuizteca and Cocolca along with the Olmeca-Xicalanca in a repetitious, almost liturgical chorus, while Veytia mentions only the Zapoteca, perhaps a misunderstanding of Muñoz Camargo's Zacatecas or Sahagún's Mixteca.

It is unclear whether indeed many different groups accompanied the Olmeca-Xicalanca on their migrations and thus each source describes different phases of Olmeca-Xicalanca alliances and history, or whether these various names for other groups are in some way synonymous, or whether the chroniclers may have erred in recording the names of these groups, particularly in light of the much later date of these written sources referring to eras in the distant past. Davies (1977: 107) suggests the various group names may have had a chronological significance with "Olmeca Uixtotin" as an early appellation, "Xicalanca" as an intermediate one and "Zacateca" as a more recently adopted name. Similarly, Jiménez Moreno (1942) also attempts to differentiate between chronological phases of the Olmeca-Xicalanca mentioned by the chroniclers, but his schema reverses the order proposed by Davies. For Jiménez Moreno (1942), the earliest are the Classic period Olmeca ("Paleo-Olmeca") described by Alva Ixtlilxochitl as inhabitants of Potonchan. These are followed by the twelfth-century "Neo-Olmeca" of Cholula and Tlaxcala, as discussed by Alva Ixtlilxochitl, the *Historia Tolteca Chichimeca*, and probably also Muñoz Camargo and Torquemada. These are followed by Chimalpahin's thirteenth-century Olmeca of Chalco-Amecameca and finally by the fifteenth-century "Post-Olmec" of Sahagún. Based on the meager references available, it is difficult to identify sufficient

evidence to support one theory over another. The Olmeca-Xicalanca seems to form the core most frequently mentioned in ethnohistorical sources and thus will be referred to solely as Olmeca-Xicalanca, without reference to the other groups.[3]

Chronicles also disagree on the origins of the Olmeca-Xicalanca. With the exception of the *Historia Tolteca Chichimeca*, all sources allude to the origins of the Olmeca-Xicalanca, however they offer little consensus. Muñoz Camargo (1966: 23-24), Torquemada (1975: 49), Motolinía (1971: 10), Mendieta (1945: 159-160), and the *Codex Vaticanus A* (Corona Núñez 1964: 196, f. 66v) locate the homeland as the Seven Caves, Chicomoztoc, also the mythical place of origins for the Mexica, sometimes identified with a location in northern Mexico or West Mexico (León-Portilla 2001: 20, 26). Also in a mythical tone, the Olmeca and Xicalanca are listed as two of Iztac Miscoatl's (*sic* Mixcoatl's) six sons, who eventually went on to populate the earth. Other sources suggest the Olmeca-Xicalanca came from the east (Sahagún 1961 Book 10: 187; Alva Ixtlilxochitl 1952: 19, 470; Veytia 1944: 107), perhaps a metaphorical allusion to a place of origins based on the sun's "birth" in the east, although Alva Ixtlilxochitl (1952: 19) goes as far as to specify Potonchan (Tabasco) as the homeland of the Olmeca-Xicalanca. Sahagún describes the flora, fauna and riches of this homeland to the east, which he refers to as "Tlalocan," "Place of Wealth" and "Tamoanchan" (Sahagún 1961 Book 10: 187, 188, 192), names usually used for a mythical paradise.[4] The products listed by Sahagún exemplifying this "wealth" (ibid.) include cacao beans, the "divine ear spice," wild cacao, liquid rubber, magnolia flowers, troupials, red spoonbills, blue cotingas, white-fronted parrots, Mexican

[3] There is also some confusion between the Nonoalca and the Olmeca-Xicalanca, for the origins of both are sometimes linked with the Gulf Coast (Davies 1977: 166-167).

[4] For more on Tamoanchan, see discussion of Xochicalco ethnohistory and footnotes on p. *** and also López Austin (1994).

parrotlets, greenstones, turquoise stones, gold and silver. Many of these goods appear to be from tropical hotlands or coastal lowland environments, but could refer to diverse tropical areas.[5] Jiménez Moreno (1942: 119, 121, 124) says distribution of these plants extends from the Olmec region of Veracruz and Tabasco to the Mazatec and Chocho-Popoloca regions of northern Oaxaca and eastern Puebla, but he identifies the Olmeca-Xicalanca region par excellence as the coastal area between Xicallanco near Boca del Río, Veracruz, and Xicallanco, Campeche. On the other hand, according to Kirchhoff (1940: 99-100), the Xicalanca went eastward to Xicalanco after the Olmeca-Xicalanca were defeated at Cholula. Motolinía (1971: 10) and Torquemada (1975: 49) also say the Xicalanca settled at Xicalanco, but do not say when. Also supporting eastward movement, Jiménez Moreno (1942: 136; 1966: 62) says that the Olmeca went to the Gulf Coast from the Valleys of Morelos or Mexico and has suggested that an earlier cradle may have been in Guerrero or in the Mixteca Baja.[6] According to Chimalpahin (Lehmann and Kutscher 1958: f. 41r), the Olmeca-Xicalanca were searching for Tamoanchan (rather than coming from it),[7] Xochitlalpan ("On the Flowery Ground") and "Parayso Terrenal" ("Earthly Paradise") in their migrations from the north, "Mictlampa Norte" (ibid.). Thus, the Olmeca Xicalanca are

[5] "Turquoise stones," if referring to what we know today as "turquoise," would suggest a northern source. However, Mesoamerican peoples often conflated precious blue (i.e. turquoise) with blue-green or green, so perhaps the allusion here is to precious greenstone or jade (Doris Heyden, personal communication, October, 1984).

[6] Jiménez Moreno's theory is at least partially based on ethnohistorical references to Tamoanchan, said to be the Olmeca homeland in Morelos or Chalco-Amecameca or near Teotihuacan. His evidence for Guerrero and the Mixteca Baja are unclear.

[7] Davies (1977: 93) fundamentally agrees that "Tamoanchan" should not be interpreted literally as a single location. However, he believes the term was used to refer to a core region of Teotihuacan-Cholula civilization (ibid.). Others have suggested that "Tamoanchan" referred to Xochicalco or to the Valley of Mexico and Morelos area in general, to the west, to the south, and even to the east, Gulf Coast (summarized in Davies 1977: 100-104), while López Austin (1994: 47) suggests Tamoanchan was a term used to frame mythical histories of different groups said to come from an archetypical Tamoanchan and who thus search for a promised land chosen for them by their patron god to settle, a place that also mirrors Tamoanchan.

said to be people from the east, the north and perhaps also to the west. They are often associated with places of origin or mythical paradises of wealth as either a starting point or a destination; it is difficult to determine the degree of historical or geographic veracity of these references, which appear to be more mythical and metaphorical than historical.

Based on the chronicles, Olmeca-Xicalanca history is also complex, for the sources provide contradictory information on their dates, migration routes, settlements, encounters with local groups, and ruler genealogies. Texts with chronological information employ dates in one of three forms: 1) Christian years, 2) cyclic years of the native calendar, and 3) in extremely generalized descriptive terms. This second form of dating is especially problematic because there is little evidence to anchor dates to specific 52-year cycles. It also remains possible that the disparate references to this group are pieces from different phases of their history. However, given the elusiveness of identifying this ethnic group in the archaeological record, it is difficult to identify them with specific locations on a material basis.[8]

The types of events most often recorded and dated are Olmeca-Xicalanca arrivals in the course of their migrations, as well as Olmeca-Xicalanca defeats or victories. Alva Ixtlilxochitl (1952: 19, 470) dates Olmeca-Xicalanca rule in mythical or cosmic terms to the Third Era or Third Sun, Ecatonatiuh (*sic* Ehecatonatiuh), prior to Toltec domination during the Fourth Sun. According to Veytia (1944: 107), the Olmeca-Xicalanca arrived in Anahuac some years after they corrected their calendar, which is not more clearly dated. Interpreting the chronicles, Jiménez Moreno (1966: 65, 67) dates the beginning of Olmeca

[8] From an archaeological perspective, there is little precedent for identifying migrant groups, which would be expected to have more of a portable material culture, which then conquered local centers (cf. the Huns?) to then continue on their migrations. The Huns and Celts, for example, have left material remains emphasizing personal adornment and weaponry (REF?).

tyranny at Cholula to about A.D. 800.[9] However, this date is not universally accepted; Nicholson (1982: 242), Davies (1977: 116-120) and León Portilla (ibid.) regard Torquemada's reference as ambiguous, lacking a foundation anchoring it to the Christian calendar. Muñoz Camargo (1966: 22-23) states the Olmeca-Xicalanca reached Tlaxcala about 370 years before the writing of his account, which has been dated to the late sixteenth century; this would mean the early thirteenth century. This would imply that Muñoz Camargo's thirteenth century date for Olmeca settlement in Tlaxcala is either erroneous or else it might refer to the dispersal of Olmeca refugees after their expulsion from Cholula.

Olmeca-Xicalanca defeat at Cholula is dated to 1 Flint (*Historia Tolteca Chichimeca*: f. 14v),[10] while Olmeca-Xicalanca defeat at Amecameca is dated to 3 House in A.D. 1261 (Chimalpahin, see Lehmann and Kutscher 1958: 43r, 44r). Their expulsion from Tlaxcala is dated to 5 Flint (Muñoz Camargo 1966: 53-54), while according to Veytia who perhaps confused earlier accounts, Olmeca-Xicalanca defeat of the giants is dated to 1 Rabbit (Veytia 1944: 108). The possible inter-relationship of these dates is unclear, for these sources (Chimalpahin, Muñoz Camargo and the *Historia Tolteca Chichimeca*) deal with different geographic locations. They might refer to different phases of Olmeca-Xicalanca history. However, it is more likely that they form part of a metanarrative aimed

[9] He reaches this conclusion based on Torquemada's reference to the expulsion of the Nicaraos from the Cholula region by the Olmeca. Jiménez Moreno speculates that Torquemada's source is the *Relaciones Geográficas* of 1580. According to Torquemada, the Nicarao migration began seven or eight "lives, lives of the old ones" ago (Torquemada 1975: 452). The latter time period probably refers to a 104-year phase (two times a 52-year cycle), thus, 1580 minus 728 (7 x 104) or 832 (8 x 104) yields A.D. 852 or 748, the average of which is approximately A.D. 800 (Jiménez Moreno 1966: 67).

[10] The date 1 Flint is not explicitly given in the *Historia Toltec Chichimeca*, rather it is deduced from the statement that the Toltec conquest of Cholula was followed by five years of peace and that in the sixth year, 6 House, war was waged (Kirchhoff et al. 1976: 158, f. 14v). See Davies (1977: 171-172, 442) and especially Umberger (1981: 280ff) for the symbolic significance of the date 1 Flint linked to Mexica origins and beginnings.

Jiménez Moreno (1967: 18) dates the Olmeca conquest of Cholula to 800 A.D., but he does not cite his evidence.

at fulfilling local agendas more than impartially recording historical events. Thus, the sources do not appear to concur on dates pertaining to the Olmeca-Xicalanca era, thereby precluding any attempt to define more clearly the chronology of this group.

In contrast, the texts offer some general agreement when it comes to aspects of Olmeca-Xicalanca migrations. Several sources agree on the presence of this group around Atlixco and the Rio Atoyac in the Puebla-Tlaxcala region (Muñoz Camargo, Torquemada, Alva Ixtlilxochitl, Chimalpahin and Veytia). However, other sources also refer to Olmeca-Xicalanca "coastal" migrations toward the east, perhaps during a later period. Sahagún (1961 Book 10: 192) says the Olmeca-Xicalanca followed those who went east and they came upon the sea coast. Numerous sources say the Xicalanca settled on the Gulf Coast. Alva Ixtlilxochitl (1952: 370) says they came from Potonchan, Tabasco. Veytia (1944: 107) perhaps based on Ixtlilxochitl, says they came to Pánuco, northern Veracruz, in ships.[11] Various sources say that the Xicalanca settled at Coatzacualco and beyond at Xicalanco on the north coast, as well as at Xicalanco near the port of Veracruz (Motolinía 1971: 10; Mendieta 1945: 160; Torquemada 1975: 49). Based on ethnohistorical sources, Jiménez Moreno (1966: 63, 65) suggests people from Cholula (i.e., Olmeca) migrated eastward (rather than to the northwest to Tlaxcala) toward the Mixtequilla and the Los Tuxtlas regions passing through Tehuacan and Teotitlan del Camino, while Kirchhoff (1940: 99-100) suggests the Olmeca and Xicalanca split up, the Olmeca going north and the Xicalanca to the southern Gulf Coast area of Xicalanco.

Although the Gulf Coast area is mentioned by numerous sources, it is unclear whether the Olmeca Xicalanca came from this region, whether they went there after their

[11] According to Davies (1977: 20-21), maritime travel is attributed to practically every migratory group and should not be taken literally; often such descriptions may have referred to river crossings, rather than ocean crossings.

expulsion from the Central Highlands, or even both. According to some sources, from the Gulf Coast the Olmeca-Xicalanca moved inland, passing the already populated area of the lakes and the towns around the volcanoes and Sierra Nevada (Muñoz Camargo 1966: 189; Torquemada 1975: 353). According to Muñoz Camargo (1966: 19), the Chalmecas branched off and stayed at Chalco, while the Olmeca-Xicalanca moved on around the southern end of Popocatepetl to pass through Tochimilco and then to move northward along the banks of the Atoyac River through Atlixco, Calpan and Huexotzinco, until they reached the present-day state of Tlaxcala near Santa María/Nuestra Señora de la Natividad (ibid.; Torquemada 1975: 353). Here they made their principal settlement, referred to by Torquemada (ibid.) as Yancuitlalpan which means "On the New Land."

According to Muñoz Camargo and Torquemada (ibid.), the Olmeca-Xicalanca found the area uninhabited, although this was clearly not the case in the Cacaxtla region, based on archaeological remains spanning Preclassic to Postclassic phases (López de Molina and Molina Feal 1986: 18). According to some accounts, they continued moving further north, passing through Huapalcalco and Xilotepec and Tepotzotlan and Quauhtitlan (Muñoz Camargo 1966: 20, 26; Torquemada 1975: 353, 355; see Gerhard 1972: 332). Numerous other settlements are mentioned on the migratory route of the Olmeca-Xicalanca, but the present-day equivalent or location cannot always be determined; a deeper investigation of this matter is beyond the scope of this work, which is meant to reassess present-day knowledge on the Olmeca-Xicalanca. Chimalpahin (Lehmann and Kutscher 1958: f. 40r, 41r, 42r, 45r, 54r) is the only chronicler to locate the Olmeca-Xicalanca at Amaquemecan (Amecameca or Chalchiuhmomoztli). Chimalpahin (ibid.: 42r, 45r) is also the only writer to mention a series of towns with curiously scatological names (Cuitlatepec or Cuitlatetelco, "Excrement Hill"; Ehecaticpac, "On the Wind"; and

Cuitlaoztoc, "Excrement Cave"), where the Olmeca-Xicalanca were said to "relieve" themselves or "urinate."[12]

Most sources locate Olmeca-Xicalanca settlements in the Puebla-Tlaxcala area, although the precise locations of towns mentioned cannot always be determined. The *Historia Tolteca Chichimeca* (Kirchhoff et al. 1976: f. 5v, 6v, 9r, 10v) mentions Cholula (called Tlachiualtepetl) along with several other towns. Alva Ixtlilxochitl (1952: 20, 470) and Veytia (1944: 107, 108) also mention Cholula and refer to settlements on the banks of the Atoyac between Puebla and Cholula. Muñoz Camargo (1966: 20) and Torquemada (1975: 353-354) refer to the same general area, but say that the principal Olmeca-Xicalanca settlement was near Santa María/Nuestra Señora de la Natividad, the area that appears to correspond with the archaeological zone of Cacaxtla. Only Sahagún (1961 Book 10: 188) and Chimalpahin (Lehmann and Kutscher 1958: f. 42r, 43r) do not corroborate the information on Olmeca-Xicalanca settlements found in other sources. Sahagún describes their settlements in more paradisiacal or mythological terms, referring to Tlalocan and Tamoanchan (1961 Book 10: 188) and to Mount Chichinauhia or Popozonaltepetl where pulque was made (ibid.: 193). Chimalpahin appears to refer to an area different from that discussed by other chroniclers and perhaps refers to a different group of peoples or to a part of Olmeca-Xicalanca history earlier or later than that treated by other chroniclers. He places the main Olmeca-Xicalanca settlement at Chalchiuhmomozco or Amaquemecan (Amecameca), but like Sahagún, he also refers to this place as Tamoanchan. Chimalpahin mentions other Olmeca-Xicalanca settlements, Xochtlan and Quiyahuiztan, but the modern counterparts are not clear (Lehmann and Kutscher 1958: f. 45v).

[12] I thank Louise Burkhart for verifying Nahuatl terms herein. The scatological nature of Chimalpahin's place names is also pointed out by López Austin (1988: 21, 88).

The chroniclers also provide contradictory information on Olmeca-Xicalanca history. According to some accounts, they were the first settlers in Tlaxcala (Muñoz Camargo 1966: 24; Torquemada 1975: 354), while according to others, they encountered giants who enslaved them (Alva Ixtlilxochitl 1952: 470-471; Veytia 1944: 107-108). The latter story about giants appears to be a variation on the *Historia Tolteca Chichimeca* account of Olmeca-Xicalanca cruelty to the Toltecs, who were said to have served the Olmeca-Xicalanca as slaves (Kirchhoff et al. 1976: f. 10v). Tezcatlipoca instructed the Toltecs to destroy their masters with their own weapons (ibid.: f. 11v), while Alva Ixtlilxochitl (1952: 470) says that the Olmeca-Xicalanca defeated the giants with their own arms. Chimalpahin records a completely unrelated narrative about the defeat of the Olmeca-Xicalanca by the Chichimec prince Atonaltzin (Lehmann and Kutshcer 1958: f. 43r, 43v, 44r, 44v).

Similarly, references to historical Olmeca-Xicalanca leaders display little correlation. The *Historia Tolteca Chichimeca* has an extensive list of Olmeca-Xicalanca captains (Kirchhoff et al. 1976: f. 9r-10v) that does not appear to be reproduced in any other source. Muñoz Camargo (1966: 23, 51, 54) and Torquemada (1975: 354, 362-363) duplicate the names of several Olmeca-Xicalanca chiefs (Coxanatecuhtli, Ixcohuatl, Xopanuatecuhtli or Xopancatecuhtli, and Colopechtli), not found in any other source. On the other hand, Sahagún (1969 Book 10: 192) says the Olmeca-Xicalanca were led by a sorcerer called Olmecatl Uixtotli. Similarly, Veytia (1944: 207) says the Olmeca chief was called Ulmecatl, and Xicalanca chief called Xicalancatl, and the Zapotecas chief called Zapotecas.

However, there is surprising agreement among the chroniclers concerning Olmeca-Xicalanca political organization. Several sources describe a dual political order with two

chiefs called the *tlalchiach* and the *aquiach*, a system that survived until the sixteenth century (Kirchhoff et al. 1976: f. 9r, 14v; Muñoz Camargo 1966: 208; Torquemada 1975: 361; Rojas 1927: 160). Represented by the jaguar and eagle respectively, the *tlalchiach* was considered "the chief of that below the earth," while the *aquiach* was "the chief of that above" (Rojas 1927: 160; Muñoz Camargo 1966: 208). Olivera and Reyes (1969: 252) say these designations refer to a cult of the earth (jaguar/below) and of water (eagle/above) respectively. The distinction between the responsibilities of these chiefs, whether functional, territorial, ceremonial or otherwise, is unclear, although Olivera and Reyes (1969: 252) say that these chiefs were in charge of two different capitals.

The authors who describe aspects of Olmeca-Xicalanca culture view them through a filter that idealized the past. The Olmeca-Xicalanca are described as extremely wealthy people (Sahagún 1961 Book 10: 187, 188; Kirchhoff et al. 1976: f. 5v) who possessed many cultural traits. The men wore tied-on capes, sleeveless jackets, bark paper breechclouts and precious rubber sandals, while the women's garb included wide armbands of greenstone, plaited necklaces with pendants and sandals (Sahagún 1961 Book 10: 188). The men were good hunters, carrying bows and copper hatchets, while the women were skilled in working cotton thread and embroidery, and were said to have discovered the preparation of agave juice (ibid.: 188, 193).[13]

As for religion, the Olmeca-Xicalanca are said to have introduced the Quetzalcoatl cult and the worship of the cross (Alva Ixtlilxochitl 1952: 20, 470), while other sources say they worshipped a sacred spring around which a temple was built (Lehmann and Kutscher 1958: f. 41v). Although the Olmeca-Xicalanca are, for the most part, portrayed as civilized,

[13] The introduction of metalwork into Mesoamerica is considered a late phenomenon, at earliest dating to the Early Postclassic. Metalwork has not been found at Cacaxtla to date and only a few pieces of greenstone ornaments have been discovered to date (see chapter 4 on portable elite goods).

cultivated people, they are also described malevolently as magicians, wise men, sorcerers and proprietors of spells (Sahagún 1961 Book 10: 192; Lehmann and Kutscher 1958: f. 53r, 54r-54v, 41v, 42r, 44r). Chadwick (1966) proposes the Olmeca-Xicalanca were not only artisans, but also merchants, responsible for the manufacture and distribution of Teotihuacan Thin Orange Ware. However, there is little evidence for the identification of the Olmeca Xicalanca, except for references to the port of Xicalanco as center for trade in later times long after the fall of Teotihuacan (Motolinía 1971: 10; Mendieta 1945: 160), and there is no data specifically linking them to Thin Orange.

The ethnic and linguistic affiliations of the Olmeca-Xicalanca are equally vague. The different groups, Olmeca-Xicalanca and Zacatecas, are said to be of the same appearance and disposition, and to speak the same language (Muñoz Camargo 1966: 23; Torquemada 1975: 354). In later times they were referred to by the Aztecs as *tenime* ("barbarous") because they spoke a non-Nahuatl tongue, although many spoke Nahuatl as well (Sahagún 1961 Book 10: 187-188; Veytia 1944: 109). Some sources say the Olmeca-Xicalanca were kinsmen to the Culhuas, Tepanecs, Aculhuas, Chalmecas, Teochichimecs and Chichimecs (Muñoz Camargo 1966: 25; Torquemada 1975: 355) or a branch of the Toltecs (Sahagún 1961 Book 10: 187; Alva Ixtlilxochitl 1952: 47i4--?; Veytia 1944: 109).[14] Jiménez Moreno (1942: 127ff; 1966: 62) proposes that the Olmeca-Xicalanca of Cholula and Tlaxcala were a tri-ethnic group consisting of Chocho-Popoloca and Mixteca speakers who were deeply "Nahuatlized." This is based on two assumptions: 1) the sixteenth-century situation largely mirrored the ethno-linguistic composition of the area centuries earlier, 2)

[14] According to Linné, the Aztecs used the term "Toltec" to denote all highly cultured peoples who existed before their time, a meaning that perhaps explains references to the Olmeca-Xicalanca as Toltecs (Davies 1977: 130).

ceramic resemblances can be interpreted as physical manifestations of cultures.[15] According to Kirchhoff (1940: 100), contradictions in the chroniclers arose precisely because of the former approach and their descriptions of the linguistic situation compressed the many changes that must have occurred. Along the same lines, Davies (1977: 110) states the ethnic and linguistic composition of the Olmeca-Xicalanca cannot be clearly defined because the name was applied through time to different peoples who probably spoke different languages; this would indeed help to explain the disparity of information linked particularly with this group. Guevara Hernández (n.d.) proposes the Olmeca-Xicalanca were originally Maya people, citing Lombardo de Ruiz's contention that Cacaxtla's mural paintings reveal their origin in the Usumacinta or Tabasco regions. He suggests they were essentially the Putun Itza discussed by J. Eric S. Thompson as a people that became gradually acculturated with Nahuatl groups.

[15] Mixteca-Puebla style ceramics have long been read as material culture showing movements of people or trade routes based in the Central Highlands. However, Smith and Smith (1980) have shown that the style has its roots in West Mexico rather than the Oaxaca or Puebla-Tlaxcala region, as previously believed.

APPENDIX B: Cacaxtla and Xochicalco Environment and Resources

Cacaxtla

The climate of the area surrounding Cacaxtla in the state of Tlaxcala is similar to that of the Valley of Mexico. Rain falls mostly in heavy thunderstorms during the summer months, while winters tend to be cool and dry (Snow 1969: 132). Precipitation varies between 700 mm to 800 mm annually (Santana 1977-78).

The environment of the Cacaxtla region is rich in natural resources. Water sources to the west include the Atoyac River, which continues into Puebla, changes names, and goes to Oaxaca, Guerrero and Michoacan, and drains into the Pacific under the name of Balsas (Enciclopedia de México 1977: 2253). To the east is the Zahuapan River, the Rosario Lagoon to the north, marshes to the south and springs in many of the hills in the area (López de Molina 1980b: 296; López de Molina and Molina Feal 1980: 7; Molina Feal 1980: 43-44). Arable lands border the southern marshes and the northern lagoon, while the surrounding plains and the terraced slopes of the hills themselves were often cultivated (López de Molina 1980b: 296). Subsistence was probably based on a combination of varied cultigens and fauna. Sahagún mentions maize and gourds as Tlaxcalan products for pre-Hispanic times (Gibson cited in Snow 1969: 142). Today maize, tomatoes, beans, alfalfa, broad beans, lima beans and *huauhtli* (amaranth) are among the major crops grown (López de Molina and Molina Feal 1977: 2; Molina Feal 1980: 44), while maize, gourds and maguey are noted as particularly marketable commodities from the area (Gibson cited in Snow 1969: 142). Other local resources include limestone, *tepetate* and *tufa* for

construction, clay for adobe and pottery, as well as wood, especially pine, and igneous stones (Molina Feal 1980: 43; López de Molina 1980b: 296).

Within the last century, major changes have affected the environment and area's productivity (Molina Feal 1980: 44). The drying up of marshes and the Rosario Lagoon, deliberately carried out in the mid-twentieth century, has led to increased desiccation in this already semi-arid region. The felling of trees has resulted in hill erosion, prevented only by droughts. Heavy exploitation has reduced certain previously arable lands to dusty fields (ibid.). These changes suggest a decrease in the land's productive capacity. Reports from the time of the Conquest describe fertile areas covered with grass, rivers bounded by reed swamps and hills more extensively covered by oak and pine forests (Snow 1969: 132; Solís y Rivadeneira cited in Santana 1977-78: 11-12). These early accounts provide a dramatic contrast to the present situation.

Xochicalco

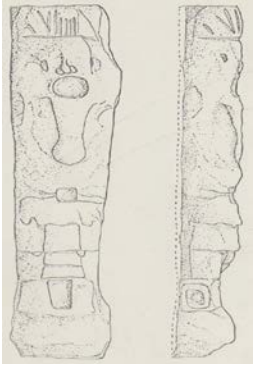
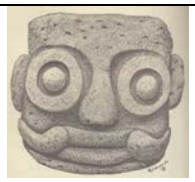
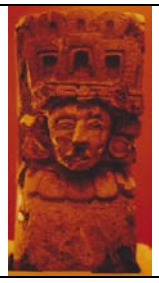
Other factors affecting the choice of its location might have included climate and resources. Xochicalco is located in a transitional climatological zone of hot to semi-hot temperatures (Hirth 1983: 21). Average annual rainfall is 1.040 m, most of which falls during the summer (ibid.) and which would have been adequate for pre-Hispanic agricultural needs (Hirth 1984: 579). Other major water sources in the region are the Tembembe River and the Coatetelco Lake, as well as small local springs (Hirth 1983: 20). Despite the availability of these water sources around the site, agricultural productivity would have been limited due to the thin soil with poor water retention (Hirth 1984: 579; 2000: 22), as well as due to the abundance of well-defined gullies that would have prevented simple irrigation by channeling water courses, which meant it would have been

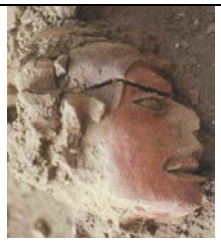
necessary to elevate the water level 25 to 75 m above river level (Hirth 1983: 20). Some fertile alluvial bottomland could be found within a 5 km radius of Xochicalco (Hirth 1984: 579) and it has been suggested that rural groups might have been linked to Xochicalco via regional administrative centers which supplied resources, perhaps in the form of tribute (Sanders 1952: 32; Hirth 1984: 581).

Actual fauna species identified as food sources found in house middens include the domesticated turkey, cottontail rabbit, jackrabbit, white-tailed deer, and boney fish as well as the domesticated dog, although the latter might not have been for consumption (Heath-Smith 2000). Local flora differs depending on soil and water conditions and includes *caulote* (a variety of mulberry tree), peanuts, guayaba (a tropical fruit), copal (resin) and annona (guanabana) in semi-arid regions and prickly pear (cactus with edible fruit and leaves), huizache (tree producing seeds for dyes), *tehuistli* (soapberry) and *cuatecomate* (gourds) in arid zones (Hirth 1983: 21; Garza Tarazona and González Crespo 1995: 91). Other produce grown at or below the 1000 meter level include cotton, mamey, zapote and avocado (Hirth and Angulo 1981: 138). Plant remains identified from excavations in pre-Hispanic Morelos include annona (or guanabana), avocado, beans (legumes), nance fruit, hog plum and cacao, the latter identified as a trade item (Lentz 2000).

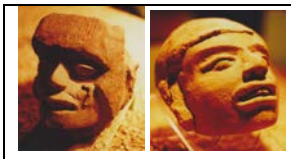
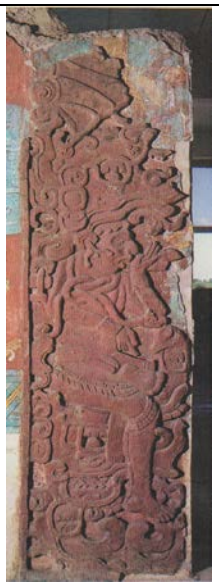
Other resources in the immediate vicinity of Xochicalco include andesite, tezontle, and limestone for construction, flint for simple cutting tools, black basalt for grinding stones and construction, and cinnabar for pigments (Hirth 1983: 19-20). Lime for stucco could be processed from local rock (Hirth 2000: 20).

APPENDIX C: List of Sculpture from Cacaxtla

	Monolith. The largest stone monument from Cacaxtla is a rudimentarily carved andesite block, measuring 2.5 m x .8 m wide and .5 m deep (Abascal 1973); otherwise only small, schematic or crude carvings are known from the site. Attributing a seventh to eighth century date to the monument, Abascal (1973: 36) considers it a prototype for later Toltec supporting figures. However, it was found on the surface of La Mesita south of the Great Platform. It is unclear whether the monument was ever completed or used, due to its present crude, eroded state.
	Columnar anthropomorphic sculpture. Much smaller in scale than the monolith above, it is believed to be from Cacaxtla and was found in the possession of Don Miguel Guevara Bañuelos, a resident of San Miguel del Milagro (Armillas 1941 CXVI-868-3). The shape of the mouth suggests Olmec period sculpture, so the piece might pertain to Cacaxtla's Formative period occupation.
	Headless, cross-legged stone figure. It was found during Salvage Archaeology work when the roof was built to cover the site (Sánchez de Real 1987, np). The lack of the head makes it unclear whether it depicts a human or a deity such as the Old Fire God.
	Stone Tlaloc head. It was reportedly found in a burial on the western slope of Cacaxtla hill, but only a drawing has been published (Jiménez Ovando 1988: 64, fig. 6).
	Stone bust with a trapeze-and-ray headdress. It was found on one of the terraces near the site. Sculptures of this type have been reported for the Epiclassic and Early Postclassic period.

	Plain stone ballcourt marker. It was uncovered by the Salvage Archaeology project during construction of the colossal roof.
	Building E, unfired clay anthropomorphic relief. It was attached with lime plaster to an exterior pier of Building E (Molina Feal 1980: 78, 102, 110). Executed in an essentially naturalistic style, these remains showing a standing, elaborately garbed figure, flanked by vegetation
	Polychrome unfired clay fragments. They were found together near Building B (Molina Feal 1980: 54-55, 110; Brittenham 2009). The fragments represent corn, shells, flowers, parts of a serpent or chiton and bear traces of red, yellow, and blue pigment.
	Three-dimensional clay figural sculpture. In 1986 the Mexican Salvage Archaeology Department team uncovered a large, three-dimensional, anthropomorphic clay sculpture in a pit, approximately three meters deep, located at the base of the hill near the modern stairway leading up to the summit.[16] Approximately life-sized, this sculpture represents an elaborately garbed male with undulating belt resembling the victorious warriors in the Building B murals.
	Human head. A head fragment of an apparently similar, three-dimensional sculptural type has been published (Sánchez de Real 1987).

[16] I thank archaeologist Octavio Paredes for allowing me to see this sculpture while it was still in the ground. Photos were taken of the piece after restoration while on exhibit in the Museo Nacional de Antropología, Mexico (April 1990). The location of the pieces suggests they were carefully placed in a ritual deposit and cached, like other fragments of sculpture and mural painting found at the site (Brittenham 2009).

 	Three male heads. Based on scale and treatment of facial features, these seem to form part of a series of figures like the clay figural sculpture above. They were uncovered during the Salvage Archaeology Project at Cacaxtla.
	Monochrome, dark red unfired clay relief.[17] It was placed on top of a portion of the murals flanking the door of Building A. It appears to be executed in a different style from the other examples. Slender in proportions, shown in a profile, half-lotus position with one leg hanging and elaborate hand gestures, the figure is shown wearing an elaborate headdress, knotted serpent necklace, and short loincloth. The most ornate portions are the figure's fantastic throne and headdress, both of which share elements of a bat and the Maya *cauac* or *witz* monster, identified by the grape-like cluster of small circles. (Image from Sánchez del Real 1998 np).
 	Three Storm God heads. At least three Storm God heads other with similar facial treatment (but without the human face beneath), have also been found in the Palace area.[18] All specimens, about 7-10 cm in height, have rounded, hollowed out backs, but due to their fragmentary condition, their original shape (perhaps as Tlaloc vessels?) and function are unclear.[19] All three examples are stylistically similar and are made of an orangish clay. One has traces of blue on the upper lip, while another seems to have traces of red slip. Similar to the human head of the masked Storm God *almena* described above are head fragments with mouths showing T-shaped dental mutilation (Cacaxtla

[17] Karl Taube (July 1986 personal communication) noted the similarity in color between zapote wood, often used for lintels in the Maya region, and this relief's deep, dark red paint.

[18] These were found in excavation quadrant: I'-26, E'26&I, and O' or D'-37/I during the Molinas' third excavation season (based on numbered registered on these artifacts).

[19] Similar Tlaloc heads in clay forming Tlaloc vessels in different shapes and obsidian eccentrics of a Tlaloc face or were also found at Xochicalco. (see Palavicini Beltrán 2004).

	storeroom). Like the other Tlaloc heads, these are hand modelled from a brownish clay and are crudely hollowed out in the back so that their original use remains unclear.
	Terracotta standing Storm God. Tentatively identified as an *almena* or roof ornament. It was found on the west slope of the Gran Basamento (Jiménez Ovando 1988).[20] The figure holds a triangular bag and undulating lightning staff. This particularly unusual representation of Tlaloc displays a fleshy, rounded deity face as a mask splitting into two parts to expose a more stylized human face below.

[20] Apparently a roof ornament, it was round as part of an offering accompanied by a secondary burial containing mostly skulls and a stone sculpture of a Tlaloc face (Jiménez Ovando 1988).



The Once Señores. A group of eleven three-dimensional terracotta figures dubbed the "Once Señores" (Eleven Lords) was found buried in pairs in a deposit 800 meters to the east of the main hill (Morales Gómez 1999) and must have been part of the greater Epiclassic center that once encompassed Cacaxtla along with Xochitéctal and Nativitas (Serra Puche and Lazcano 2011: 37-46). Only one of the flayed figures was left standing, while the others were placed face down grouped in similar pairs. Each of the figures measures about 40–45 cm in height and is set into a scroll background consisting of three pairs of stacked volutes.[20] Given their general resemblance to the shape and scale of pieces identified as *almenas* to ornament rooflines at Teotihuacan, they might have served a similar purpose. They bear a combination of Teotihuacan or Teotihuacan traits mediated through Maya iconography deployed in a local style. Four figures have a headdress blending Tlaloc features and a jaguar maw helmet with hanging paws, the latter unique to Teotihuacan forms of representation, three have a figure with a Xipe-like face (crescent eye slits and o-shaped mouth) and a simple tiered rectangular headdress bearing heart droplet motifs, two have a bird headdress, and two have a bird-butterfly headdresses. (Photos taken by Claudia Brittenham).

[20] This motif is similar in shape to the so-called shell elements on the Xochicalco Pyramid of the Feathered Serpent and also known at Tula (Rivas Castro and Michetti Micó 2007) given that they are probably considerably earlier in date (Brittenham and Nagao 2014). Specimens of complete and fragmentary roof ornaments with scroll or fret designs have also been found at Xochicalco (De la Fuente, Garza Tarazona, González Crespo et al. 1995: 109; Smith and Hirth 2000, 2: 50).

	Celosía (Lattice Window Structure). It is an openwork diamond pattern made of a framework of branches, covered with adobe and stucco (Molina Feal 1980: 102, 110). This latticework appears to have been inserted as a divider in a small room, but it does not reach ceiling level; its original function is unclear. The Celosía was deliberately filled and was covered over by the Palace (ibid.: 68).
	Patio of the Rhombuses. A similar interlace pattern, executed on a reduced scale in clay bas-relief, decorates small panels flanking a doorway facing the Patio of the Rhombuses (Molina Feal 1980). It is part of the Palace and thus later in date.
	Building E fired clay moldmade disks. These pieces were set into grooves forming a rectangular panel decorating lateral rooms (Molina Feal 1980: 110). These architectural ornaments appear to be coeval with the above-mentioned unfired clay anthropomorphic relief on Building E.[21]
	Venus-Star place glyph relief. A *talud* and *tablero*, the latter described as framed and decorated with stucco bas-reliefs, was found on one of the earliest buildings of the Great Platform (García Bárcena 1987: 8). On the lower slope on the western side of the hill, a wall with a series of horizontal bands (perhaps forming *talud-tablero* building articulation) was uncovered, but only one panel bears a relief. In clay low relief surrounded on three sides by a rectangular (feathered?) frame, a half star surmounts four disks, in turn set over a bar with a prominent knot in the middle and terminating at both ends with a trilobe or dart-shape. The sign below the prominent knot is partially damaged, but it may have been a single-stepped platform using Zapotec place glyph conventions. It is unclear whether the emblem refers to a date, a place or even a person.[22]

[21] A small altar articulated with a talud-tablero profile with small, stucco-covered adobe staircase was reported for a sub-structure beneath Portico B (Molina Feal 1980: 100). I was not able to see the actual remains or any photographs, so it is difficult to assess the validity of this brief, written reference.

[22] The numerals suggest a calendrical function, perhaps referring to a person or a deity. However, the stepped platform with bar ending in trilobe shapes recalls two possible parallels in Zapotec writing: 1) place signs

Appendix D: Tables of Find Spots of Small Scale Pieces from Xochicalco

Table 5: Lapidary masks found at Xochicalco

Location	Lapidary mask	Context: other materials, comment, source
César Sáenz excavations in ceremonial core		
1. Structure A/Temple of the Stelae/X1-4a Secondary burial in pit with broken stelae	A broken (Teotihuacan-style?) *tecali* mask and a *tecali* mask mouth fragment	Bones from a secondary burial were accompanied by a small crude stone sculpture, 1 Teotihuacan- Mezcala-style male figurine, 2 Teotihuacan-Mezcala style female figurines, Mezcala-style figurine; jade, turquoise, and shell beads; *tecali* vessel fragments; blue stucco remains probably applied to wood; obsidian spear head, blade, fragments, and two eccentrics; local sherds; polychrome censer handle; Puuc Z Fine Orange fragment; Monte Alban V Mixtec ceramics (Sáenz 1961: 42-43); 2 stone figures (?), Z Fine Orange fragment, polychrome ceramic fragment, Teotihuacan censer (Hirth 2000a: 200). "6 obsidian bifacial implements"
2. Structure A/Temple of the Stelae/X1-4b/ Chamber of the Offerings– found in architectural fill	Half *tecali* mask with inlaid shell and pyrite eyes	Headless anthropomorphic seated clay figurine; rudimentary stone sculpture (Sáenz 1962: 46; 1962 INAH DMP Inf. 11))
3. Structure E/X2-1/ -found in architectural fill	*Tecali* mask fragment	Burned plant material; obsidian projectile points, blades, large eccentric; ceramics (Sáenz 1966: 27).
NORBERTO GONZÁLEZ CRESPO/SILVIA GARZA TARAZONA EXCAVATIONS		
4. East Platform Mound from pair of complexes flanking TF-1/Platforms P6-AJ and P6-AK	Teotihuacan- and Mezcala-style lapidary masks	Lapidary figurines and beads, only a small amount of ceramics (González Crespo, Garza Tarazona, et al. 1995: 233; Hirth et al. 2000: 235).
5. B1-2, Room 2	Large quantity of masks	Associated with rectangular altar in corner. Other materials found on stucco floor and in fill of fallen roof: large quantity of figurines, projectile points, shells, plaques, beads, effigy censer with human face, pendants, 1 *molcajete* (grinding bowl), earflares, bowls, spindle whorls, scrapers, blades, pots, drinking vessels, incense pans, flutes, shell inlay, plaques, eccentrics, bifacial implements, front foot of a jaguar "et cetera" (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 71-72)
6. E3-5, "Element 138"	1 mask	4 greenstone figurines. Found on northwest wall of room 2 in niche. This deposit probably represents the original location, where these pieces were stored for daily use (González Crespo, Garza Tarazona, and Alvarado León

(e.g. Pre-Classic Building J illustrated in Winter [1989:55]), 2) the use of the bar as the coefficient five (Classic Period Monte Albán Tomb 104 wall painting, illustrated in Winter [1989: 69)]).

		1993-1994: 144).
7. Pirámide Gemela (Twin Pyramid) substructure (6x10 m room), destroyed and burned to be used as fill for next construction	Masks (fragments?)	Skeletal jaguar sculptures, shells, travertine sculptures with yellow and green pigment on stucco (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 174).
8. H-5, "Elements 151 and 158" (SW structure in Plaza of 2-Glyph Stela)	Teotihuacan style mask	Bowl (cajete) with pigment remains; vessels (vasijas), cups (vasos), obsidian knives, anthropomorphicfigurine fragments, censers (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 267).

Table 6: Lapidary figurines from Xochicalco

Location	Lapidary figurines	Context: other materials, comment, source
César Sáenz excavations		
1. Structure A/Temple of the Stelae/X1-4a Secondary burial in pit with broken stelae	1 Teotihuacan-Mezcala-style male figurine, 2 Teotihuacan-Mezcala style female figurines, Mezcala-style figurine	Bones from a secondary burial were accompanied by a small crude stone sculpture; a broken (Teotihuacan-style?) *tecali* mask and a *tecali* mask mouth fragment; *tecali* vessel fragments; jade, turquoise, and shell beads; blue stucco remains probably applied to wood; obsidian spear head, blade, fragments, and two eccentrics; local sherds; polychrome censer handle; Puuc Z Fine Orange fragment; Monte Alban V Mixtec ceramics (Sáenz 1961: 42-43); 2 stone figures (?), Z Fine Orange fragment, polychrome ceramic fragment, Teotihuacan censer (Hirth 2000a: 200). "6 obsidian bifacial implements"
2. Structure A/Temple of the Stelae/X1-4b, Chamber of the Offerings, Burial	1 Guerrero type greenstone figurine with crossed arms; 1 serpentine Teotihuacan type female figurine	Maya jade profile head pendant; 4 *Spondylus* shells; a shell human arm and hand pendant; 15 small obsidian blades; 1 large obsidian arrowhead; 2 mollusks (Sáenz 1962 INAH DMP Inf. 11: 31)
3. Structure A/Temple of the Stela/X1-4b, Chamber of the Offerings, offering found on floor	2 Teotihuacan style figurines; Mezcala figurines	Slab of the Four Glyphs sculpture; Mayoid greenstone plaque; 2 plain yokes, 1 *hacha* (hand holding dead human head); warrior clay head (effigy vessel fragment?) (Sáenz 1962 INAH DMP Inf. 11)
4. Structure A/Temple of the Stelae,/X1-5? Southwest Salon	1 complete Mezcala style greenstone figurine and 1 fragment	Anthropomorphic clay face with dental mutilation (effigy vessel fragment?), lower part of clay face with dental mutilation; stone rattlesnake tail pendant (Sáenz 1962: INAH DMP Infs. 11: 51)
5. Feathered Serpent Pyramid, in fill	1 Mezcala style greenstone figurine	(Sáenz 1963 RMEA 19)

6. Structure C/X3-1, in fill	Gray stone anthropomorphic figurine fragment	3 ceramic Tlaloc vessels, clay jaguar head and foot, clay censer fragment with appliqué decoration (Sáenz 1964 INAH DMP Inf. 12).
Norberto González Crespo and Silvia Garza Tarazona excavations		
7. B1-2-Cuarto 3	Large number of anthropomorphic figurines	Associated with rectangular altar in corner. Other materials found on stucco floor and in fill of fallen roof: large quantity of masks, projectile points, shells, plaques, beads, effigy censer with human face, pendants, 1 molcajete, earflares, bowls, spindle whorls, scrapers, blades, pots, drinking vessels, incense pans, flutes, shell inlay, plaques, eccentrics, bifacial implements, front foot of a jaguar "et cetera" (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 71-72). Probably same deposit as González Crespo, Garza Tarazona, Alvarado León 1993-1994, 128-140) which reports 12 mask fragments; 12 complete figurines, 177 figurine fragments;
8. B2-1 (temazcal)	Greenstone figurines	Large flat clay disks with rim, fragments of ceramic sculpture, obsidian *navajillas* (small blades) (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 77)
9. B2-2 (Salón del Altar Policromado), "Element 77"	6 complete figurines, 103 figurine fragments	4 greenstone plaques; broken plain *yugo* (yoke); ceramic, obsidian, shell, bone, stone beads – found on stucco floor with traces of burned roofing; found with moon sculpture and serpent tail (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 79, 141-149)
10. B2-3	figurine fragments	Found with inverted L-shaped onyx fragment (cf. niches) with hole in middle; 2 *cajetes* (footed bowls); obsidian arrowheads; *navajillas*, *cajete* (footed bowl) fragments, censers, beads, flint point; box-shaped ceramic censer and other censers, clay shell (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 87-88)
11. E1-2, east patio between room 1 and contention wall	2 figurines, anthropomorphic figurine	2 obsidian "*puntas de navaja*" (blade tips) (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 117)
12. E3-5, "Element 138"	4 greenstone figurines.	1 mask. Found on northwest wall of room 2 in niche. This deposit probably represents the original location, where these pieces were stored for daily use (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 144).
13. Sector 4, Gran Pirámide (F-1)	Greenstone figurine and various fragments	Obsidian eccentrics, including 2 obsidian rings and 4 bracket-shaped eccentrics with a straight side and 3 points on the other forming a Tlaloc face (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 150, 154).
14. G6-1c, "Element 47"	Large quantity of greenstone figurines	Found on floor of room (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 205).

15. G6-1c, Patio 1, "Element 44"	2 figurines	373 greenstone beads, greenstone noseplug fragment, disk fragment, 1 pendant; total beads 505 (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 207).
16. G6-Patio 2, floor	Greenstone figurines (including Tlaloc representations)	Found on floor near sculpture of male head in serpent headdress. 86 greenstone beads, earflares, bifacial implements, projectile points, eccentrics, pendants, disks, a grinding stone, ceramic polisher, and stamped and painted cylindrical vessel with crab and aquatic plant decoration.
17. G6-3c, patio 3, "Element 46"	152 greenstone anthropomorphic figurines	Stone *malacates* (spindle whorls), plaques, pendants, beads, molds, noseplugs, masks, blades, projectile points found broken and strewn on floor (González Crespo, Garza Garazona, and Alvarado León 1993-1994: 214)..
18. G6-3b	Anthropomorphic figurine	Small translucent greenstone *hacha* (celt) 7.5 x 4.7 cm and a core in the process of working a bead (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 214)
19. Portico I9	Greenstone figurine and additional fragments	Bone remains of 28 individuals; greenstone plaques and plaque fragments, beads (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 291).
20. I-18	Figurine fragments	Obsidian eccentrics, greenstone beads, earflare fragment, grinding stone and mortar (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 292).
21. H-5, "Elements 151 and 158"	Anthropomorphic figurine fragments,	Teotihuacan style mask, *cajete* (footed bowl) with pigment remains; vasijas (tall vessels), *vasos* (cups), obsidian knives, censers (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 267).

Table 7: Greenstone lapidary plaques from Xochicalco.

Location	Lapidary plaques	Context: other materials, comment, source
César Sáenz excavations		
1.Feathered Serpent Pyramid, Offering 1	2 greenstone plaques	1 broken painted *tecali* vessel; *Spondylus* shells; perforated gastropod shells; large trumpet shell fragment carved with disks and stepped frets; 2 orange clay tripod bowls; fragmentary (slate?) disk with iron oxide (Sáenz 1963 RMEA 19)
2.Feathered Serpent Pyramid, Burial 1, secondary burial	2 jade plaques (full length Maya type; head) (pendants)	3 large seashells, 9 small perforated olivine shells; stone disk with iron oxide (Sáenz 1964, INAH DMP 12)
3.Feathered Serpent	2	4 tubular jade beads; 2 jade ear ornaments; 4 small

Temple, Burial 2, secondary burial	anthropomorphic jade figural pendants	perforated undecorated jade plaques, ceramic fragments (Sáenz 1962 RMEA 19)
4.Structure A/Temple of the Stelae/X1-4b, Chamber of the Offerings, Burial	Maya jade profile head pendant	1 Guerrero type greenstone figurine with crossed arms; 1 serpentine Teotihuacan type female figurine; 4 Spondylus shells; a shell human arm and hand pendant; 15 small obsidian blades; 1 large obsidian arrowhead; 2 mollusks (Sáenz 1962 INAH DMP Inf. 11: 31). Hirth identifies this deposit as part of a destruction and abandonment ritual of the building (2000:43).
5.Structure A/Temple of the Stela/X1-4b, Chamber of the Offerings, offering found on floor	Mayoid greenstone plaque	Slab of the Four Glyphs sculpture; 2 Teotihuacan style figurines; Mezcala figurines; 2 plain yokes, 1 *hacha* (hand holding dead human head); warrior clay head (effigy vessel fragment?) (Sáenz 1962 INAH DMP Inf. 11)
6.Structure C/X3-1, Offering, stone box	Jade plaque with frontal figure; jade plaque with frontal head	Jade disk with large perforation in center; jade earspool; 4 gastropod shells, 1 conch, 9 mollusks, 1 trumpet shell fragment; perforated conch beads; orange tripod bowl; brown clay bowl (Sáenz 1964, INAH DMP Inf. 12)
7.Structure C/X3-a, Burial	Jade anthropomorphic head in maw pendant; jade anthropomorphic plaque of figure w/ arms on chest; jade anthropomorphic pendant w/ head (Maya green)	2 small jade disks with perforations; trumpet shell with remains of red pigment; 13 perforated gastropod shells; conch beads for necklace; large disk with iron oxide (Sáenz 1964, INAH DMP Inf. 12).
Norberto González Crespo and Silvia Garza Tarazona excavations		
8.B1-2-cuarto 2	Plaques (pendants?)	Associated with rectangular altar in corner. Other materials found on stucco floor and in fill of fallen roof: large quantity of masks, figurines, projectile points, shells, beads, effigy censer with human face, pendants, 1 *molcajete* (grinding bowl), earflares, bowls, spindle whorls, scrapers, blades, pots, drinking vessels, incense pans, flutes, shell inlay, plaques, eccentrics, bifacial implements, front foot of a jaguar "et cetera" (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 71-72)
9.G6-3c, patio 3, "Element 46"	Plaques (no further information)	152 greenstone anthropomorphic figurines; stone *malacates* (spindle whorls), pendants, beads, molds, noseplugs, masks, blades, projectile points found broken and strewn on floor of room with altar and sculpture of male head in a feathered serpent headdress (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 214)..

Table 8: *Tecali* vessels from Xochicalco

Location	Lapidary vessels	Context: other materials, comment, source
César Sáenz excavations		
1.Feathered Serpent Pyramid, Offering 1	1 broken painted *tecali* vessel	2 greenstone plaques; *Spondylus* shells; perforated gastropod shells; Large trumpet shell fragment carved with disks and stepped frets; 2 orange clay tripod bowls; fragmentary (slate?) disk with iron oxide (Sáenz 1963 RMEA 19)
2.Structure A/Temple of the Stelae/X1-4a Secondary burial in pit with broken stelae	*tecali* vessel fragments	Bones from a secondary burial were accompanied by a small crude stone sculpture; a Teotihuacan- Mezcala-style male figurine, 2 Teotihuacan-Mezcala style female figurines, Mezcala-style figurine; jade, turquoise, and shell beads; a broken (Teotihuacan-style?) *tecali* mask and a *tecali* mask mouth fragment; blue stucco remains probably applied to wood; obsidian spear head, blade, fragments, and two eccentrics; local sherds; polychrome censer handle; Puuc Z Fine Orange fragment; Monte Alban V Mixtec ceramics (Sáenz 1961: 42-43); 2 stone figures (?), Z Fine Orange fragment, polychrome ceramic fragment, Teotihuacan censer (Hirth 2000a: 200). "6 obsidian bifacial implements"
Norberto González Crespo and Silvia Garza Tarazona excavations		
3.K2-5, Room with altar bearing figurative mural painting	Fragments of *tecali* vessel carved with anthropomorphic figures	Effigy censer, miniature *cajete* (footed bowl), other ceramic vessels, stone cylinders, greenstone polisher (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 304)

Table 9: Obsidian eccentrics found in Xochicalco

Location	Obsidian eccentrics	Context: other materials, comment, source
César Sáenz excavations		
1.Structure A/Temple of the Stelae/X1-4a Secondary burial in pit with broken stelae	Obsidian spear head, blade, fragments, and two eccentrics (Sáenz 1961: 42-	Bones from a secondary burial were accompanied by a small crude stone sculpture; a Teotihuacan- Mezcala-style male figurine, 2 Teotihuacan-Mezcala style female figurines, Mezcala-style figurine; jade, turquoise, and shell beads; a broken (Teotihuacan-style?) *tecali* mask and a *tecali* mask mouth fragment; *tecali* vessel fragments; blue stucco remains probably applied to wood; local sherds; polychrome censer handle; Puuc Z Fine Orange

	43); 6 obsidian bifacial implements (Hirth 2000a: 200)	fragment; Monte Alban V Mixtec ceramics (Sáenz 1961: 42-43); 2 stone figures (?), Z Fine Orange fragment, polychrome ceramic fragment, Teotihuacan censer (Hirth 2000a: 200).
2.Structure A/Temple of the Stelae/X1-4b, Chamber of the Offerings, Burial	15 small obsidian blades; 1 large obsidian arrowhead	1 Guerrero type greenstone figurine with crossed arms; 1 serpentine Teotihuacan type female figurine; Maya jade profile head pendant; 4 *Spondylus* shells; a shell human arm and hand pendant; 2 mollusks (Sáenz 1962 or 1961? INAH DMP Inf. 11: 31)
3.Structure E (This is the same as Structure F-1 below)	1 large obsidian eccentric	Obsidian arrowheads, blades, half a stone mask, small quantity of Tlahuica ceramics; Classic period sherds; carbonized vegetal material (Sáenz 1966: 27; 1967: 14).
Norberto González Crespo and Silvia Garza Tarazona excavations		
4.Sector B, Unit 1, Structure-2, Room 2	Obsidian eccentrics	Associated with rectangular altar in corner. Other materials found on stucco floor and in fill of fallen roof: large quantity of masks, figurines, projectile points, shells, plaques, beads, effigy censer with human face, pendants, 1 *molcajete* (grinding bowl), earflares, bowls, spindle whorls, scrapers, blades, pots, drinking vessels, incense pans, flutes, shell inlay, plaques, eccentrics, bifacial implements, front foot of a jaguar "et cetera" (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 71-72)
5.Sector B, Unit 1, Structure 2, Salon	2 complete Tlaloc masks composed of obsidian eccentrics	Obsidian platform core, projectile points (Albaitero R., 16-175, 1993-1994: 217)
6.E1-2, room with altar	Awl (*punzón*)	Projectile point, rectangular-shaped (ceramic) recipient, pendant, cup, whistle (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 117)
7.Sector F, Structure 1, Gran Pirámide, temple, "Element 121"	9 complete obsidian eccentrics (Albaitero R. 16-175, 1993-1994: 242)	Obsidian bifacial implements, prismatic blades, projectile points, knives, scrapers, prismatic core (Albaitero R., 16-175, 1993-1994: 242), 1 greenstone figurine, greenstone figurine fragments, "et cetera"; describes eccentrics as "a Tlaloc mask with two obsidian rings, four bracket shaped eccentrics and one with straight side and another with three points" (González Crespo, Garza Tarazona, Alvarado León 1993-1994, Inf. 16-168: 150-154).

Table 10: Shell excavated in Xochicalco

Location	Shell	Context: other materials, comment, source
César Sáenz excavations		
1.Feathered Serpent Pyramid, Offering 1	*Spondylus* shells; perforated gastropod shells; Large trumpet shell fragment carved with disks and stepped frets	2 greenstone plaques; 1 broken painted *tecali* vessel; 2 orange clay tripod bowls; fragmentary (slate?) disk with iron oxide(Sáenz 1963 RMEA 19). Secondary burial from Stage A, Feathered Serpent Pyramid substructure composed of a room and altar, dated ca. AD 600; covered with cinnabar (Melgar-Tísoc 2007: 84S).
2.Feathered Serpent Pyramid, Burial 1, secondary burial	3 large seashells, 9 small perforated olivine shells	2 jade plaques (full length Maya type; head) (pendants); stone disk with iron oxide (Sáenz 1964, INAH DMP 12) Secondary burial from Stage A, Feathered Serpent Pyramid substructure composed of a room and altar, dated ca. AD 600; covered with cinnabar (Melgar-Tísoc 2007: 84S).
3.Structure A/Temple of the Stelae/X1-4b, Chamber of the Offerings, Burial	4 Spondylus shells; a shell human arm and hand pendant; 2 mollusks	1 Guerrero type greenstone figurine with crossed arms; 1 serpentine Teotihuacan type female figurine; Mayoid jade profile head pendant; 15 small obsidian blades; 1 large obsidian arrowhead; (Sáenz 1962 INAH DMP Inf. 11: 31)
4.Structure C/X3-1, Offering, stone box	4 gastropod shells, 1 conch, 9 mollusks, 1 trumpet shell fragment; perforated conch beads	Jade plaque with frontal figure; jade plaque with frontal head; jade disk with large perforation in center; jade earspool;; orange tripod bowl; brown clay bowl (Sáenz 1964, INAH DMP Inf. 12)
5.Structure C/X3-a, Burial	trumpet shell with remains of red pigment; 13 perforated gastropod shells; conch beads for necklace	Jade anthropomorphic head in maw pendant; jade anthropomorphic plaque of figure w/ arms on chest; jade anthropomorphic pendant w/ head (Maya green); 2 small jade disks with perforations; large disk with iron oxide (Sáenz 1964, INAH DMP Inf. 12).
Norberto González Crespo and Silvia Garza Tarazona excavations		
6.B1-2-Room 2	Shells	Associated with rectangular altar in corner. Other materials found on stucco floor and in fill of fallen roof:

		large quantity of masks, figurines, projectile points, shells, plaques, beads, effigy censer with human face, pendants, 1 *molcajete* (grinding bowl), earflares, bowls, spindle whorls, scrapers, blades, pots, drinking vessels, incense pans, flutes, shell inlay, plaques, eccentrics, bifacial implement, front foot of a jaguar "et cetera" (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 71-72)
7.G-1 (Feathered Serpent Pyramid", Burial 2, found on central axis at level of fourth step	Necklace of carved shell skulls with pyrite inlaid eyes; 3 other shell necklaces	Primary burial of a young adult male with rich offering; one of the shell necklaces had jade beads and a greenstone pendant; matte obsidian bead necklace; *tecali* flat bottomed vessel; round plaques for mosaic; shell inlay; alabaster ring; pyrite appliqué; shell beads and rattles (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 168, 169). Although identified as a funerary offering corresponding to Stage C of the Feathered Serpent Pyramid, AD 750-800, containing a 13-17 year-old male accompanied by lavish offerings (Melgar Tísoc 2007: 84X-86S), it was probably also a dedicatory offering.

Table 11: Ceramic effigy vessels and censers from Xochicalco

Location	Ceramic effigy censer	Context: other materials, comment, source
César Sáenz excavations		
1.Structure A/Temple of the Stela/X1-4b, Chamber of the Offerings, offering found on floor	Warrior clay head (effigy vessel fragment?)	Slab of the Four Glyphs sculpture; 2 Teotihuacan style figurines; Mezcala figurines; Mayoid greenstone plaque; 2 plain yokes, 1 *hacha* (hand holding dead human head) (Sáenz 1962 INAH DMP Inf. 11)
2.Structure C, in fill	3 Tlaloc vessels, clay jaguar head and foot; clay censer fragments with appliqué decoration	Gray stone anthropomorphic figurine fragment (Sáenz 1964 INAH DMP 12)
Norberto González Crespo and Silvia Garza Tarazona excavations		
3.Sector B, Unit 1, Structure 1	Effigy censer with human face, spiral eye, other eye closed	Found with bowls, obsidian projectile points, prismatic blades. Burned. (González Crespo, Garza Tarazona, Alvarado León et al. 1993-1994: 51)
4.B1-2-cuarto 2	Effigy censer with appliqué and anthropomorphic face	Associated with rectangular altar in corner. Other materials found on stucco floor and in fill of fallen roof: large quantity of masks, figurines, projectile points, shells, plaques, beads, effigy censer with human face, pendants, 1 molcajete, earflares, bowls, spindle

		whorls, scrapers, blades, pots, drinking vessels, incense pans, flutes, shell inlay, plaques, eccentrics, bifacial implements, front foot of a jaguar "et cetera" (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 71-72)
5.B2-1 (temazcal) – next to temazcal toward Unidad 3	Element 1A: Effigy censer – old man with bird-serpent helmet, skirt, *quechquemitl*	(González Crespo, Garza Tarazona, Alvarado León 1993-1994: 78)
6.E1-3. "Element 171"	Horned puma effigy censer with knotted necklace	*Cajete* (footed bowl) served as the censer lid (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 120)
7.E2-3, "Element 95"	Effigy censer with richly dressed male figure wearing animal helmet with bifid tongue	(González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 126)
7. E2-6, small room attached to E2-4, "Element 173"	Large quantity of small vessels with attached Tlaloc plaque	Molds for these vessels were found in earlier 1984 season in "Structure 1 west" next to west bastion (González Crespo, Garza Tarazona, and Alvarado León 1993-1994: 130)
8. E3-6, "Element 145", south gallery of this room	Broken seated puma effigy vessel with knotted necklace	
9. G6-2d, "element 63"	Effigy censer with human face and long bifid tongue and fangs	Found broken with large basin. The largest effigy censer from Xochicalco (88 cm tall) (González Crespo, Garza Garazona, and Alvarado León 1993-1994: 212).
10. Site Museum location, 2 small platforms	Tlaloc effigy appliqué plaque and Tlaloc vessel	Shell rattles; plain stela found in front of platform (González Crespo, Garza Tarazona, Alvarado León 1993-1994: 379).